Metabolic Enzyme/Protease

Metabolic pathways are enzyme-mediated biochemical reactions that lead to biosynthesis (anabolism) or breakdown (catabolism) of natural product small molecules within a cell or tissue. In each pathway, enzymes catalyze the conversion of substrates into structurally similar products. Metabolic processes typically transform small molecules, but also include macromolecular processes such as DNA repair and replication, and protein synthesis and degradation. Metabolism maintains the living state of the cells and the organism.

Proteases are used throughout an organism for various metabolic processes. Proteases control a great variety of physiological processes that are critical for life, including the immune response, cell cycle, cell death, wound healing, food digestion, and protein and organelle recycling. On the basis of the type of the key amino acid in the active site of the protease and the mechanism of peptide bond cleavage, proteases can be classified into six groups: cysteine, serine, threonine, glutamic acid, aspartate proteases, as well as matrix metalloproteases. Proteases can not only activate proteins such as cytokines, or inactivate them such as numerous repair proteins during apoptosis, but also expose cryptic sites, such as occurs with β-secretase during amyloid precursor protein processing, shed various transmembrane proteins such as occurs with metalloproteases and cysteine proteases, or convert receptor agonists into antagonists and vice versa such as chemokine conversions carried out by metalloproteases, dipeptidyl peptidase IV and some cathepsins. In addition to the catalytic domains, a great number of proteases contain numerous additional domains or modules that substantially increase the complexity of their functions.

Imbalances in metabolic activities have been found to be critical in a number of pathologies, such as cardiovascular diseases, inflammation, cancer, and neurodegenerative diseases.

References:

[1] Turk B, et al. EMBO J. 2012 Apr 4;31(7):1630-43.

Target List in Metabolic Enzyme/Protease

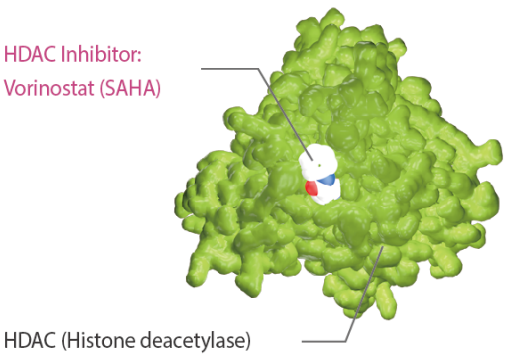
- 15-PGDH 4
- 5 alpha Reductase 6
- 5-Lipoxygenase 8
- Acetyl-CoA Carboxylase 12
- Acyltransferase 14
- Adenosine Deaminase 18
- Adenosine Kinase 20
- Aldehyde Dehydrogenase (ALDH) 22
- Aldose Reductase 24
- Aminoacyl-tRNA Synthetase 26
- Aminopeptidase 28
- Angiotensin-converting Enzyme (ACE) 30
- Arginase 35
- ATGL 37
- ATP Citrate Lyase 39
- Carbonic Anhydrase 41
- Carboxypeptidase 44
- Cathepsin 46
- CETP 50
- COMT 52
- Cytochrome P450 54
- Dipeptidyl Peptidase 62
- Dopamine β-hydroxylase 67
- Drug Metabolite 69
- E1/E2/E3 Enzyme 74
- Elastase 77
- Endogenous Metabolite 80
- Enolase 138
- FAAH 140
- FABP 143
- Factor Xa 145
- Farnesyl Transferase 148
- Fatty Acid Synthase (FAS) 151
- FXR 154
- Glucokinase 157
- Glutathione Peroxidase 159
- GSNOR 161
- Gutathione S-transferase 163
- HCV Protease 165
- Hexokinase 169
- HIF/HIF Prolyl-Hydroxylase 171
- HIV Integrase 176
- HIV Protease 179
- HMG-CoA Reductase (HMGCR) 182

Target List in Metabolic Enzyme/Protease

- HSP 186
- Indoleamine 2,3-Dioxygenase (IDO) 192
- Isocitrate Dehydrogenase (IDH) 196
- Lactate Dehydrogenase 199
- LXR 201
- MAGL 204
- MALT1 207
- Mineralocorticoid Receptor 209
- Mitochondrial Metabolism 211
- MMP 215
- NADPH Oxidase 221
- Nampt 223
- NEDD8-activating Enzyme 226
- Neprilysin 228
- PAI-1 231
- PDHK 233
- PGC-1α 235
- Phosphatase 237
- Phosphodiesterase (PDE) 244
- Phospholipase 257
- Procollagen C Proteinase 261
- Proteasome 263
- Pyruvate Kinase 268
- RAR/RXR 270
- Reactive Oxygen Species 275
- Renin 288
- ROR 290
- Ser/Thr Protease 293
- SGK 295
- Stearoyl-CoA Desaturase (SCD) 297
- Thrombin 300
- Tryptophan Hydroxylase 303
- Tyrosinase 305
- Xanthine Oxidase 308

15-PGDH

15-Hydroxyprostaglandin dehydrogenase



15-PGDH (15-Hydroxyprostaglandin dehydrogenase) is a tumor suppressor in breast, colon, liver, lung, and pancreas since decreased expression of this enzyme is associated with increased tumorigenesis. 15-PGDH metabolizes intracellular PGE_2 so that this ligand is unable to bind EP receptors, which results in suppression of PGE_2 signaling.

The tumor suppressor 15-PGDH is the key enzyme in prostaglandin E_2 catabolism and is down-regulated in colorectal cancer (CRC) tissue. Canonical Wnt signaling is frequently elevated in colon cancers and has been shown to down-regulate 15-PGDH expression.

Inhibition of 15-PGDH, a prostaglandin-degrading enzyme, potentiates tissue regeneration in multiple organs in mice. 15-PGDH acts in vivo as a negative regulator of prostaglandin levels and activity, provides a candidate target.

15-PGDH Inhibitors & Modulators

SW033291

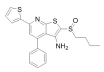
Cat. No.: HY-16968

Bioactivity: SW033291 is a small-molecule inhibitor of 15-PGDH (Ki=0.1 nM) that increases prostaglandin PGE2 levels in bone marrow and other tissues. IC50 value: 0.1 nM(Ki) [1] Target: 15-PGDH in vitro: SW033291 inhibition of 15-PGDH was noncompetitive versus PGE2 over concentrations up to 40 μM PGE2. SW033291...

Purity: 99.62%

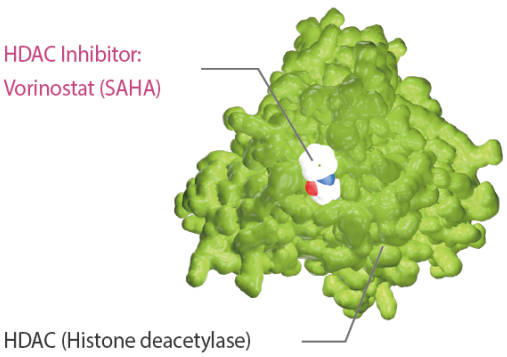
Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



5 alpha Reductase

5α-reductase



5 alpha Reductase (5α-reductases), also known as 3-oxo-5α-steroid 4-dehydrogenases, are enzymes involved in steroid metabolism. They participate in 3 metabolic pathways: bile acid biosynthesis, androgen and estrogen metabolism, and prostate cancer.

5 alpha Reductase Inhibitors & Modulators

Alpha-Estradiol

(Alfatradiol; Epiestradiol; Epiestrol) Cat. No.: HY-B0141A

Bioactivity: Alpha-Estradiol is a weak estrogen and a **5α-reductase** inhibitor which is used as a topical medication in the treatment of androgenic alopecia.

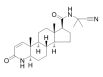
Purity: 99.46%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

CGP-53153

Cat. No.: HY-U00125

Bioactivity: CGP-53153 is a steroidal inhibitor of **5 alpha reductase** with IC_{50}s of 36 and 262 nM in rat and human prostatic tissue, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

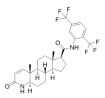


Dutasteride

(GG 745; GI 198745) Cat. No.: HY-13613

Bioactivity: Dutasteride (GG745) is a potent inhibitor of both 5 alpha-reductase isozymes. Dutasteride may possess off-target effects on the androgen receptor (AR) due to its structural similarity to DHT.

Purity: 99.79%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

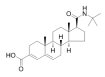


Epristeride

(ONO-9302; SKF105657) Cat. No.: HY-107385

Bioactivity: Epristeride is a novel **5α-reductase** inhibor.

Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

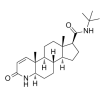


Finasteride

(MK-906) Cat. No.: HY-13635

Bioactivity: Finasteride is an orally active testosterone 5-alpha-reductase inhibitor (Ki= 10 nM). Target: 5-alpha Reductase Approved: 1992 Finasteride, a synthetic 4-azasteroid antiandrogen compound, is a specific inhibitor of steroid Type II 5α-reductase, an intracellular enzyme that converts the...

Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg

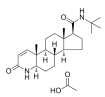


Finasteride acetate

(MK-906 acetate) Cat. No.: HY-13635A

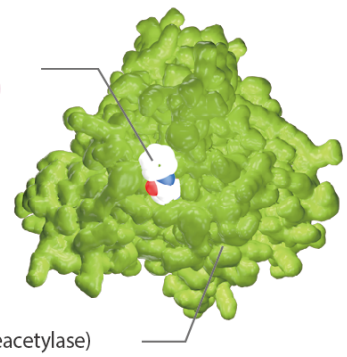
Bioactivity: Finasteride (acetate) is an orally active testosterone 5-alpha-reductase inhibitor.

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 200 mg



5-Lipoxygenase

5-LOX;5-LO



5-Lipoxygenase (5-LOX or 5-LO) is an enzyme that in humans is encoded by the ALOX5 gene. 5-lipoxygenase is a member of the lipoxygenase family of enzymes. It transforms EFAs into leukotrienes and is a current target for pharmaceutical intervention in a number of diseases. 5-LO catalyzes oxidation of AA at the 5-position to yield 5-HpETE. 5-LO then converts 5-HpETE to leukotriene A4. Recently, oxidized lipid products of 5-LO have been measured in membranes of neutrophils in the form of esterified-5-HETE phospholipids. These novel products have biological activities including inhibition of neutrophil extracellular traps. 5-LO is a target for pharmaceutical intervention in CAD. Some people with variant alleles for 5-LO are at elevated risk for CAD. 5-LO is expressed in brain cells and may participate in neuropathologic processes.

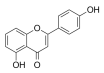
5-Lipoxygenase Inhibitors & Modulators

4',5-Dihydroxyflavone

Cat. No.: HY-N1881

Bioactivity: 4',5-Dihydroxyflavone is a **soybean LOX-1** and **yeast α-Glucosidase** inhibitor, with an K_i of 102.6 μM for soybean LOX-1 and an IC_{50} of 66 μM for yeast α-glucosidase.

Purity: 95.75%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

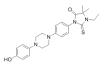


5-Lipoxygenase-In-1

Cat. No.: HY-U00308

Bioactivity: 5-Lipoxygenase-In-1 is a **5-Lipoxygenase** inhibitor extracted from patent EP 331232 A2, table 4, compound example 4.10.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

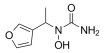


A-69412

Cat. No.: HY-101945

Bioactivity: A-69412 is a reversible, specific inhibitor of the **hydrophilic 5-lipoxygenase** (**5-LO**).

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



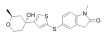
AZD 4407

(ZD 4407)

Cat. No.: HY-U00217

Bioactivity: AZD 4407 is a potent **5-lipoxygenase** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



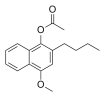
Bunaprolast

(U66858)

Cat. No.: HY-U00170

Bioactivity: Bunaprolast (U66858) is a potent inhibitor of LTB_4 production in human whole blood. Bunaprolast (U66858) also exhibits significant inhibition of **lipoxygenase** and TXB_2 release.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



Caffeic acid

Cat. No.: HY-N0172

Bioactivity: Caffeic acid is an inhibitor of both **TRPV1** ion channel and **5-Lipoxygenase** (**5-LO**).

Purity: 98.80%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 100 mg, 5 g

Cirsiliol

Cat. No.: HY-110399

Bioactivity: Cirsiliol is a potent and selective **5-lipoxygenase** inhibitor and a competitive low affinity benzodiazepine receptor ligand.

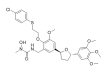
Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

CMI-392

Cat. No.: HY-19205A

Bioactivity: CMI-392 is a dual **5-lipoxygenese** inhibitor and platelet-activating factor (**PAF**) receptor antagonist with IC_{50}s of 100 and 10 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



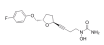
CMI977

(LDP977)

Cat. No.: HY-U00260

Bioactivity: CMI977 is a potent **5-Lipoxygenase** (**5-LO**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

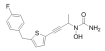


COX/5-LO-IN-1

Cat. No.: HY-U00347

Bioactivity: COX/5-LO-IN-1 is an inhibitor of **cylooxygenase** and **5-lipoxygenase**, used for the research of inflammatory and allergic disease states.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



Docebenone

(AA 861) Cat. No.: HY-12886

Bioactivity: Docebenone (AA 861) is a potent, selective and orally active **5-LO (5-lipoxygenase)** inhibitor.

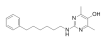
Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

Enazadrem

Cat. No.: HY-U00024

Bioactivity: Enazadrem is a **5-lipoxygenase** inhibitor with antiinflammatory activities.

Purity: 97.26%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

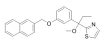


ICI 211965

(ZM-211965) Cat. No.: HY-100148

Bioactivity: ICI 211965 is a selective and orally potent **5-Lipoxygenase** (**5-LPO**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

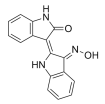


Indirubin-3'-monoxime

(Indirubin-3'-oxime) Cat. No.: HY-19807

Bioactivity: Indirubin-3'-monoxime is a potent **GSK-3β** inhibitor, and weakly inhibits **5-Lipoxygenase**, with **IC_{50}**s of 22 nM and 7.8-10 μM, respectively; Indirubin-3'-monoxime also shows inhibitory activities against CDK5/p25 and CDK1/cyclin B, with **IC_{50}**s...

Purity: 99.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

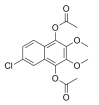


Lonapalene

(RS4317) Cat. No.: HY-U00156

Bioactivity: Lonapalene (RS4317) is a topically effective **5-lipoxygenase** (**5-LO**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

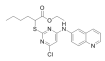


LP117

Cat. No.: HY-U00438

Bioactivity: LP117 is a novel and potent inhibitor of **5-Lipoxygenase** (**5-LO**) product synthesis with an **IC_{50}** of 1.1 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

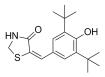


LY 178002

Cat. No.: HY-101579

Bioactivity: LY 178002 is a potent inhibitor of **5-lipoxygenase**, **phospholipase A2**, with **IC_{50}** of 0.6 μM for 5-1ipoxygenase, inhibits cellular production of LTB4 by human polymorphonuclear leukocytes, and shows relatively weak inhibition on **cyclooxygenase**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

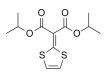


Malotilate

(NKK 105) Cat. No.: HY-A0060

Bioactivity: Malotilate is a liver protein metabolism improved compound, which selectively inhibit the 5-lipoxygenase.

Purity: 99.54%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



ML355

Cat. No.: HY-12341

Bioactivity: ML355 is a potent and selective inhibitors of 12-Lipoxygenase(12-LOX) with IC50 of 0.34 μM, excellent selectivity over related lipoxygenases and cyclooxygenases, and possess favorable ADME properties. IC50 value: 0.34 μM [1] Target: 12-LOX ML355 inhibits PAR-4 induced aggregation and...

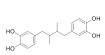
Purity: 98.28%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

Nordihydroguaiaretic acid

(NDGA) Cat. No.: HY-N0198

Bioactivity: Nordihydroguaiaretic acid is a **5-lipoxygenase** (**5LOX**) (**IC_{50}**=8±3 μM) and tyrosine kinase inhibitor.

Purity: 99.78%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg



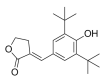
PGS-IN-1

(KME-4)

Cat. No.: HY-101587

Bioactivity: PGS-IN-1 is a potent inhibitor of **prostaglandin synthetase** (PGS) with an IC_{50} of 0.28 μM; also inhibits **5-lipoxygenase** with an IC_{50} of 1.05 μM.

Purity: 99.51%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

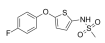


RWJ 63556

Cat. No.: HY-U00022

Bioactivity: RWJ 63556 is an orally active **COX-2 selective/5-lipoxygenase** inhibitor, with anti-inflammatory activities.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



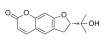
S-(+)-Marmesin

((+)-Marmesin; (S)-Marmesin)

Cat. No.: HY-N2176

Bioactivity: S-(+)-Marmesin is a natural coumarin, exhibiting **COX-2/5-LOX** dual inhibitory activity.

Purity: 99.04%
Clinical Data: No Development Reported
Size: 2 mg, 5 mg, 10 mg, 25 mg, 50 mg

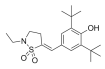


S-2474

Cat. No.: HY-19212

Bioactivity: S-2474 is an inhibitor of **COX-2** and **5-lipoxygenase**, with IC_{50}s of 11 nM and 27 μM for COX-2 and COX-1 in human intact cells, and used as a nonsteroidal anti-inflammatory drug.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

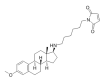


U-73122

Cat. No.: HY-13419

Bioactivity: U-73122 is an inhibitor of **phospholipase C (PLC)**, **phospholipase A2**, and **5-LO (5-lipoxygenase)**.

Purity: 98.17%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



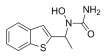
Zileuton

(A 64077; Abbott 64077)

Cat. No.: HY-14164

Bioactivity: Zileuton is a potent and selective inhibitor of **5-lipoxygenase** with antiasthmatic properties.

Purity: 99.93%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



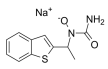
Zileuton sodium

(A 64077 (sodium); Abbott 64077 (sodium))

Cat. No.: HY-14164A

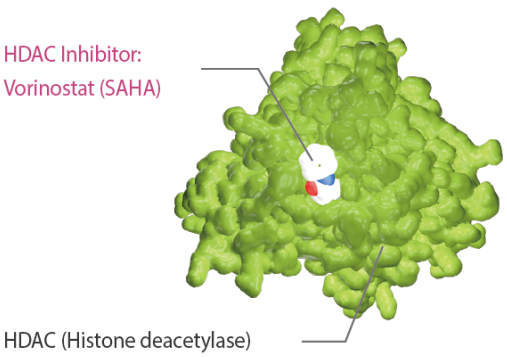
Bioactivity: Zileuton sodium (A 64077 sodium; Abbott 64077 sodium) is a potent and selective inhibitor of **5-lipoxygenase**, exhibiting inflammatory activities.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



Acetyl-CoA Carboxylase

ACC, Acetyl Coenzyme A Carboxylase



Acetyl-CoA carboxylase (ACC) is a biotin carboxylase that catalyzes the ATP-dependent condensation of acetyl-CoA and carbonate to form malonyl-CoA. The malonyl-CoA produced by ACC serves two major physiologic functions. It is an essential and rate-limiting substrate for de novo lipogenesis (DNL), and it acts as an allosteric inhibitor of the enzyme carnitine-palmitoyl transferase I (CPT-1). Acetyl-CoA carboxylase (ACC) inhibitors offer significant potential for the treatment of type 2 diabetes mellitus (T2DM), hepatic steatosis, and cancer.

Acetyl-CoA carboxylase (ACC) in mammals is encoded by two related enzymes ACC1 and ACC2, which catalyze the ATP dependent carboxylation of acetyl-CoA to form malonyl-CoA. ACC1 encodes a cytoplasmic isoform that is thought to be the predominant isoform controlling FASyn, whereas ACC2 is tethered to the mitochondrial outer membrane, where localized malonyl-CoA production blocks CPT-1 function to prevent fatty acids from entering the mitochondria to undergo fatty acid oxidation (FAOxn).

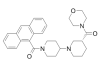
Acetyl-CoA Carboxylase Inhibitors & Modulators

CP-640186

Cat. No.: HY-15259

Bioactivity: CP-640186 is a potent and cell-permeable **Acetyl-CoA carboxylase (ACC)** inhibitor with **IC_{50}**s of 53 nM and 61 nM for rat liver ACC1 and rat skeletal muscle ACC2 respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

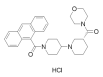


CP-640186 hydrochloride

Cat. No.: HY-15259A

Bioactivity: CP-640186 hydrochloride is a potent and cell-permeable **Acetyl-CoA carboxylase (ACC)** inhibitor with **IC_{50}**s of 53 nM and 61 nM for rat liver ACC1 and rat skeletal muscle ACC2 respectively.

Purity: 99.40%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



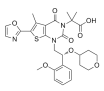
Firsocostat

(ND-630; GS-0976; NDI-010976)

Cat. No.: HY-16901

Bioactivity: Firsocostat (ND-630; GS-0976; NDI-010976) is an acetyl-CoA carboxylase (**ACC**) inhibitor; inhibits human ACC1 and ACC2 with **IC_{50}** values of 2.1 and 6.1 nM, respectively.

Purity: 98.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

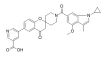


MK-4074

Cat. No.: HY-107709

Bioactivity: MK-4074 is a liver-specific inhibitor of **acetyl-CoA carboxylase** ACC1 and ACC2 with **IC_{50}** values of approximately 3 nM.

Purity: 98.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

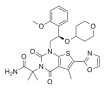


ND-646

Cat. No.: HY-101842

Bioactivity: ND-646 is an orally bioavailable and steric inhibitor of acetyl-CoA carboxylase (**ACC**) with **IC_{50}**s of 3.5 nM and 4.1 nM for recombinant hACC1 and hACC2, respectively.

Purity: 98.39%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Olumacostat glasaretil

Cat. No.: HY-17641

Bioactivity: Olumacostat glasaretil is a small molecule inhibitor of acetyl coenzyme A carboxylase (**ACC**).

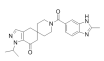
Purity: 98.78%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

PF-05175157

Cat. No.: HY-12942

Bioactivity: PF-05175157 is broad spectrum **acetyl-CoA carboxylase** (**ACC**) inhibitor with **IC_{50}**s of 27.0, 33.0, 23.5 and 50.4 nM for ACC1 (human), ACC2 (human), ACC1 (rat), ACC2 (rat), respectively.

Purity: 98.74%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg



TOFA

(RMI14514; MDL14514)

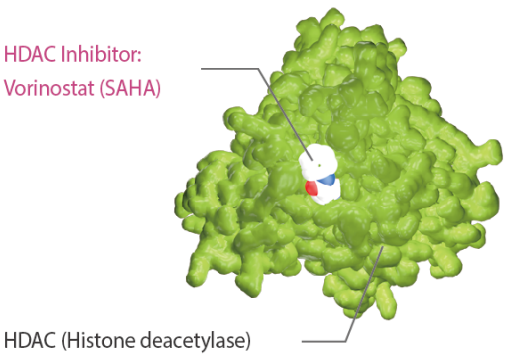
Cat. No.: HY-101068

Bioactivity: TOFA (RMI14514;MDL14514) is an allosteric inhibitor of acetyl-CoA carboxylase-α (**ACCA**).

Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

Acyltransferase

Diacylglycerol acyltransferase;Diglyceride acyltransferase;acyl-CoA:cholesterol acyltransferase;mono-acylglycerol acyltransferase



DGAT (acyl-CoA: diacylglycerol acyltransferase) is a transmembrane enzyme that acts in the final and committed step of triacylglycerides (TAGs) synthesis, and it has been proposed to be the rate-limiting enzyme in plant storage lipid accumulation. DGAT catalyzes the acylation of sn-1,2-diacylglycerol (DAG) at the sn-3 position using an acyl-CoA substrate. DGAT has been proposed to be the rate-limiting enzyme in plant storage lipid accumulation. DGAT is considered a key enzyme for biotechnological purposes; it might be utilized to increase oil content in oleaginous plant species.

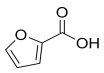
DGAT1 and DGAT2 are two of the enzymes that are responsible for the main part of TAG synthesis in most organisms, and they have been studied in many eukaryotic organisms.

2-Furoic acid

(Furan-2-carboxylic acid) Cat. No.: HY-W012946

Bioactivity: 2-Furoic acid (Furan-2-carboxylic acid) is an organic compound produced through furfural oxidation [1]. 2-Furoic acid exhibits hypolipidemic effet, lowers both serum cholesterol and serum triglyceride levels in rats [2].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

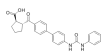


A 922500

(DGAT-1 Inhibitor 4a) Cat. No.: HY-10038

Bioactivity: A 922500 is a potent, selective, and orally bioavailable **DGAT-1** inhibitor exhibiting IC_{50}s of 9 and 22 nM against human and mouse DGAT-1, respectively.

Purity: 98.50%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

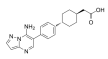


ABT-046

Cat. No.: HY-15197

Bioactivity: ABT-046 is a potent, selective, and orally bioavailable Diacylglycerol acyltransferase 1 (DGAT-1) inhibitor (IC50= 8 nM). IC50 value: 8 nM [1] Target: DGAT-1 Oral administration at doses ≥0.03 mg/kg significantly reduced postprandial triglycerides in mice following an oral lipid challenge....

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

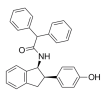


ACAT-IN-1 cis isomer

Cat. No.: HY-101648

Bioactivity: ACAT-IN-1 cis isomer is a potent **ACAT** inhibitor with an IC_{50} of 100 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

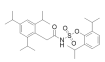


Avasimibe

(CI-1011; PD-148515) Cat. No.: HY-13215

Bioactivity: Avasimibe is an oral inhibitor of **acyl-Coenzyme A:cholesterol acyltransferase (ACAT)** with IC_{50}s of 24 and 9.2 μM for ACAT1 and ACAT2, respectively.

Purity: 99.74%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

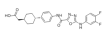


AZD3988

Cat. No.: HY-50861

Bioactivity: AZD3988 is a **diacylglycerol acyl transferase-1 (DGAT-1)** inhibitor with IC_{50}s of 6, 5, 11 nM for human, rat, mouse, respectively [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

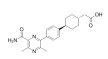


AZD7687

Cat. No.: HY-15497

Bioactivity: AZD7687 is a potent and selective DGAT1 inhibitor with an IC50 value of 80 nM (hDGAT1).

Purity: 98.09%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

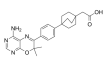


DGAT-1 inhibitor 2

Cat. No.: HY-50670

Bioactivity: DGAT-1 inhibitor 2 is an effective inhibitor of DGAT-1;antiobesity agents. IC50 value: Target: DGAT-1 Acyl-CoA:diacylglycerol acyltransferase 1 (DGAT1) is one of two known DGAT enzymes that catalyze the final step in triglyceride synthesis. Findings from genetically modified...

Purity: 95.20%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

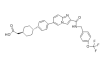


DGAT1-IN-1

Cat. No.: HY-12425

Bioactivity: DGAT1-IN-1 is a potent DGAT1 inhibitor with IC50 of < 10 nM(cell lysate from Hep3B cells overexpressing human DGAT1).

Purity: 95.14%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

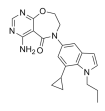


Diacylglycerol acyltransferase inhibitor-1

Cat. No.: HY-112851

Bioactivity: Diacylglycerol acyltransferase inhibitor-1 is a diacylglycerol acyltransferase **(DGAT1)** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg

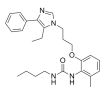


E-5324

Cat. No.: HY-19183

Bioactivity: E-5324 is potent inhibitor of acyl-CoA:cholesterol acyltransferase (**ACAT**) with **IC_{50}**s of 44 to 190 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

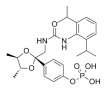


FCE 28654

Cat. No.: HY-U00369

Bioactivity: FCE 28654 is a water soluble inhibitor of acylCoA: cholesterol acyltransferase (**ACAT**), weakly inhibiting **ACAT** in microsomes from rabbit aorta and intestine, and monkey liver, with **IC_{50}**s of 2.55, 1.08 and 5.69 μM, respcetively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

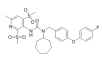


FR-190809

Cat. No.: HY-122078

Bioactivity: FR-190809 is a potent, nonadrenotoxic, orally efficacious acyl-CoA:cholesterol O-acyltransferase (**ACAT**) inhibitor, with an **IC_{50}** of 45 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

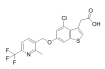


GOAT-IN-1

Cat. No.: HY-103479

Bioactivity: GOAT-IN-1 is an inhibitor of **ghrelin O-acyltransferase (GOAT)**, which could be useful for the prophylaxis or treatment of obesity, diabetes, hyperlipidemia, metabolic, non-alcoholic fatty liver, steatohepatitis, sarcopenia, appetite control, alcohol/narcotic dependence, Alzheimer's disease, Parkinson's...

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

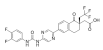


GSK2973980A

Cat. No.: HY-111417

Bioactivity: GSK2973980A is a potent and selective **Acyl-CoA:diacylglycerol acyltransferase 1 (DGAT1)** inhibitor with an **IC_{50}** of 3 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

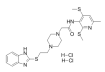


K-604 dihydrochloride

Cat. No.: HY-100400A

Bioactivity: K-604 dihydrochloride is a potent and selective acyl-CoA:cholesterol acyltransferase 1 (**ACAT-1**) inhibitor with an **IC_{50}** of 0.45±0.06 μM.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg

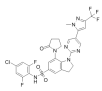


MGAT2-IN-1

Cat. No.: HY-101857

Bioactivity: MGAT2-IN-1 is an orally active inhibitor of monoacylglycerol acyltransferase (MGAT2) with **IC_{50}** of 7.8 and 2.4 nM for human and mouse MGAT2, respectively.

Purity: 98.63%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

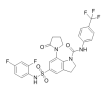


MGAT2-IN-2

Cat. No.: HY-U00430

Bioactivity: MGAT2-IN-2 is a potent and selective acyl CoA:monoacylglycerol acyltransferase 2 (**MGAT2**) inhibitor with an **IC_{50}** of 3.4 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg



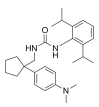
Nevanimibe

(PD-132301; ATR-101)

Cat. No.: HY-100399

Bioactivity: Nevanimibe (PD-132301; ATR101) is a selective and potent acyl-coenzyme A:cholesterol O-acyltransferase 1 (**ACAT1**) inhibitor with an **EC_{50}** of 9 nM. Nevanimibe (PD-132301; ATR101) inhibits ACAT2 with an EC_{50} of 368 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg



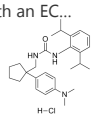
Nevanimibe hydrochloride

(PD-132301 hydrochloride; ATR101 hydrochloride)

Cat. No.: HY-100399A

Bioactivity: Nevanimibe hydrochloride (PD-132301 hydrochloride; ATR101 hydrochloride) is a selective and potent acyl-coenzyme A:cholesterol O-acyltransferase 1 (**ACAT1**) inhibitor with an **EC_{50}** of 9 nM. Nevanimibe hydrochloride (PD-132301 hydrochloride; ATR101 hydrochloride) inhibits ACAT2 with an EC...

Purity: 99.77%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

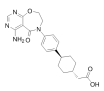


PF-04620110

Cat. No.: HY-13009

Bioactivity: PF-04620110 is a potent, selective and orally bioavailable **diglyceride acyltransferase-1 (DGAT-1)** inhibitor with an IC_{50} of 19 nM [1].

Purity: 99.37%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

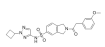


PF-06471553

Cat. No.: HY-108339

Bioactivity: PF-06471553 is a potent, selective and orally available **monoacylglycerol acyltransferase 3 (MGAT3)** inhibitor, with an IC_{50} of 92 nM.

Purity: 98.29%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



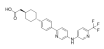
Pradigastat

(LCQ-908)

Cat. No.: HY-16278

Bioactivity: Pradigastat (LCQ-908) is a diacylglycerol acyltransferase 1 (**DGAT1**) inhibitor.

Purity: 96.39%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

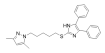


RP 70676

Cat. No.: HY-101576

Bioactivity: RP 70676 is a potent inhibitor of **ACAT**, with IC_{50} of 25 and 44 nM for rat and rabbit ACAT.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

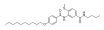


RP-64477

Cat. No.: HY-16437

Bioactivity: RP-64477 is a potent inhibitor of the cholesterol esterifying enzyme Acyl-coenzyme A:cholesterol O-acyltransferase (**ACAT**).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

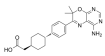


T863

Cat. No.: HY-32219

Bioactivity: T-863 (DGAT-1 inhibitor) is an orally active, selective and potent **DGAT1 (Acyl-CoA:diacylglycerol acyltransferase 1)** inhibitor that interacts with the acyl-CoA binding site of DGAT1, and inhibits triacylglycerol synthesis in cells.

Purity: 99.08%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

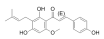


Xanthohumol

Cat. No.: HY-N1067

Bioactivity: Xanthohumol is one of the principal flavonoids isolated from hops, the inhibitor of diacylglycerol acetyltransferase (**DGAT**), **COX-1** and COX-2, and shows anti-cancer and anti-angiogenic activities.

Purity: 99.68%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

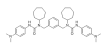


YM17E

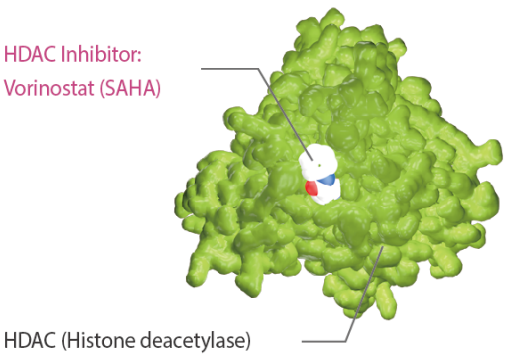
Cat. No.: HY-101627

Bioactivity: YM17E is an inhibitor of acyl CoA:cholesterol acyltransferase (**ACAT**), with IC_{50} of 44 nM in rabbit liver microsomes in vitro.

Purity: 97.11%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



Adenosine Deaminase



Adenosine deaminase (ADA) is an enzyme involved in purine metabolism. It is needed for the breakdown of adenosine from food and for the turnover of nucleic acids in tissues. Present in virtually all mammalian cells, its primary function in humans is the development and maintenance of the immune system. Adenosine deaminase is considered one of the key enzymes of purine metabolism. Adenosine deaminase in humans is involved in the development and maintenance of the immune system. However, Adenosine deaminase association has also been observed with epithelial cell differentiation, neurotransmission, and gestation maintenance. It has also been proposed that Adenosine deaminase, in addition to adenosine breakdown, stimulates release of excitatory amino acids and is necessary to the coupling of A1 adenosine receptors and heterotrimeric G proteins.

Adenosine Deaminase Inhibitors & Modulators

Adenosine deaminase

Cat. No.: HY-114175

Bioactivity: Adenosine deaminase is an enzyme that catalyzes the irreversible deamination of adenosine and 2'-deoxyadenosine to inosine and 2'-deoxyinosine, respectively.

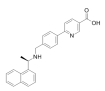
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg

AMPD2 inhibitor 1

Cat. No.: HY-103673

Bioactivity: AMPD2 inhibitor 1 is an adenosine monophosphate deaminase 2 (**AMPD2**) inhibitor, used in the research of sugar craving, salt craving, umami craving, and addictions including drug, tobacco, nicotine and alcohol addictions.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



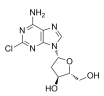
Cladribine

(2-Chloro-2′-deoxyadenosine; CldAdo; 2CdA)

Cat. No.: HY-13599

Bioactivity: Cladribine is an adenosine deaminase inhibitor used to treat hairy cell leukemia and multiple sclerosis.

Purity: 99.89%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



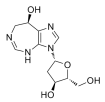
Pentostatin

(CI-825; Deoxycoformycin)

Cat. No.: HY-A0006

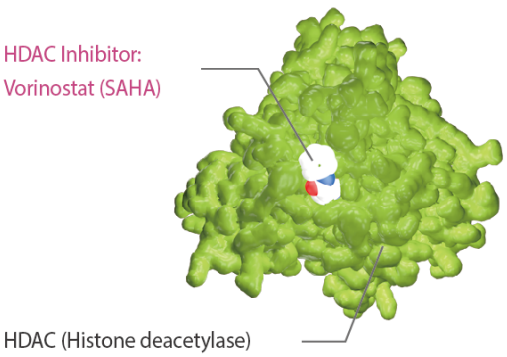
Bioactivity: Pentostatin is an irreversible inhibitor of **adenosine deaminase** with K_i of 2.5 pM.

Purity: 99.69%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



Adenosine Kinase

ADK



Adenosine kinase (AK) is a cytosolic enzyme that catalyzes the conversion of adenosine to AMP. One potential adenosine regulating agent (ARA) target is adenosine kinase. Adenosine kinase activation represents the major clearance route of adenosine and is partly responsible for its extremely short plasma half-life (<1 s). Inhibition of adenosine kinase results in increased intracellular adenosine which passes out of the cell via passive diffusion or via nucleoside transporter(s) to activate nearby cell-surface adenosine receptors. Thus, adenosine kinase inhibition can represent an alternative mechanism for activation of adenosine receptors and production of adenosine-associated pharmacologies.

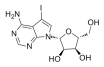
Adenosine kinase inhibitors (AKIs) represent an alternative strategy, since AKIs may raise local adenosine levels in a more site- and event-specific manner and thereby elicit the desired pharmacology with a greater therapeutic window. Several potent AKIs are shown to exhibit anticonvulsant activity in the rat maximal electric shock (MES) induced seizure assay.

5-Iodotubercidin

(NSC 113939; 5-ITu) Cat. No.: HY-15424

Bioactivity: 5-Iodotubercidin is a potent **adenosine kinase** inhibitor with **IC_{50}** of 26 nM.

Purity: 99.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 25 mg, 50 mg

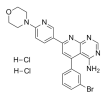


ABT-702 dihydrochloride

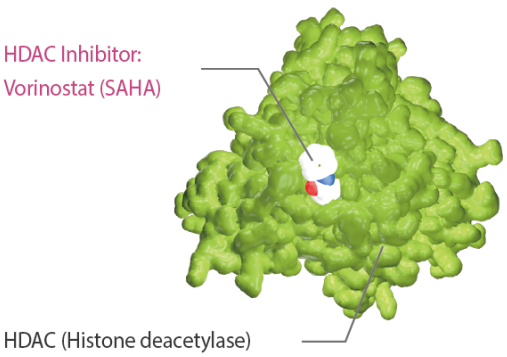
Cat. No.: HY-103161

Bioactivity: ABT-702 dihydrochloride is a potent **adenosine kinase** (**AK**) inhibitor (**IC_{50}**=1.7 nM).

Purity: 98.03%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Aldehyde Dehydrogenase (ALDH)



Aldehyde dehydrogenase 1 (ALDH1), which is a putative marker of breast cancer stem cells (CSCs), in triple negative breast cancer (TNBC) tissues.

Mitochondrial aldehyde dehydrogenase (ALDH2) is a member of the 19-strong human aldehyde dehydrogenase family of $NADP^+$ -dependent enzymes.

ALDH2, a mitochondrial enzyme responsible for metabolizing the major lipid peroxidation product, protects against acute ischemia/reperfusion injury and chronic heart failure. Activation of ALDH2, the main enzyme that catalyzes 4-HNE metabolism, is sufficient to protect the heart against acute ischemia-reperfusion injury.

ALDH2 is a key detoxifying enzyme. ALDH2 is most commonly associated with its role in ethanol metabolism, catalyzing the oxidation of ethanol-derived acetaldehyde to acetate.

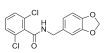
Aldehyde Dehydrogenase (ALDH) Inhibitors & Modulators

Alda-1

Cat. No.: HY-18936

Bioactivity: Alda-1 is a potent **ALDH2** agonist, which activates wild-type ALDH2 and restores near wild-type activity to ALDH2*2.

Purity: 99.81%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



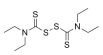
Disulfiram

(Tetraethylthiuram disulfide; TETD)

Cat. No.: HY-B0240

Bioactivity: Disulfiram is a specific inhibitor of **aldehyde-dehydrogenase (ALDH1)**, used for the treatment of chronic alcoholism by producing an acute sensitivity to alcohol.

Purity: 98.67%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

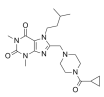


NCT-501

Cat. No.: HY-18768

Bioactivity: NCT-501 is a potent and selective theophylline-based inhibitor of **aldehyde dehydrogenase 1A1 (ALDH1A1)**, inhibits hALDH1A1 with **IC_{50}** of 40 nM, typically shows better selectivity over other ALDH isozymes and other dehydrogenases (hALDH1...

Purity: 99.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

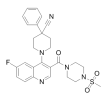


NCT-505

Cat. No.: HY-112277

Bioactivity: NCT-505 is a potent and selective **aldehyde dehydrogenase (ALDH1A1)** inhibitor, with an **IC_{50}** of 7 nM, and weakly inhibits hALDH1A2, hALDH1A3, hALDH2, hALDH3A1 (**IC_{50}**s, >57, 22.8, 20.1, >57 μM).

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

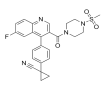


NCT-506

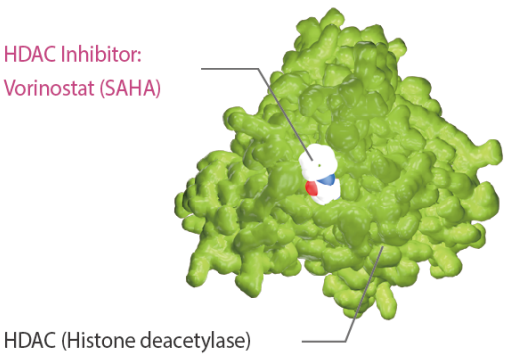
Cat. No.: HY-112278

Bioactivity: NCT-506 is an orally bioavailable aldehyde dehydrogenase 1A1 (**ALDH1A1**) inhibitors with an **IC_{50}** of 7 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg



Aldose Reductase



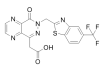
Aldose reductase is an NADPH-dependent oxidoreductase that catalyzes the reduction of a variety of aldehydes and carbonyls, including monosaccharides. It is primarily known for catalyzing the reduction of glucose to sorbitol, the first step in polyol pathway of glucose metabolism. The aldose reductase reaction, in particular the sorbitol produced, is important for the function of various organs in the body. Aldose reductase inhibitors are a class of drugs being studied as a way to prevent eye and nerve damage in people with diabetes.

Aldose reductase-IN-1

Cat. No.: HY-18967

Bioactivity: Aldose reductase-IN-1 is a inhibitor of aldose reductase with IC50 of 28.9 pM.

Purity: 99.86%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



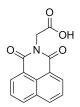
Alrestatin

(AY-22284)

Cat. No.: HY-B1202

Bioactivity: Alrestatin is an inhibitor of aldose reductase, an enzyme involved in the pathogenesis of complications of diabetes mellitus, including diabetic neuropathy.

Purity: 99.14%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



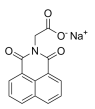
Alrestatin sodium

(AY-22284A)

Cat. No.: HY-B1202A

Bioactivity: Alrestatin sodium is an inhibitor of aldose reductase, an enzyme involved in the pathogenesis of complications of diabetes mellitus, including diabetic neuropathy.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg



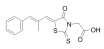
Epalrestat

(ONO2235)

Cat. No.: HY-66009

Bioactivity: Epalrestat is an aldose reductase inhibitor for the treatment of diabetic neuropathy. Target: Aldose Reductase Epalrestat may affect or delay progression of the underlying disease process. Data from six clinical trials were evaluated, and it was determined that epalrestat 50 mg 3 times/day may improve...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



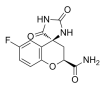
Fidarestat

(SNK 860)

Cat. No.: HY-105185

Bioactivity: Fidarestat (SNK 860) is an inhibitor of **aldose reductase**, with **IC_{50}**s of 26 nM, 33 μM, and 1.8 μM for aldose reductase, AKR1B10 and V301L AKR1B10, respectively; Fidarestat (SNK 860) has the potential to treat diabetic disease.

Purity: >98%
Clinical Data: Launched
Size: 250 mg, 500 mg



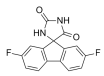
Imirestat

(AL 1576; Alcon 1576; HOE 843)

Cat. No.: HY-16255

Bioactivity: Imirestat (AL 1576) is an **aldose reductase** inhibitor, used for the treatment of diabetes.

Purity: 99.52%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 20 mg



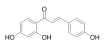
Isoliquiritigenin

(GU17; ISL; Isoliquiritigen)

Cat. No.: HY-N0102

Bioactivity: Isoliquiritigenin is an anti-tumor flavonoid from the root of Glycyrrhiza glabra, which inhibits **aldose reductase** with an **IC_{50}** of 320 nM.

Purity: 98.24%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg



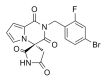
Ranirestat

(AS-3201)

Cat. No.: HY-15314

Bioactivity: Ranirestat (AS-3201) is an aldose reductase inhibitor being developed for the treatment of diabetic neuropathy.

Purity: 99.14%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



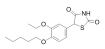
Risarestat

(CT 112)

Cat. No.: HY-16433

Bioactivity: Risarestat (CT-112), an **aldose reductase** inhibitor, is developed for the treatment of diabetic complications.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



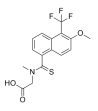
Tolrestat

(AY-27773)

Cat. No.: HY-16500

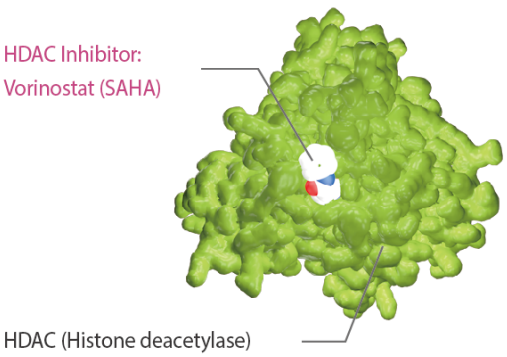
Bioactivity: Tolrestat is a potent, orally active **aldose reductase** inhibitor with **IC_{50}** of 35 nM.

Purity: 98.85%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Aminoacyl-tRNA Synthetase

tRNA Synthetase, aaRS



Aminoacyl-tRNA Synthetases (AARSs) are ubiquitous and evolutionarily conserved enzymes that catalyze the highly specific acylation of amino acids to cognate tRNAs. Aminoacyl-tRNA Synthetases are essential for accurate decoding of the triplet genetic code and for sustenance of all domains of life, including bacteria, archaea, and eukarya.

Aminoacyl-tRNA Synthetases also perform critical cellular activities unrelated to their primary function in aminoacylation. These noncanonical activities include regulation of gene transcription, mRNA translational control, angiogenesis, apoptosis, amino acid sensing, and cell signaling.

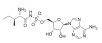
Aminoacyl-tRNA Synthetase Inhibitors & Modulators

Aminoacyl tRNA synthetase-IN-1

Cat. No.: HY-108939

Bioactivity: Aminoacyl tRNA synthetase-IN-1 is a **bacterial aminoacyl tRNA synthetase** (**aaRS**) inhibitor.

Purity: 99.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

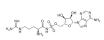


Arg-AMS

Cat. No.: HY-112862

Bioactivity: Arg-AMS is a potent nanomolar inhibitor of **arginyl tRNA synthetase**, which displays tightly bound inhibitory characteristics for the A-domains in non-ribosomal peptide synthetases **(NRPS)** enzymes.

Purity: 99.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

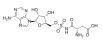


Asp-AMS

Cat. No.: HY-112860

Bioactivity: Asp-AMS, an analogue of aspartyl-adenylate, is an **aspartyl-tRNA synthetase** inhibitor and also a strong competitive inhibitor of the **mitochondrial enzyme**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

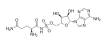


Gln-AMS

Cat. No.: HY-112861

Bioactivity: Gln-AMS is an aminoacyl-tRNA synthetases **(AARS)** inhibitor, which binds the A-domain within the NRPS enzymes.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

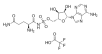


Gln-AMS TFA

Cat. No.: HY-112861A

Bioactivity: Gln-AMS (TFA) is a type Ia **aminoacyl-tRNA synthetase (AARS)** inhibitor. Gln-AMS inhibits **glutaminyl-tRNA synthetase (GlnRS)** with a K_i of 1.32 μM.

Purity: 99.50%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

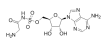


GlyRS-IN-1

Cat. No.: HY-108940

Bioactivity: GlyRS-IN-1 is a **glycyl-tRNA synthase** (**GlyRS**) inhibitor extracted from patent WO 2017066459 A1. GlyRS-IN-1 can also inhibit the growth of bacteria.

Purity: 97.35%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

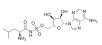


Leu-AMS

Cat. No.: HY-108900

Bioactivity: Leu-AMS is a potent inhibitor of **leucyl-tRNA synthetase** (**LRS**) with an IC_{50} of 22.34 nM and inhibits the growth of bacteria.

Purity: 99.14%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

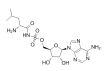


Leu-AMS R enantiomer

Cat. No.: HY-108900A

Bioactivity: Leu-AMS R enantiomer is the R enatiomer of Leu-AMS. Leu-AMS is a potent inhibitor of leucyl-tRNA synthetase (LRS) and inhibits the growth of bacteria.

Purity: 97.64%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg

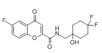


LysRs-IN-2

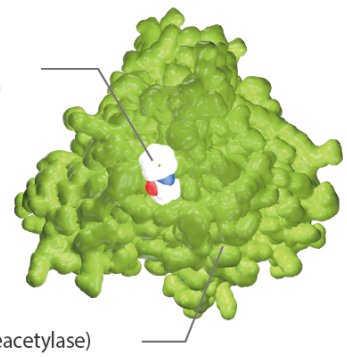
Cat. No.: HY-126130

Bioactivity: LysRs-IN-2 is a **lysyl-tRNA synthetase (KRS)** inhibitor with IC_{50}s of 0.015 μM and 0.13 μM for Plasmodium falciparum lysyl-tRNA synthetase (PfKRS) and Cryptosporidium parvum lysyl-tRNA synthetase (CpKRS), respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg, 100 mg



Aminopeptidase



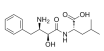
Aminopeptidases catalyze the cleavage of amino acids from the amino terminus of protein (N-terminus) or peptide substrates. They are widely distributed throughout the animal and plant kingdoms and are found in many subcellular organelles, in cytoplasm, and as membrane components. Aminopeptidases are used in essential cellular functions. Many, but not all, of these peptidases are zinc Metalloenzymes. Some aminopeptidases are monomeric, and others are assemblies of relatively high mass (50 kDa) subunits. CDNA sequences are available for several aminopeptidases and a crystal structure of the open state of human endoplasmic reticulum Aminopeptidase 1 ERAP1 is presented here. Amino acid sequences determined directly or deduced from cDNAs indicate some amino acid sequence homologies in organisms as diverse as Escherichia coli and mammals, particularly in catalytically important residues or in residues involved in metal ion binding. One important aminopeptidase is a zinc-dependent enzyme produced and secreted by glands of the small intestine. It helps the enzymatic digestion of proteins. Additional digestive enzymes produced by these glands include dipeptidases, maltase, sucrase, lactase, and enterokinase.

Aminopeptidase Inhibitors & Modulators

Bestatin
(Ubenimex) Cat. No.: HY-B0134

Bioactivity: Bestatin is a natural, broad-spectrum, and competitive **aminopeptidase** inhibitor.

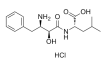
Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



Bestatin hydrochloride
(Ubenimex hydrochloride) Cat. No.: HY-B0134A

Bioactivity: Bestatin hydrochloride is an inhibitor of **CD13 (Aminopeptidase N)/APN** and **leukotriene A4 hydrolase**, used for cancer treatment.

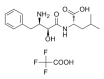
Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



Bestatin trifluoroacetate
(Ubenimex trifluoroacetate) Cat. No.: HY-B0134B

Bioactivity: Bestatin trifluoroacetate is an inhibitor of **CD13 (Aminopeptidase N)/APN** and **leukotriene A4 hydrolase**, used for cancer treatment.

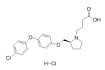
Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



DG051
Cat. No.: HY-10825

Bioactivity: DG051 is a potent **leukotriene A4 hydrolase** inhibitor of leukotriene B4 biosynthesis in the enzyme assay with an $\mathbf{IC_{50}}$=47 nM.

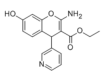
Purity: 99.65%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg



HFI-142
Cat. No.: HY-110259

Bioactivity: HFI-142 is an insulin-regulated aminopeptidase (IRAP) inhibitor with a $\mathbf{K_i}$ of 2.01 μM [1].

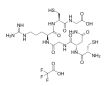
Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



NGR peptide Trifluoroacetate
Cat. No.: HY-P1043A

Bioactivity: NGR peptide Trifluoroacetate containing the asparagine-glycine-arginine (NGR) motif is recognized by **CD13**/ **aminopeptidase N** (**APN**) **receptor** isoforms that are selectively overexpressed in tumor neovasculature.

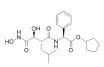
Purity: 98.55%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 mg, 5 mg



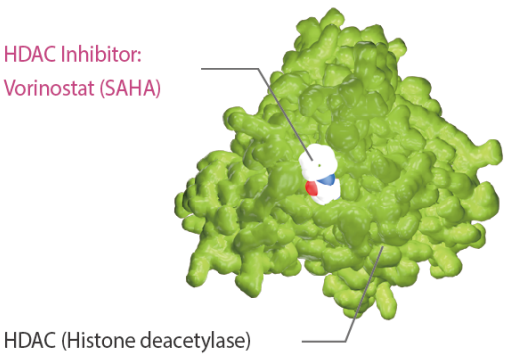
Tosedostat
(CHR-2797) Cat. No.: HY-14807

Bioactivity: Tosedostat is an **aminopeptidase** inhibitor.

Purity: 99.65%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Angiotensin-converting Enzyme (ACE)



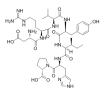
Angiotensin-converting enzyme (ACE) indirectly increases blood pressure by causing blood vessels to constrict. ACE does that by converting angiotensin I to angiotensin II, which constricts the vessels. ACE, angiotensin I and angiotensin II are part of the renin-angiotensin system (RAS), which controls blood pressure by regulating the volume of fluids in the body. ACE is secreted in the lungs and kidneys by cells in the endothelium (inner layer) of blood vessels. It has two primary functions: ACE catalyses the conversion of angiotensin I to angiotensin II, a potent vasoconstrictor in a substrate concentration-dependent manner. ACE degrades bradykinin, a potent vasodilator, and other vasoactive peptides. These two actions make ACE inhibition a goal in the treatment of conditions such as high blood pressure, heart failure, diabetic nephropathy, and type 2 diabetes mellitus. Inhibition of ACE (by ACE inhibitors) results in the decreased formation of angiotensin II and decreased metabolism of bradykinin, leading to systematic dilation of the arteries and veins and a decrease in arterial blood pressure.

Angiotensin 1-7

(Angiotensin-(1-7); Ang-(1-7)) Cat. No.: HY-12403

Bioactivity: Angiotensin (1-7) inhibits purified canine angiotensin converting enzyme (**ACE**) activity with an IC_{50} of 0.65 μM.

Purity: 99.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 25 mg, 50 mg

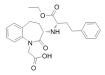


Benazepril

Cat. No.: HY-B0093

Bioactivity: Benazepril, an angiotensin converting enzyme inhibitor, which is a medication used to treat high blood pressure.

Purity: >98%
Clinical Data: Launched
Size: 1 g, 5 g

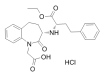


Benazepril hydrochloride

(CGS14824A) Cat. No.: HY-B0093A

Bioactivity: Benazepril hydrochloride, an angiotensin converting enzyme inhibitor, which is a medication used to treat high blood pressure. Target: angiotensin converting enzyme (ACE) Benazepril hydrochloride is a medication used to treat high blood pressure (hypertension), congestive heart failure, and...

Purity: 99.85%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

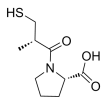


Captopril

(SQ-14534; SA333) Cat. No.: HY-B0368

Bioactivity: Captopril (SQ-14534) is a potent, competitive inhibitor of angiotensin-converting enzyme (ACE).

Purity: 98.05%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

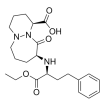


Cilazapril

(Ro 31-2848) Cat. No.: HY-A0043

Bioactivity: Cilazapril is a angiotensin-converting enzyme (ACE) inhibitor used for the treatment of hypertension and congestive heart failure.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

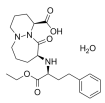


Cilazapril monohydrate

(Ro 31-2848 monohydrate) Cat. No.: HY-A0043A

Bioactivity: Cilazapril Monohydrate is a angiotensin-converting enzyme (ACE) inhibitor used for the treatment of hypertension and congestive heart failure.

Purity: 98.63%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

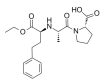


Enalapril

(MK-421) Cat. No.: HY-B0331

Bioactivity: Enalapril (MK-421) is an angiotensin converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: Launched
Size: 1 g, 5 g

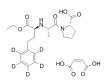


Enalapril D5 maleate

(MK-421 (D5 maleate)) Cat. No.: HY-B0331AS

Bioactivity: Enalapril (D5 maleate) (MK-421 (D5 maleate)) is deuterium labeled Enalapril, which is an angiotensin converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

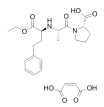


Enalapril maleate

(MK-421 (maleate)) Cat. No.: HY-B0331A

Bioactivity: Enalapril (maleate) (MK-421 (maleate)), the active metabolite of enalapril, is an angiotensin-converting enzyme (ACE) inhibitor.

Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

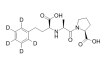


Enalaprilat D5

(MK-422 D5) Cat. No.: HY-B0231AS

Bioactivity: Enalaprilat D5 is the deuterium labeled Enalaprilat(MK-422), which is an angiotensin-converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg

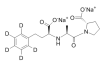


Enalaprilat D5 Sodium Salt

(MK-422 D5 Sodium Salt) Cat. No.: HY-B0231BS

Bioactivity: Enalaprilat D5 Sodium Salt is the deuterium labeled Enalaprilat(MK-422), which is an angiotensin-converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

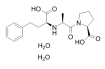


Enalaprilat dihydrate

(MK-422) Cat. No.: HY-B0231

Bioactivity: Enalaprilat (dihydrate) (MK-422) is an angiotensin-converting enzyme (ACE) inhibitor with IC_{50} of 1.94 nM.

Purity: 99.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

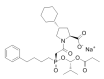


Fosinopril sodium

(SQ28555) Cat. No.: HY-B0382

Bioactivity: Fosinopril Sodium is the ester prodrug of an angiotensin-converting enzyme (ACE) inhibitor, used for the treatment of hypertension and some types of chronic heart failure. Target: ACE Fosinopril is a phosphinic acid-containing ester prodrug that belongs to the...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 50 mg, 100 mg

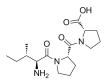


H-Ile-Pro-Pro-OH

Cat. No.: HY-114424

Bioactivity: H-Ile-Pro-Pro-OH, a milk-derived peptide [1], inhibits angiotensin-converting enzyme (**ACE**) [1] with an **IC_{50}** of 5 μM [2]. Antihypertensive tripeptides [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

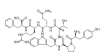


Hemorphin-7

Cat. No.: HY-P0318

Bioactivity: Hemorphin-7 is a hemorphin peptide, an endogenous opioid peptide derived from the β-chain of hemoglobin. Hemorphin peptides exhibits antinociceptive and antihypertensive activities, activating opioid receptors and inhibiting angiotensin-converting enzyme (ACE).

Purity: 99.65%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

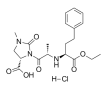


Imidapril hydrochloride

(TA-6366) Cat. No.: HY-B1451

Bioactivity: Imidapril Hydrochloride is the hydrochloride salt of Imidapril, an angiotensin-converting enzyme (ACE) inhibitor with antihypertensive activity.

Purity: 99.95%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg

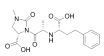


Imidaprilate

(6366A; Imidaprilat) Cat. No.: HY-109592

Bioactivity: Imidaprilate is an active metabolite of TA-6366, acts as a potent angiotensin converting enzyme (**ACE**) inhibitor, with an **IC_{50}** of 2.6 nM, and is used in the research of hypertensive disease.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

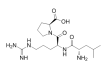


Leucylarginylproline

Cat. No.: HY-P0143

Bioactivity: Leucylarginylproline is an angiotensin-converting enzyme (**ACE**) inhibitor with an **IC_{50}** of 0.27μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

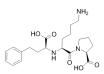


Lisinopril

(MK-521) Cat. No.: HY-18206

Bioactivity: Lisinopril (MK-521) is angiotensin-converting enzyme inhibitor, used in treatment of hypertension, congestive heart failure, and heart attacks.

Purity: >98%
Clinical Data: Launched
Size: 1 g, 5 g

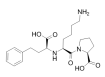


Lisinopril dihydrate

(MK-521 (dihydrate)) Cat. No.: HY-18206A

Bioactivity: Lisinopril Dihydrate is angiotensin-converting enzyme inhibitor, used in treatment of hypertension, congestive heart failure, and heart attacks. Target: ACE Lisinopril is a potent, competitive inhibitor of angiotensin-converting enzyme (ACE), the enzyme responsible for the conversion of...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 1 g, 5 g

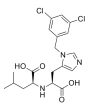


MLN-4760

Cat. No.: HY-19414

Bioactivity: MLN-4760 is a potent and selective human **ACE2** inhibitor (**IC_{50}**, 0.44 nM), with excellent selectivity (>5000-fold) versus related enzymes including human testicular ACE (**IC_{50}**

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

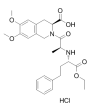


Moexipril hydrochloride

(RS-10085) Cat. No.: HY-B0378A

Bioactivity: Moexipril HCl is a potent orally active non-sulfhydryl angiotensin converting enzyme(ACE) inhibitor, which is used for the treatment of hypertension and congestive heart failure.

Purity: 98.49%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

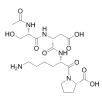


N-Acetyl-Ser-Asp-Lys-Pro

Cat. No.: HY-P0266

Bioactivity: N-Acetyl-Ser-Asp-Lys-Pro is a natural and specific substrate for the N-terminal site of **ACE**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

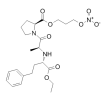


NCX899

Cat. No.: HY-101577

Bioactivity: NCX899 is a NO-releasing derivative of enalapril, and shows inhibitory activity against **angiotensin-converting enzyme (ACE)** activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

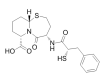


Omapatrilat

(BMS-186716) Cat. No.: HY-18208

Bioactivity: Omapatrilat is a dual inhibitor of the metalloproteases **ACE** and **NEP** with **K_i** values of 0.64 and 0.45 nM, respectively.

Purity: 97.22%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

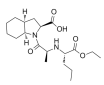


Perindopril

(S-9490) Cat. No.: HY-B0130

Bioactivity: Perindopril is a long-acting ACE inhibitor of which is used to treat high blood pressure, heart failure or stable coronary artery disease. Target: ACE Perindopril is a long-acting ACE inhibitor. It is used to treat high blood pressure, heart failure or stable coronary artery disease in form of...

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 500 mg

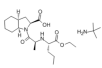


Perindopril erbumine

(Perindopril tert-butylamine salt; S-9490 (erbumine)) Cat. No.: HY-B0130A

Bioactivity: Perindopril erbumine is a potent ACE inhibitor of which is used to treat high blood pressure, heart failure or stable coronary artery disease. Target: ACE Perindopril is a long-acting ACE inhibitor. It is used to treat high blood pressure, heart failure or stable coronary artery disease in...

Purity: 99.33%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

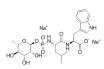


Phosphoramidon Disodium

Cat. No.: HY-N2021A

Bioactivity: Phosphoramidon disodium is a **metalloprotease** inhibitor. Phosphoramidon inhibits endothelin-converting enzyme (**ECE**), neutral endopeptidase (**NEP**), and angiotensin-converting enzyme (**ACE**) with **IC_{50}** values of 3.5, 0.034, and 78 μM, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

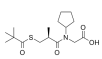


Pivalopril

(Pivopril; RHC 3659(S)) Cat. No.: HY-U00041

Bioactivity: Pivalopril is a new orally active angiotensin converting enzyme (**ACE**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

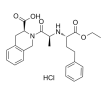


Quinapril hydrochloride

(CI-906) Cat. No.: HY-B0477

Bioactivity: Quinapril (hydrochloride) (CI-906) is a prodrug that belongs to the angiotensin-converting enzyme (ACE) inhibitor class of medications.

Purity: 99.10%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

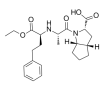


Ramipril

(HOE-498) Cat. No.: HY-B0279

Bioactivity: Ramipril (HOE-498) is an angiotensin-converting enzyme (ACE) inhibitor with IC_{50} of 5 nM.

Purity: 99.81%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

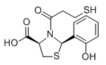


Rentiapril

(SA-446) Cat. No.: HY-106446

Bioactivity: Rentiapril is an orally active **angiotensin converting enzyme (ACE)** inhibitor with antihypertensive activity [1] [2].

Purity: >98%
Clinical Data: No Development Reported
Size:

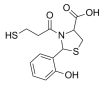


Rentiapril racemate

(SA-446 racemate) Cat. No.: HY-U00074

Bioactivity: Rentiapril racemate (SA-446 racemate) is the less active racemate of Rentiapril. Rentiapril is an **angiotensin converting enzyme** (**ACE**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

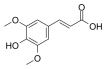


Sinapinic acid

(Sinapic acid) Cat. No.: HY-W009732

Bioactivity: Sinapinic acid (Sinapic acid) is a phenolic compound isolated from Hydnophytum formicarum Jack. Rhizome, acts as an inhibitor of **HDAC**, with an IC_{50} of 2.27 mM [1], and also inhibits **ACE-I** activity [2]. Sinapinic acid posssess pot...

Purity: 99.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

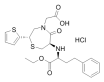


Temocapril hydrochloride

Cat. No.: HY-B0384

Bioactivity: Temocapril Hydrochloride is a long-acting angiotensin-converting enzyme (ACE) inhibitor, used for the treatment of hypertension.

Purity: 99.52%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

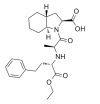


Trandolapril

(RU44570) Cat. No.: HY-B0592

Bioactivity: Trandolapril(RU44570) is an ACE inhibitor used to treat high blood pressure. Target: ACE Trandolapril is an ACE inhibitor used to treat high blood pressure, it may also be used to treat other conditions. Trandolapril acts by competitive inhibition of Angiotensin Converting Enzyme (ACE), a key...

Purity: 98.01%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

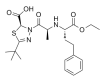


Utibapril

(FPL 63547) Cat. No.: HY-101681

Bioactivity: Utibapril is an **angiotensin-converting enzyme (ACE)** inhibitor with antihypertensive activities.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

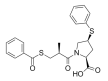


Zofenopril

Cat. No.: HY-108321

Bioactivity: Zofenopril is an **angiotensin-converting enzyme** (**ACE**) inhibitor with an IC_{50} of 81 μM.

Purity: 98.81%
Clinical Data: Launched
Size: 5 mg

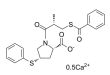


Zofenopril calcium

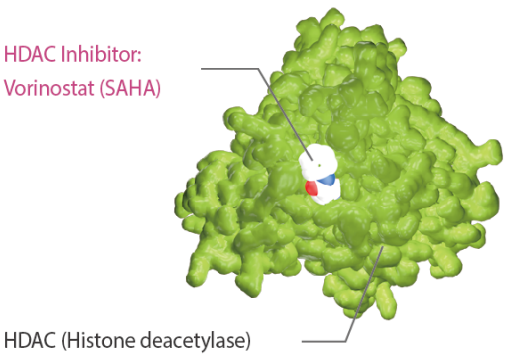
(SQ26991) Cat. No.: HY-B0655

Bioactivity: Zofenopril Calcium (SQ26991) is an antioxidant that acts as an angiotensin-converting enzyme inhibitor. Target: ACE Zofenopril Calcium is a pro-drug designed to undergo metabolic hydrolysis yielding the active free sulfhydryl compound zofenoprilat, which is an angiotensin converting enzyme (ACE)...

Purity: 97.91%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg



Arginase



Arginase, an enzyme within the urea cycle in the liver, is also found in many other cells and tissues, including the lung. Arginase is present in 2 isoforms: arginase I, the hepatic isoform; and arginase II, the extrahepatic isoform; each of which is encoded by a distinct gene.

The expression and function of arginase I in macrophages, hepatocytes, and vascular smooth muscle cells, is stimulated by lipopolysaccharide (LPS), IL-13, altered oxygen tension, and balloon dilatation of coronary arteries. The activation and expression of endothelial arginase II can also be induced by a variety of vascular insults.

Arginase competitively inhibits nitric oxide synthase (NOS) via use of the common substrate L-arginine. Inhibition of arginase activity enhances a variety of parameters relevant to allergic airways disease, possibly by altering NO homeostasis. Arginase inhibition actively augments NO production and has beneficial effects on normal cardiac function and on vascular dysfunction typical of atherogenesis, aging, and erectile dysfunction, and sickle cell disease.

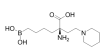
Arginase Inhibitors & Modulators

Arginase inhibitor 1

Cat. No.: HY-15775

Bioactivity: Arginase inhibitor 1 is a potent inhibitor of human **arginases I** and **II** with **IC_{50}**s of 223 and 509 nM, respectively.

Purity: 98.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

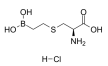


BEC hydrochloride

Cat. No.: HY-19548A

Bioactivity: BEC HCl is a slow-binding and competitive Arginase II inhibitor with Ki of 0.31 μM (ph 7.5). target: Arginase II [1]; In vitro: BEC HCl causes significant enhancement of NO-dependent smooth muscle relaxation in this tissue. [2] BEC HCl enhances perivascular and peribronchiolar lung...

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 25 mg, 50 mg



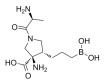
CB-1158

(INCB01158)

Cat. No.: HY-101979

Bioactivity: CB-1158 is a potent and orally bioavailable inhibitor of **arginase**, with **IC_{50}**s of 86 and 296 nM for recombinant human arginase 1 and 2, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg



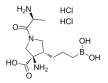
CB-1158 Hydrochloride

(INCB01158 Hydrochloride)

Cat. No.: HY-101979A

Bioactivity: CB-1158 Hydrochloride is a potent and orally bioavailable inhibitor of **arginase**, with **IC_{50}**s of 86 and 296 nM for recombinant human arginase 1 and 2, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg



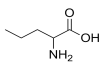
DL-Norvaline

(2-Aminopentanoic acid)

Cat. No.: HY-W010510

Bioactivity: DL-Norvaline, a derivative of **L-norvaline**, L-norvaline is a non-competitive inhibitor of arginase.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
5 g



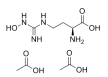
nor-NOHA acetate

(Nω-hydroxy-nor-Arginine acetate)

Cat. No.: HY-112885A

Bioactivity: nor-NOHA acetate is a specific and reversible **arginase** inhibitor, induces apoptosis in ARG2-expressing cells under hypoxia but not normoxia. Anti-leukemic activity, effective in endothelial dysfunction, immunosuppression and metabolism [1].

Purity: 99.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg



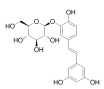
Piceatannol 3'-O-glucoside

(Quzhaqigan)

Cat. No.: HY-N2237

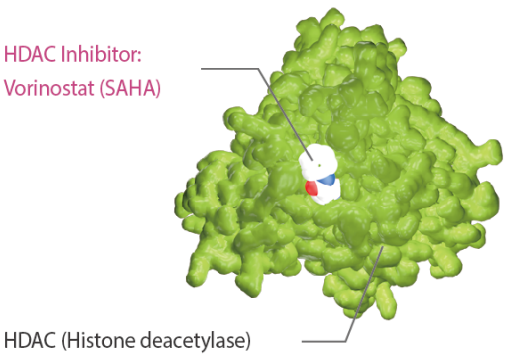
Bioactivity: Piceatannol 3'-O-glucoside, an active component of Rhubarb, activates endothelial **nitric oxide** (**NO**) **synthase** through inhibition of arginase activity with **IC_{50}**s of 11.22 μM and 11.06 μM against **arginase I** and **arginase II**, respectively.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 5 mg



ATGL

Adipose triglyceride lipase



Adipose triglyceride lipase (ATGL) is rate-limiting in the mobilization of fatty acids from cellular triglyceride stores. This central role in lipolysis marks ATGL as interesting pharmacological target since deregulated fatty acid metabolism is closely linked to dyslipidemic and metabolic disorders. Here we report on the development and characterization of a small-molecule inhibitor of ATGL. Atglistatin is selective for ATGL and reduces fatty acid mobilization in vitro and in vivo. ATGL performs the first step in triacylglycerol (TG) catabolism generating diacylglycerol which is subsequently degraded by hormone-sensitive lipase (HSL) and monoglyceride lipase (MGL) into glycerol and fatty acids (FA).

Adipose triglyceride lipase (ATGL) and hormone-sensitive lipase (HSL) are the major enzymes contributing to triacylglycerol (TG) breakdown in in vitro assays and in organ cultures of murine white adipose tissue (WAT).

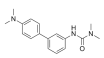
ATGL Inhibitors & Modulators

Atglistatin

Cat. No.: HY-15859

Bioactivity: Atglistatin is a selective adipose triglyceride lipase (**ATGL**) inhibitor which inhibits lipolysis with an IC_{50} of 0.7 μM in vitro.

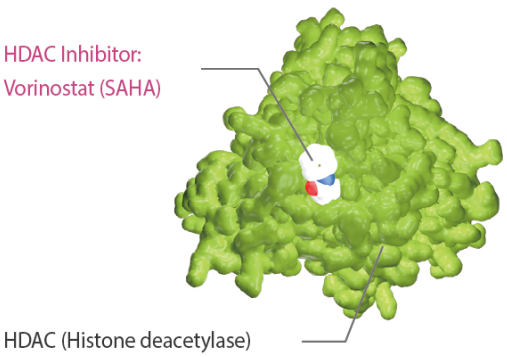
Purity: 98.06%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

ATP Citrate Lyase

ACLY



ATP-citrate lyase (ACL) is a cytosolic enzyme upstream of HMG-CoA reductase in the lipid biosynthesis pathway that catalyses the cleavage of mitochondrial-derived citrate into oxaloacetate and acetyl-CoA, the latter serving as common substrate for de novo cholesterol and fatty acid synthesis. Although ACL is not rate limiting, its strategic position at the intersection of lipid and carbohydrate metabolism, and its potential to regulate lipoprotein metabolism, attracted early interest as a drug target to treat dyslipidemia.

ATP-citrate lyase (ACL) is an extramitochondrial enzyme that is expressed in lipogenic tissues such as liver and adipose. Since ACL is the primary enzyme responsible for the production of cytosolic acetyl-CoA, a precursor required for de novo biosyntheses of cholesterol and fatty acids, inhibition of ACL has the potential to reduce cholesterol and triglyceride levels and possibly exert an impact on obesity via reduction of lipogenic factors.

ACL is an important enzyme with significant effects on fatty acid and cholesterol metabolism. It is a cytosolic enzyme highly expressed in lipogenic tissues such as the liver and white adipose tissue and is positioned upstream from HMG-CoA reductase in the mammalian cholesterol biosynthesis pathway. It links energy metabolism from carbohydrates to the production of fatty acids through catalyzing acetyl CoA synthesis, the fundamental substrate for the biosynthesis of both fatty acids and cholesterol.

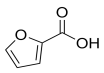
ATP Citrate Lyase Inhibitors & Modulators

2-Furoic acid

(Furan-2-carboxylic acid) **Cat. No.:** HY-W012946

Bioactivity: 2-Furoic acid (Furan-2-carboxylic acid) is an organic compound produced through furfural oxidation [1]. 2-Furoic acid exhibits hypolipidemic effet, lowers both serum cholesterol and serum triglyceride levels in rats [2].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

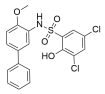


BMS-303141

Cat. No.: HY-16107

Bioactivity: BMS-303141 is a potent, cell-permeable ATP-citrate lyase (**ACL**) inhibitor with an **IC_{50}** of 0.13 μM.

Purity: 98.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

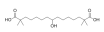


ETC-1002

(ESP-55016; Bempedoic acid) **Cat. No.:** HY-12357

Bioactivity: ETC-1002 (ESP-55016; Bempedoic acid) is an **ATP-citrate lyase** inhibitor [1]. ETC-1002 activates **AMPK** [2].

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

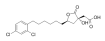


SB 204990

Cat. No.: HY-16450

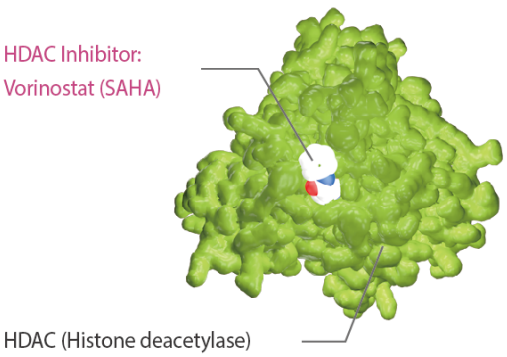
Bioactivity: SB 204990 is a potent and specific inhibitor of ATP citrate lyase **(ACLY)** enzyme.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg



Carbonic Anhydrase

Carbonate dehydratase



Carbonic anhydrase is a zinc-containing enzyme that catalyzes the reversible hydration of carbon dioxide: $CO_2+H_2O<-->HCO_3^-+H^+$. The enzyme is the target for drugs, such as Acetazolamide, Methazolamide, and Dichlorphenamide, for the treatment of glaucoma. There are three evolutionarily unrelated CA families, designated alpha, beta, and gamma. All known CAs from the animal kingdom are of the alpha type. There are seven mammalian CA isozymes with different tissue distributions and intracellular locations, CA I-VII.

Carbonic anhydrase is one of the core enzyme in organism, which involves in osmoregulation, ionic regulation, acid-base regulation and other physiological and biochemical process.

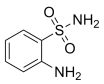
2-Aminobenzenesulfonamide

(Orthanilamide)

Cat. No.: HY-B2147

Bioactivity: 2-Aminobenzenesulfonamide is a **carbonic anhydrase IX** inhibitor.

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

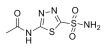


Acetazolamide

Cat. No.: HY-B0782

Bioactivity: Acetazolamide is a **carbonic anhydrase** (**CA**) **IX** inhibitor with an **IC_{50}** of 30 nM for **hCA IX** [1]. Diuretic effects [4].

Purity: 99.87%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

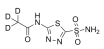


Acetazolamide D3

Cat. No.: HY-B0782S

Bioactivity: Acetazolamide D3 is deuterium labeled Acetazolamide, which is a potent carbonic anhydrase (CA) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

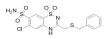


Benzthiazide

Cat. No.: HY-B1424

Bioactivity: Benzthiazide is a long-acting diuretic [1] and a hypertension agent. Benzthiazide is an inhibitor of **carbonic anhydrase 9 (CA9)**, with **K_i**s of 8.0, 8.8 and 10 nM for CA9, CA2 and CA1, respectively. Benzthiazide also suppresses proliferation...

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg



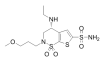
Brinzolamide

(AL-4862)

Cat. No.: HY-B0588

Bioactivity: Brinzolamide(AL 4862) is a potent carbonic anhydrase II inhibitor with IC50 of 3.19 nM.

Purity: 99.78%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



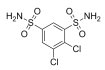
Dichlorphenamide

(Diclofenamide)

Cat. No.: HY-B0397

Bioactivity: Dichlorphenamide(Diclofenamide) is a carbonic anhydrase inhibitor that is used in the treatment of glaucoma.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



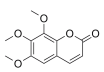
Dimethylfraxetin

(6,7,8-Trimethoxycoumarin; Fraxetin dimethyl ether)

Cat. No.: HY-N0085

Bioactivity: Dimethylfraxetin is a **Carbonic anhydrase** inhibitor, with a **K_i** value of 0.0097 μM.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg



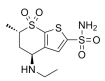
Dorzolamide

(L671152; MK507)

Cat. No.: HY-B0109

Bioactivity: Dorzolamide(L671152; MK507) is an anti-glaucoma agent, which is a carbonic anhydrase inhibitor. Target: carbonic anhydrase (CA) Dorzolamide is a carbonic anhydrase inhibitor. It is an anti-glaucoma agent, and acts by decreasing the production of aqueous humour [1]. Glaucoma was induced in the right eye of...

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



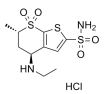
Dorzolamide hydrochloride

(L671152 hydrochloride; MK507 hydrochloride)

Cat. No.: HY-B0109A

Bioactivity: Dorzolamide Hcl(L671152 Hcl; MK507 Hcl) is an anti-glaucoma agent, which is a carbonic anhydrase inhibitor.

Purity: 99.47%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg



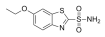
Ethoxzolamide

(Redupresin; L-643786; PNU-4191)

Cat. No.: HY-B1480

Bioactivity: Ethoxzolamide is a **carbonic anhydrase** inhibitor with **K_i** of 1 nM.

Purity: 98.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



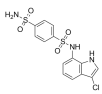
Indisulam

(E 7070)

Cat. No.: HY-13650

Bioactivity: Indisulam (E 7070) is a **carbonic anhydrase** inhibitor and a G1-targeting agent. Indisulam causes a blockade in the G1/S transition through inhibition of the activation of both cyclin-dependent kinase 2 (CDK2) and cyclin E. Shows anti-tumor activity in human colon and lung cancer cells [1]...

Purity: 98.92%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg



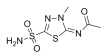
Methazolamide

(L584601)

Cat. No.: HY-B0553

Bioactivity: Methazolamide is a carbonic anhydrase inhibitor used to treat glaucoma.

Purity: 97.72%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 1 g, 5 g

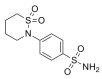


Sultiame

Cat. No.: HY-108316

Bioactivity: Sultiame is a **carbonic anhydrase** inhibitor, widely used as an antiepileptic drug.

Purity: 99.11%
Clinical Data: No Development Reported
Size: 5 mg

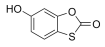


Tioxolone

Cat. No.: HY-B0483

Bioactivity: Tioxolone, a metalloenzyme carbonic anhydrase I inhibitor, is an anti-acne preparation.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



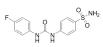
U-104

(NSC-213841; MST-104)

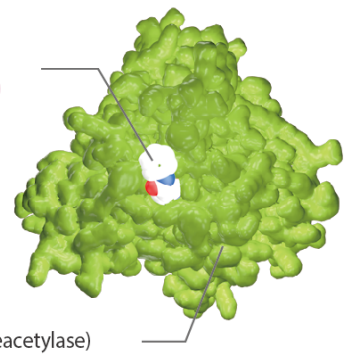
Cat. No.: HY-13513

Bioactivity: U-104 is a potent carbonic anhydrase (CA) inhibitor for CA IX and CA XII with Ki of 45.1 nM and 4.5 nM; low inhibition for CA I and CA II.

Purity: 99.55%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



Carboxypeptidase



Carboxypeptidase is a protease enzyme that hydrolyzes (cleaves) a peptide bond at the carboxy-terminal (C-terminal) end of aprotein or peptide. Contrast with an aminopeptidase, which cleaves peptide bonds at the other end of the protein. Humans, animals, and plants contain several types of carboxypeptidases that have diverse functions ranging from catabolism to protein maturation. Carboxypeptidases function involved in the indigestion of food, biosynthesis of neuroendocrine peptides, blood clotting, growth factor production, wound healing, reproduction, and many other processes.

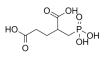
Carboxypeptidase Inhibitors & Modulators

2-PMPA

(2-(Phosphonomethyl)pentanedioic acid) **Cat. No.:** HY-100788

Bioactivity: 2-PMPA is a potent and selective inhibitor of glutamate carboxypeptidase Ⅱ (**GCPII**) with an IC_{50} of 300 pM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

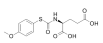


Carboxypeptidase G2 (CPG2) Inhibitor

(CPG2 Inhibitor) **Cat. No.:** HY-70003

Bioactivity: Carboxypeptidase G2 (CPG2) Inhibitor is a novel Carboxypeptidase G2 (CPG2) Inhibitor, Antitumor agents.

Purity: 97.53%
Clinical Data: No Development Reported
Size: 50 mg, 100 mg

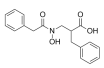


CPA inhibitor

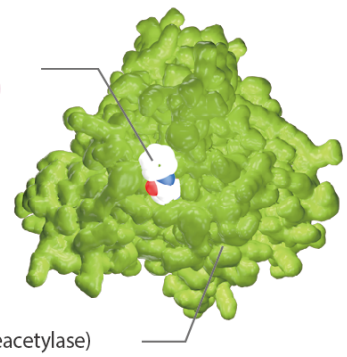
(carboxypeptidase inhibitor) **Cat. No.:** HY-70005

Bioactivity: CPA inhibitor is a potent inhibitor for carboxypeptidase A (CPA).

Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



Cathepsin

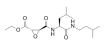


Cathepsins are proteases (enzymes that degrades proteins) found in all animals as well as other organisms. The cathepsin family of proteolytic enzymes contains several diverse classes of proteases. Most of the members become activated at the low pH found in lysosomes. The activity of this family lies almost entirely within those organelles. Cathepsins have a vital role in mammalian cellular turnover, e.g. bone resorption. They degrade polypeptides and are distinguished by their substratespecificities. Classification: Cathepsin A, Cathepsin B, Cathepsin C, Cathepsin D, Cathepsin E, Cathepsin F, Cathepsin G, Cathepsin H, Cathepsin K, Cathepsin L1, Cathepsin L2, Cathepsin O, Cathepsin S, Cathepsin W, Cathepsin Z. Most cathepsins are lysosomal and each is involved in cellular metabolism, participating in various events such as peptide biosynthesis and protein degradation. Cathepsins may also cleave some protein precursors, thereby releasing regulatory peptides.

Aloxistatin
(E64d; E64c ethyl ester) Cat. No.: HY-100229

Bioactivity: Aloxistatin (E64d) is a cell-permeable and irreversible broad-spectrum **cysteine protease** inhibitor.

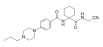
Purity: 98.22%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg



Balicatib
(AAE581) Cat. No.: HY-15100

Bioactivity: Balicatib(AAE-581) is a potent and selective inhibitor of cathepsin K; 10-100 fold more potent in cell-based enzyme occupancy assays than against cathepsin B, L, and S.

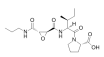
Purity: 97.23%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



CA-074
Cat. No.: HY-103350

Bioactivity: CA-074 is a potent inhibitor of **cathepsin B** with a K_i of 2 to 5 nM.

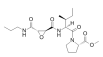
Purity: 99.85%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg



CA-074 methyl ester
(CA-074Me) Cat. No.: HY-100350

Bioactivity: CA-074 methyl ester is a specific inhibitor of **Cathepsin B**, which has potent bioactivities such as neuroprotective, anti-cancer, and anti-inflamatory effects.

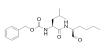
Purity: 98.40%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg



Calpeptin
Cat. No.: HY-100223

Bioactivity: Calpeptin is a potent, cell penetrating **calpain** inhibitor, with an ID_{50} of 40 nM for Calpain I in human platelets [1].
Calpeptin is also an inhibitor of **cathepsin K** [2].

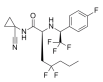
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



Cathepsin Inhibitor 2
Cat. No.: HY-U00377

Bioactivity: Cathepsin Inhibitor 2 is a potent **Cathepsin S** inhibitor extracted from patent WO2009123623A1, has a K_i of <20 nM.

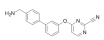
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Cysteine Protease inhibitor (2-Pyrimidinecarbonitrile, 4-[[4'-(aminomethyl)[1,1'-biphenyl]-3-yl]oxy]-)
Cat. No.: HY-17541

Bioactivity: Cysteine Protease inhibitor is an inhibitor of **cysteine protease**. IC50 & Target: Cysteine Protease

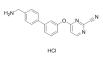
Purity: 97.14%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Cysteine Protease inhibitor hydrochloride
Cat. No.: HY-17541A

Bioactivity: Cysteine Protease inhibitor hydrochloride is an inhibitor of **cysteine protease**. IC50 & Target: Cysteine Protease

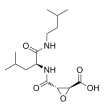
Purity: 96.22%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



E 64c
Cat. No.: HY-100227

Bioactivity: E 64c is a derivative of naturally occurring epoxide inhibitor of **cysteine proteases**, a Calcium-activated neutral protease **(CANP)** inhibitor and a very weak irreversible **cathepsin C** inhibitor.

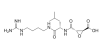
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg



E-64
(Proteinase inhibitor E 64) Cat. No.: HY-15282

Bioactivity: E-64 is a potent irreversible inhibitor against general **cysteine proteases** with IC_{50} of 9 nM for **papain**.

Purity: 99.62%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

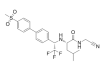


L-873724

Cat. No.: HY-50887

Bioactivity: L-873724 is a potent, orally bioavailable, selective and reversible [2] non-basic cathepsin K inhibitor, with **IC_{50}**s of 0.2, 178, 264, and 5239 nM for cathepsin K, cathepsin S, cathepsin L, cathepsin B, respectively [1]. L-873724 a...

Purity: >98%
Clinical Data: Phase 3
Size: 1 mg, 5 mg, 10 mg, 20 mg

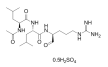


Leupeptin hemisulfate

Cat. No.: HY-18234A

Bioactivity: Leupeptin hemisulfate is a reversible, competitive **serine/cysteine protease** inhibitor.

Purity: 98.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg

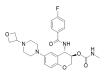


LY 3000328

Cat. No.: HY-15533

Bioactivity: LY 3000328 is a potent and selective **Cathepsin S (Cat S)** inhibitor with **IC_{50}**s of 7.7 and 1.67 nM for hCat S and mCat S, respectively.

Purity: 99.35%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

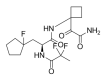


MIV-247

Cat. No.: HY-112583

Bioactivity: MIV-247 is a selective **cathepsin S** inhibitor with **K_I**s of 2.1, 4.2 and 7.5 nM for human, mouse and cynomolgus monkey cathepsin S, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

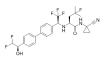


MK-0674

Cat. No.: HY-10290

Bioactivity: MK-0674 is a potent, orally bioavailable and selective **cathepsin K** inhibitor, with an **IC_{50}** of 0.4 nM, shows 1156, 1465, 11857 and 243 fold selectivity over Cat B, Cat F, Cat L and Cat S [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

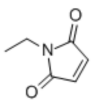


N-Ethylmaleimide (NEM)

Cat. No.: HY-D0843

Bioactivity: N-Ethylmaleimide (NEM) is a **cysteine protease** inhibitor [1]. N-ethylmaleimide specific inhibits phosphate transport in mitochondria [2].

Purity: 99.67%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

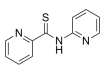


NSC 185058

Cat. No.: HY-125169

Bioactivity: NSC 185058 is an inhibitor of **ATG4B**, a major **cysteine protease**. NSC185058 markedly attenuates **autophagic** activity [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

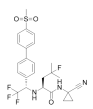


Odanacatib (MK-0822)

Cat. No.: HY-10042

Bioactivity: Odanacatib (MK-0822) is a potent and selective inhibitor of **cathepsin K**, with an **IC_{50}** of 0.2 nM for human cathepsin K.

Purity: 99.80%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Papain

Cat. No.: HY-P1645

Bioactivity: Papain is a cysteine protease of the peptidase C1 family, which is used in food, pharmaceutical, textile, and cosmetic industries.

Purity:
Clinical Data: No Development Reported
Size: 100 mg

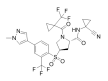
Papain

Petesicatib

Cat. No.: HY-109069

Bioactivity: Petesicatib is a **cathepsin S** inhibitor, used in research of immune diseases [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

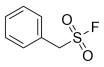


PMSF

(Phenylmethylsulfonyl fluoride; Benzylsulfonyl fluoride) **Cat. No.:** HY-B0496

Bioactivity: PMSF is an irreversible **serine/cysteine protease** inhibitor commonly used in the preparation of cell lysates.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 5 g, 10 g

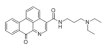


S130

Cat. No.: HY-112818

Bioactivity: S130 is a high affinity, selective inhibitor of **ATG4B** (a major cysteine protease) with an **IC_{50}** of 3.24 μM. S130 suppresses autophagy flux [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 100 mg, 500 mg

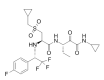


VBY-825

Cat. No.: HY-15958

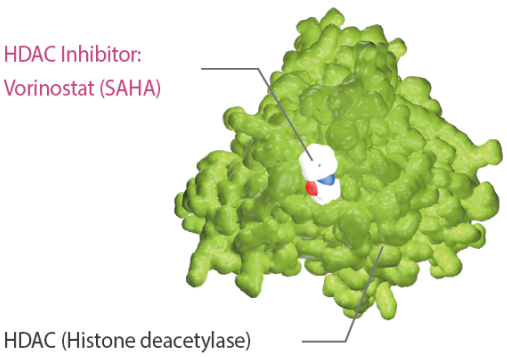
Bioactivity: VBY-825 is a novel, reversible cathepsin inhibitor with high potency against cathepsins B, L, S and V.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg



CETP

Cholesteryl ester transfer protein



Cholesteryl ester transfer protein (CETP) is a plasma glycoprotein that promotes reverse cholesterol transport via the exchange of cholesteryl ester (CE) and triglyceride (TG) among lipoproteins. Cholesteryl ester transfer protein (CETP) promotes reverse cholesterol transport via exchange of cholesteryl ester and triglyceride among lipoproteins. CETP has a central role in lipoprotein metabolism.

CETP, a hydrophobic plasma glycoprotein, is a promising target for raising circulating HDL cholesterol (HDL-C) concentrations in humans. CETP is secreted primarily from the liver and plays a critical role in HDL metabolism by facilitating the exchange of cholesteryl esters (CE) from HDL for triglycerides (TG) in apoB-containing lipoproteins, such as LDL and VLDL.

CETP catalyses the exchange of cholesteryl ester and triglyceride between HDL and apoB containing lipoprotein particles. The role of CETP in modulating plasma HDL cholesterol levels in humans is well established and there have been significant efforts to develop CETP inhibitors to increase HDL cholesterol for the treatment of coronary artery disease.

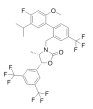
CETP Inhibitors & Modulators

Anacetrapib
(MK-0859)

Cat. No.: HY-12090

Bioactivity: Anacetrapib is a potent **CETP** inhibitor, with IC_{50}s of 7.9±2.5 nM and 11.8±1.9 nM for rhCETP and C13S CETP mutant, respectively.

Purity: 98.39%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

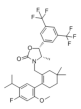


CKD-519

Cat. No.: HY-116078

Bioactivity: CKD-519 is a selective and potent **cholesteryl ester transfer protein (CETP)** inhibitor, which inhibits CETP-mediated transfer of cholesteryl ester in human serum with an IC_{50} of 2.3 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 100 mg, 500 mg

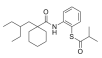


Dalcetrapib
(JTT-705; RO4607381)

Cat. No.: HY-14950

Bioactivity: Dalcetrapib (JTT-705; RO-4607381) is a rhCETP inhibitor with IC50 of 0.2 μM that increases the plasma HDL cholesterol.

Purity: 99.46%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

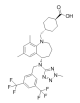


Evacetrapib
(LY2484595)

Cat. No.: HY-13327

Bioactivity: Evacetrapib is a potent and selective of **CETP** inhibitor, which inhibits human recombinant CETP protein (IC_{50} 5.5 nM) and CETP activity in human plasma (IC_{50} 36 nM) in vitro.

Purity: 99.33%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

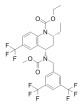


Torcetrapib
(CP-529414)

Cat. No.: HY-12089

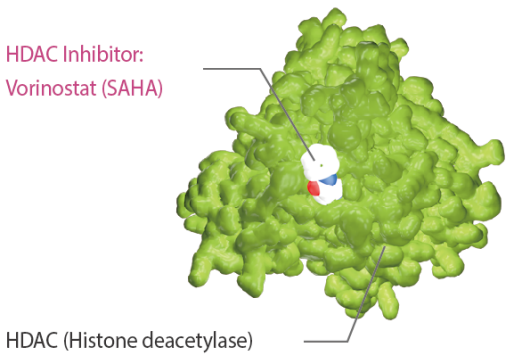
Bioactivity: Torcetrapib(CP-529414) is a CETP inhibitor with IC50 of 37 nM, elevates HDL-C and reduces nonHDL-C in plasma.

Purity: 99.35%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



COMT

Catechol-O-methyltransferase



Catechol O-methyltransferase (COMT) is a ubiquitous bisubstrate magnesium-dependent enzyme found in plants, animals and microorganisms. COMT catalyses the transfer of a methyl group from S-adenosyl-L-methionine (SAM) to one of the hydroxyl oxygen atoms (preferentially the 3-hydroxyl) in a catechol substrate. Physiological substrates of COMT are catecholamine neurotransmitters such as dopamine, noradrenaline, adrenaline and their metabolites. COMT also methylates catecholic steroids such as 2-hydroxyestradiol as well as a range of other catecholic compounds including neuroactive drugs such as L-dopa, α-methyldopa and isoproterenol. COMT inhibition is a means of treating Parkinson's disease, schizophrenia and depression. There are two isoforms of human COMT: soluble cytoplasmic COMT (S-COMT), which is mainly intracellular, and a membrane-bound form (MB-COMT), which has a single-span helix contained within a 50 amino acid extension at the N-terminus.

COMT is an enzyme that plays a major role in catechol neurotransmitter deactivation. Inhibition of COMT can increase neurotransmitter levels, which provides a means of treatment for Parkinson's disease, schizophrenia and depression.

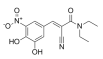
COMT Inhibitors & Modulators

Entacapone

Cat. No.: HY-14280

Bioactivity: Entacapone is a specific, potent, peripherally acting catechol-O-methyltransferase (COMT) inhibitor with IC50 of 151 nM for PD treatment. IC50 Value: 151 nM Target: COMT in vitro: Entacapone inhibits catechol-O-methyltransferase(COMT) with similar IC50 in different tissues including live, duodenum,...

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

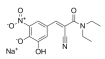


Entacapone sodium salt

Cat. No.: HY-14280A

Bioactivity: Entacapone is a specific, potent, peripherally acting catechol-O-methyltransferase (COMT) inhibitor with IC50 of 151 nM for PD treatment.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

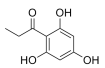


Flopropione

Cat. No.: HY-100562

Bioactivity: Flopropione is a **5-HT$_{1A}$ receptor** antagonist and also a **catechol-o-methyltransferase** (**COMT**) inhibitor.

Purity: 98.37%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



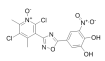
Opicapone

(BIA 9-1067)

Cat. No.: HY-14896

Bioactivity: Opicapone is an available catechol-O-methyltransferase (**COMT**) inhibitor. Opicapone decreases the ATP content of the cells with IC $_{50}$ values of 98 μM.

Purity: 99.60%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg



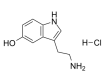
Serotonin hydrochloride

(5-Hydroxytryptamine hydrochloride; 5-HT hydrochloride)

Cat. No.: HY-B1473

Bioactivity: Serotonin hydrochloride is a monoamine neurotransmitter in the CNS and an endogenous **5-HT receptor** agonist. Serotonin hydrochloride is also a **catechol O-methyltransferase** (**COMT**) inhibitor with a **K$_i$** of 44 μM.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg



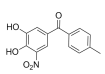
Tolcapone

(Ro 40-7592)

Cat. No.: HY-17406

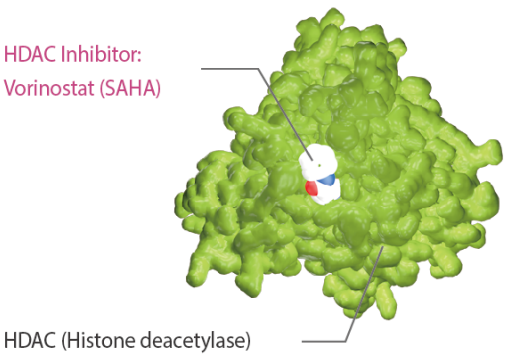
Bioactivity: Tolcapone(Ro 40-7592) is an orally active selective, potent catechol-O-methyltransferase (COMT) inhibitor.

Purity: 99.52%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



Cytochrome P450

CYPs



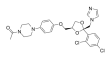
Cytochrome p450 comprises a superfamily of heme-thiolate proteins named for the spectral absorbance peak of their carbon-monoxide-bound species at 450 nm. Having been found in every class of organism, including Archaea, the p450 superfamily is believed to have originated from an ancestral gene that existed over 3 billion years ago. Repeated gene duplications have subsequently given rise to one of the largest of multigene families. These enzymes are notable both for the diversity of reactions that they catalyze and the range of chemically dissimilar substrates upon which they act. Cytochrome p450s support the oxidative, peroxidative and reductive metabolism of such endogenous and xenobiotic substrates as environmental pollutants, agrochemicals, plant allelochemicals, steroids, prostaglandins and fatty acids. In humans, Cytochrome p450s are best known for their central role in phase I drug metabolism where they are of critical importance to two of the most significant problems in clinical pharmacology: drug interactions and interindividual variability in drug metabolism.

(+)-Ketoconazole

Cat. No.: HY-B0105A

Bioactivity: (+)-Ketoconazole is an imidazole anti-fungal agent, a CYP3A4 inhibitor. Target: CYP3A4 (+)-Ketoconazole, an imidazole anti-fungal agent, has often produced features of androgen deficiency including decreased libido, gynecomastia, impotence, oligospermia, and decreased testosterone levels, in...

Purity: 99.51%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



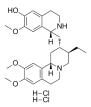
(-)-Cephaeline dihydrochloride

(NSC 32944)

Cat. No.: HY-N2260

Bioactivity: (-)-Cephaeline dihydrochloride is an enantiomer of Cephaeline dihydrochloride. Cephaeline dihydrochloride is a selective **CYP2D6** inhibtor with **IC_{50}** of 121 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 2 mg, 5 mg



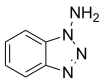
1-Aminobenzotriazole

(ABT; 3-Aminobenzotriazole)

Cat. No.: HY-103389

Bioactivity: 1-Aminobenzotriazole is a nonspecific and irreversible inhibitor of **cytochrome P450** (**P450**).

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg, 500 mg

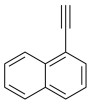


1-Ethynylnaphthalene

Cat. No.: HY-111430

Bioactivity: 1-Ethynylnaphthalene is a selective inhibitor of cytochrome **P450 1B1**.

Purity: 99.27%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

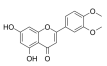


4'-Methylchrysoeriol

Cat. No.: HY-112734

Bioactivity: 4'-Methylchrysoeriol is a potent inhibitor of **Cytochrome P450** enzymes, with an **IC_{50}** of 19 nM for human P450 1B1-dependent EROD.

Purity: 99.17%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



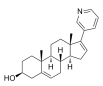
Abiraterone

(CB-7598)

Cat. No.: HY-70013

Bioactivity: Abiraterone is a potent, selective, and irreversible **CYP17** inhibitor with **IC_{50}** of 2 to 4 nM.

Purity: 99.61%
Clinical Data: Launched
Size: 10mM x 1mL in DMF, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g, 2 g, 5 g



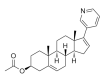
Abiraterone acetate

(CB7630)

Cat. No.: HY-75054

Bioactivity: Abiraterone acetate is an oral, potent, selective, and irreversible inhibitor of **CYP17**.

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g, 2 g, 5 g

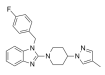


Antihistamine-1

Cat. No.: HY-100238

Bioactivity: Antihistamine-1 is a **H1-antihistamine** (**K_i**=6.9 nM) with acceptable blood-brain barrier penetration and also an inhibitor of **CYP2D6** and **hERG channel** with **IC_{50}**s of 5.4 and 0.8 μM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

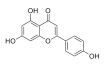


Apigenin (4',5,7-Trihydroxyflavone; Apigenol; C.I. Natural Yellow 1)

Cat. No.: HY-N1201

Bioactivity: Apigenin is a competitive **CYP2C9** inhibitor with a **K_i** of 2 μM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg



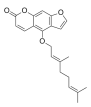
Bergamottin

(5-Geranoxypsoralen; Bergamotine; Bergaptin)

Cat. No.: HY-N2194

Bioactivity: Bergamottin is a potent and competitive **CYP1A1** inhibitor with a **K_i** of 10.703 nM.

Purity: 99.57%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

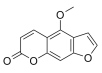


Bergapten

(5-Methoxypsoralen) Cat. No.: HY-N0370

Bioactivity: Bergapten is a natural anti-inflammatory and anti-tumor agent isolated from bergamot essential oil, other citrus essential oils and grapefruit juice. Bergapten is inhibitory towards mouse and human **CYP** isoforms.

Purity: 99.96%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 1 g, 5 g

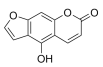


Bergaptol

(5-Hydroxypsoralen; 4-Hydroxybergapten) Cat. No.: HY-76316

Bioactivity: Bergaptol A hydroxylated psoralen that acts as a potent inhibitors of debenzylation activity of CYP3A4 enzyme with an IC50 value of 24.92 uM. Recent studies suggest that it may have antiproliferative and anticancer properties. target: CYP3A4 [1] IC50: 24.92 [1] For in vivo enzyme activity...

Purity: 99.28%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 500 mg

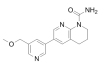


BI 689648

Cat. No.: HY-101217

Bioactivity: BI 689648 is a novel, highly selective **aldosterone synthase** inhibitor which can inhibit **CYP11B1** and **CYP11B2** with **IC_{50}**s of 310 and 2.1 nM, respectively.

Purity: 99.20%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg



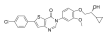
BMS-819881

Cat. No.: HY-12433

Bioactivity: BMS-819881 is a melaninconcentrating hormone receptor 1 (**MCHR1**) antagonist, which binds rat MCHR1 with a **K_i** of 7 nM.

BMS-819881 also is selective and potent for **CYP3A4** activity with an **EC_{50}** of 13 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

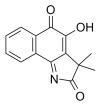


BVT948

Cat. No.: HY-100625

Bioactivity: BVT948 is a **protein tyrosine phosphatase** (**PTP**) inhibitor which can also inhibit several **cytochrome P450** (**P450**) isoforms and lysine methyltransferase **SETD8**.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

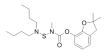


Carbosulfan

Cat. No.: HY-B2015

Bioactivity: Carbosulfan inhibited relatively potently CYP3A4 and moderately CYP1A1/2 and CYP2C19 in pooled HLM (human livers). Carbosulfan activation is predominantly catalyzed in humans by CYP3A4.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

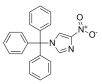


CDD3505

Cat. No.: HY-100901

Bioactivity: CDD3505 is used for elevating high density lipoprotein cholesterol (HDL) by inducing hepatic **cytochrome P450IIIA (CYP3A)** activity.

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

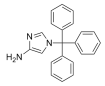


CDD3506

Cat. No.: HY-100902

Bioactivity: CDD3506 is used for elevating high density lipoprotein cholesterol (HDL) by inducing hepatic **cytochrome P450IIIA (CYP3A)** activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Cecropin B

Cat. No.: HY-P0092

Bioactivity: Cecropin B has high level of antimicrobial activity and is considered as a valuable peptide antibiotic.

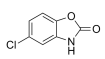
Purity: 98.12%
Clinical Data: No Development Reported
Size: 500u g, 1 mg, 5 mg, 10 mg

Chlorzoxazone

Cat. No.: HY-B1462

Bioactivity: Chlorzoxazone is a centrally acting muscle relaxant used to treat muscle spasm and the resulting pain or discomfort. It acts on the spinal cord by depressing reflexes.Chlorzoxazone is currently being used as a marker substrate in vitro/vivo studies to quantify cytochrome P450 2E1 (CYP2E1) activity in...

Purity: 99.72%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g

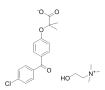


Choline Fenofibrate

(ABT-335) Cat. No.: HY-14739

Bioactivity: Choline Fenofibrate (ABT-335) is the choline salt of fenofibric acid under clinical development as a combination therapy with rosuvastatin for the management of dyslipidemia.

Purity: 99.81%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 100 mg

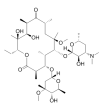


Clarithromycin

Cat. No.: HY-17508

Bioactivity: Clarithromycin is a macrolide antibiotic and a CYP3A4 inhibitor. Target: Antibacterial; CYP3A4 Clarithromycin is a macrolide antibiotic used to treat pharyngitis, tonsillitis, acute maxillary sinusitis, acute bacterial exacerbation of chronic bronchitis, pneumonia (especially atypical pneumonias...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg

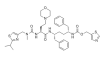


Cobicistat

(GS-9350) Cat. No.: HY-10493

Bioactivity: Cobicistat is a potent and selective inhibitor of **cytochrome P450 3A (CYP3A) enzymes** with IC_{50}s of 30-285 nM. Cobicistat is a pharmacokinetic enhancer which increases the overall absorption of several HIV medications.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

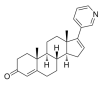


D4-abiraterone

(Δ4-Abiraterone; CB-7627; Abiraterone D4A metabolite) Cat. No.: HY-109619

Bioactivity: D4-abiraterone is a major metabolite of abiraterone. D4-abiraterone is an inhibitor of **CYP17A1**, 3b-hydroxysteroid dehydrogenase (**3βHSD**) and steroid-5a-reductase (**SRD5A**) and also an antagonist of **androgen receptor**.

Purity: 99.42%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

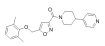


Dafadine-A

Cat. No.: HY-16670

Bioactivity: Dafadine-A, an analog of dafadine, is a novel inhibitor of DAF-9 cytochrome P450 in the nematode Caenorhabditis elegans; also inhibits the mammalian ortholog of DAF-9(CYP27A1).

Purity: 98.77%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

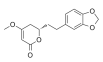


Dihydromethysticin

((+)-Dihydromethysticin) Cat. No.: HY-N0921

Bioactivity: Dihydromethysticin is one of the six major kavalactones found in the kava plant; has marked activity on the induction of CYP3A23.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

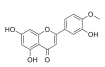


Diosmetin

Cat. No.: HY-N0125

Bioactivity: Diosmetin is a natural flavonoid which inhibits human **CYP1A** enzyme activity with an IC_{50} of 40 μM in HepG2 cell.

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg

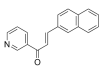


DMU2105

Cat. No.: HY-101284

Bioactivity: DMU2105 is a potent and specific **CYP1B1** inhibitor, with IC_{50}s of 10 nM and 742 nM for CYP1B1 and CYP1A1, respectively.

Purity: 98.12%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

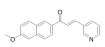


DMU2139

Cat. No.: HY-101285

Bioactivity: DMU2139 is a potent and specific **CYP1B1** inhibitor, with IC_{50}s of 9 nM and 795 nM for CYP1B1 and CYP1A1, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

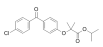


Fenofibrate

Cat. No.: HY-17356

Bioactivity: Fenofibrate is a **PPARα** agonist with an EC_{50} of 30 μM.

Purity: 99.92%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g, 10 g

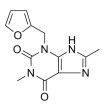


Furafylline

Cat. No.: HY-107204

Bioactivity: Furafylline is a potent and selective inhibitor of **human cytochrome P450IA2** with an IC_{50} of 0.07 μM.

Purity: 99.86%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg

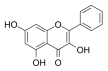


Galangin

(Norizalpinin; 3,5,7-Trihydroxyflavone) Cat. No.: HY-N0382

Bioactivity: Galangin is an agonist/antagonist of the arylhydrocarbon receptor, and also shows inhibition of **CYP1A1** activity.

Purity: 99.96%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 25 mg, 50 mg, 100 mg

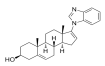


Galeterone

(TOK-001; VN-124-1) Cat. No.: HY-70006

Bioactivity: Galeterone (TOK-001) is a multifunctional antiandrogen and **CYP17** inhibitor (IC_{50}=47 nM) in castration resistant prostate cancer (CRPC).

Purity: 99.90%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

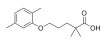


Gemfibrozil

(CI-719) Cat. No.: HY-B0258

Bioactivity: Gemfibrozil is an activator of **PPAR-α**, used as a lipid-lowering drug; Gemfibrozil is also a nonselective inhibitor of several **P450** isoforms, with K_i values for CYP2C9, 2C19, 2C8, and 1A2 of 5.8, 24, 69, and 82 μM, respectively.

Purity: 99.91%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

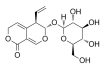


Gentiopicroside

(Gentiopicrin) Cat. No.: HY-N0494

Bioactivity: Gentiopicroside, a naturally occurring iridoid glycoside, inhibits **P450** activity, with an IC_{50} and a K_i of 61 μM and 22.8 μM for CYP2A6; Gentiopicroside has antianti-inflammatoryand antioxidative effects.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 25 mg, 50 mg, 100 mg

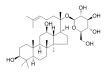


Ginsenoside C-K

(Ginsenoside K; Ginsenoside compound K) Cat. No.: HY-N0904

Bioactivity: Ginsenoside C-K, a bacterial metabolite of G-Rb1, exhibits anti-inflammatory effects by reducing **iNOS** and **COX-2**. Ginsenoside C-K exhibits an inhibition against the activity of **CYP2C9** and **CYP2A6** in human liver microsomes with IC_{50}s of 32.0±3.6 μM and 63.6±4.2 μM, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

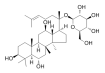


Ginsenoside F1

(20(S)-Ginsenoside F1) Cat. No.: HY-N0598

Bioactivity: Ginsenoside F1, an enzymatically modified derivative of Ginsenoside Rg1, demonstrates competitive inhibition of **CYP3A4** activity and weaker inhibition of CYP2D6 activity.

Purity: 99.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

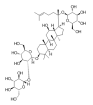


Ginsenoside Rd

(Gypenoside VIII) Cat. No.: HY-N0043

Bioactivity: Ginsenoside Rd inhibits TNFα-induced **NF-κB** transcriptional activity with an IC_{50} of 12.05±0.82 μM in HepG2 cells. Ginsenoside Rd inhibits expression of **COX-2** and **iNOS** mRNA. Ginsenoside Rd also inhibits Ca^{2+} influx. Ginsenoside...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

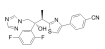


Isavuconazole

(BAL-4815; RO-0094815) Cat. No.: HY-14273

Bioactivity: Isavuconazole is a moderate inhibitor of **CYP3A4** and a water-soluble triazole with broad-spectrum **antifungal** activity.

Purity: 99.99%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

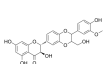


Isosilybin

(Isosilybinin) Cat. No.: HY-N0779

Bioactivity: Isosilybin (Isosilybinin) is a flavonoid from milk thistle; inhibits **CYP3A4** induction with an IC_{50} of 74 μM.

Purity: 98.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg

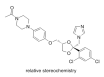


Ketoconazole

(R-41400; (±)-Ketoconazol) Cat. No.: HY-B0105

Bioactivity: Ketoconazole (R-41400) is an imidazole anti-fungal agent, a CYP3A4 and CYP24A1 inhibitor.

Purity: 99.67%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 1 g, 5 g

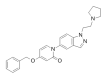


MCH-1 antagonist 1

Cat. No.: HY-100331

Bioactivity: MCH-1 antagonist 1 is a potent melanin concentrating hormone (**MCH-1**) antagonist with a K_i of 2.6 nM. MCH-1 antagonist 1 also inhibits **CYP3A4** with an IC_{50} of 10 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

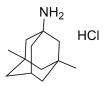


Memantine hydrochloride

(D-145 (hydrochloride)) Cat. No.: HY-B0365A

Bioactivity: Memantine (hydrochloride) (D-145 (hydrochloride)), an amantadine derivative with low to moderate-affinity for NMDA receptors, inhibit CYP2B6 and CYP2D6 with K_i of 0.51 nM and 94.9 μM, respectively.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

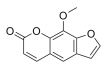


Methoxsalen

(8-Methoxypsoralen; Xanthotoxin; 8-MOP) Cat. No.: HY-30151

Bioactivity: Methoxsalen (8-Methoxypsoralen) is a potent tricyclic furocoumarin suicide inhibitor of CYP (cytochrome P-450), is an agent used to treat psoriasis, eczema, vitiligo and some cutaneous Lymphomas in conjunction with exposing the skin to sunlight.

Purity: 99.98%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g

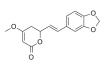


Methysticin

(DL-Methysticin; (±)-Methystici) Cat. No.: HY-N0922

Bioactivity: Methysticin is a major kavalactone in kava extract to induce **CYP1A1**.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

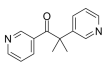


Metyrapone

(Su-4885) Cat. No.: HY-B1232

Bioactivity: Metyrapone is an inhibitor of cytochrome P450-mediated ω/ω-1 hydroxylase activity and CYP11B1. Target: CYP11B1 Metyrapone is a drug used in the diagnosis of adrenal insufficiency and occasionally in the treatment of Cushing's syndrome (hypercortisolism). Metyrapone blocks cortisol synthesis by...

Purity: 99.83%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 500 mg

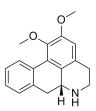


N-Nornuciferine

Cat. No.: HY-N2129

Bioactivity: N-Nornuciferine is an aporphine alkaloid in lotus leaf that significantly inhibits **CYP2D6** with IC_{50} and K_i of 3.76 and 2.34 μM, respectively.

Purity: 99.38%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

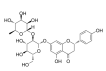


Naringin

(Naringoside) Cat. No.: HY-N0153

Bioactivity: Naringin is a major flavanone glycoside obtained from tomatoes, grapefruits, and many other citrus fruits. Naringin exhibits biological properties such as antioxidant, anti-inflammatory, and antiapoptotic activities.

Purity: 99.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 200 mg, 10 g

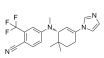


ODM-204

Cat. No.: HY-111421

Bioactivity: ODM-204 is novel nonsteroidal dual inhibitor of both **androgen receptor** and **CYP17A1 enzyme**, with IC_{50}s of 80 nM and 22 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 100 mg, 250 mg

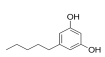


Olivetol

Cat. No.: HY-W008364

Bioactivity: Olivetol is a naturally phenol found in lichens and produced by certain insects, acting as a competitive inhibitor of the cannabinoid receptors **CB1** and **CB2** [3]. Olivetol also inhibits **CYP2C19** and **CYP2D6** activity, with IC_{50}s of 1...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

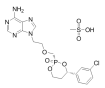


Pradefovir mesylate

(Remofovir mesylate) Cat. No.: HY-112690A

Bioactivity: Pradefovir mesylate is a good substrate for liver CYP3A4. Pradefovir is converted to 9-(2-phosphonylmethoxyethyl)adenine (PMEA) in human liver microsomes with a K_m of 60 μM.

Purity: 99.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

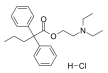


Proadifen hydrochloride

(SKF-525A; U-5446; RP-5171) Cat. No.: HY-B1311

Bioactivity: Proadifen hydrochloride is a Cytochrome P450 inhibitor (IC50 = 19μM). IC50 value: 19μM Target: P450 Proadifen HCl has many biochemical functions, some of which include: inhibitory effects on NOS1 (neuronal nitric oxide synthase; IC50 = 90 mM), adult mouse skeletal muscle AChR (acetyl choline...

Purity: 99.42%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 250 mg, 500 mg

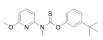


Pyributicarb

(TSH-888) Cat. No.: HY-111202

Bioactivity: Pyributicarb, a carbamate-type herbicide, is a potent activator of both **CYP3A4** gene and human **pregnane X receptor** (**hPXR**).

Purity: 99.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

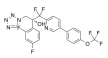


Quilseconazole

(VT-1129) Cat. No.: HY-109040

Bioactivity: Quilseconazole (VT-1129) is a potent, orally active **fungal Cyp51 (lanosterol 14-α-demethylase)** inhibitor, binds tightly to cryptococcal CYP51, but weakly inhibits humans CYP450 enzymes [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

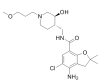


Revexepride

Cat. No.: HY-U00373

Bioactivity: Revexepride is a highly selective **5-HT4 receptor** agonist, and a potential inducer of **CYP3A4 enzyme**, used for the treatment of gastroesophageal reflux disease.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

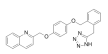


RG-12525

(NID 525) Cat. No.: HY-101676

Bioactivity: RG-12525 is a a specific, competitive and orally effective antagonist of the **peptidoleukotrienes**, **LTC4**, **LTD4** and **LTE4**, inhibiting LTC4-, LTD4- and LTE4-inducd guinea pig parenchymal strips contractions, with IC_{50}s of 2.6 nM, 2.5 nM and 7 nM, respectively; RG-12525 is also a peroxisome...

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

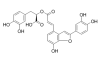


Salvianolic acid C

Cat. No.: HY-N0319

Bioactivity: Salvianolic acid C is a noncompetitive Cytochrome P4502C8 (**CYP2C8**) inhibitor and a moderate mixed inhibitor of Cytochrome P45022J2 (**CYP2J2**), with K_i**s** of 4.82 μM and 5.75 μM for CYP2C8 and CYP2J2, respectively.

Purity: 99.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

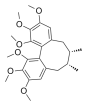


Schisandrin A

(Schizandrin-A; Wuweizisu-A; Deoxyschizandrin) Cat. No.: HY-N0693

Bioactivity: Schisandrin A inhibits **CYP3A** activity with an IC_{50} of 6.60 μM and K_i of 5.83 μM, respectively.

Purity: 99.67%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

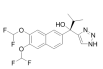


Seviteronel

(VT-464) Cat. No.: HY-15996

Bioactivity: Seviteronel (VT-464) is a potent CYP17 lyase inhibitor(h-Lyase IC_{50}=69 nM) that demonstrated both exceptional in vitro lyase/hydroxylase selectivity (~10-fold) and oral activity in a hamster model of androgen biosynthesis inhibition.

Purity: 99.11%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

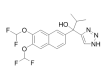


Seviteronel racemate

(VT-464 (racemate)) Cat. No.: HY-15996B

Bioactivity: Seviteronel (VT-464) racemate is the racemate form of Seviteronel (VT-464), which is a potent CYP17 lyase inhibitor(h-Lyase IC_{50}=nM)inhibition.

Purity: 98.11%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

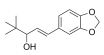


Stiripentol

(BCX2600) Cat. No.: HY-103392

Bioactivity: Stiripentol (STP) is an anticonvulsant agent, which can inhibit **N-demethylation of CLB to NCLB** mediatated by CYP3A4 (noncompetitively) and CYP2C19 (competitively) with K_i of 1.59±0.07 and 0.516±0.065 μM and IC_{50} of 1.58 and 3.29 ...

Purity: 99.99%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

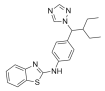


Talarozole

(R115866) Cat. No.: HY-14531

Bioactivity: Talarozole is a potent inhibitor of both **CYP26A1** and **CYP26B1**, with IC_{50}s of 5.4 and 0.46 nM, respectively.

Purity: 99.54%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 50 mg, 100 mg

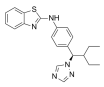


Talarozole R enantiomer

((R)-Talarozole) Cat. No.: HY-14802

Bioactivity: Talarozole R enantiomer is a potent and selective inhibitor of cytochrome P450 26-mediated breakdown of endogenous all-trans retinoic acid for the treatment of psoriasis and acne.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

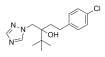


Tebuconazole

Cat. No.: HY-B0852

Bioactivity: Tebuconazole is an agricultural azole fungicide which can also inhibit **CYP51** with IC_{50}s of 0.9 and 1.3 μM for Candida albicans CYP51 (**CaCYP51**) and truncated Homo sapiens CYP51 (**Δ60HsCYP51**), respectively.

Purity: 99.38%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
200 mg, 1 g



Tetrahydrocurcumin

(HZIV 81-2) Cat. No.: HY-N0893

Bioactivity: Tetrahydrocurcumin is a Curcuminoid found in turmeric (Curcuma longa) that is produced by the reduction of Curcumin. Tetrahydrocurcumin inhibit **CYP2C9** and **CYP3A4**.

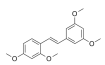
Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg

TMS

((E)-2,3',4,5'-tetramethoxystilbene) Cat. No.: HY-19340

Bioactivity: TMS is a selective inhibitor of **CYP1B1** activity.

Purity: 99.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

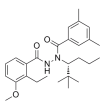


Veledimex

(INXN-1001; RG-115932) Cat. No.: HY-16785

Bioactivity: Veledimex is an oral activator ligand for a proprietary gene therapy promoter system, and a moderate inhibitor of and substrate for **CYP3A4/5**.

Purity: 99.09%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg

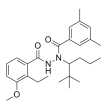


Veledimex racemate

(RG-115932 racemate; INXN-1001 racemate) Cat. No.: HY-16785A

Bioactivity: Veledimex racemate is the racemate of veledimex. Veledimex is an orally available, small-molecule activator ligand for the RheoSwitch Therapeutic System.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

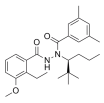


Veledimex S enantiomer

(INXN-1001 S enantiome; RG-115932 S enantiome) Cat. No.: HY-16785B

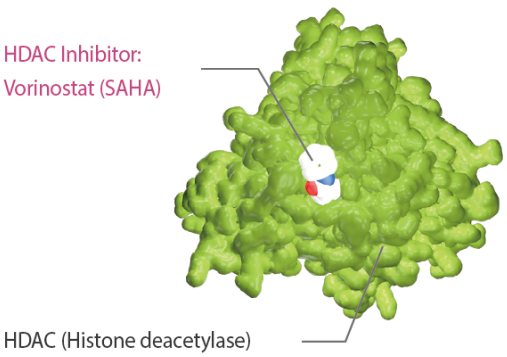
Bioactivity: Veledimex S enantiomer is the S enantiomer of veledimex. Veledimex is an oral activator ligand for a proprietary gene therapy promoter system, and a moderate inhibitor of and substrate for **CYP3A4/5**.

Purity: 99.52%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg



Dipeptidyl Peptidase

DPP



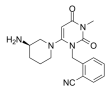
Dipeptidyl Peptidase (DPP) is an antigenic enzyme expressed on the surface of most cell types and is associated with immune regulation,signal transduction and apoptosis. DPP is an intrinsic membrane glycoprotein and a serine exopeptidase that cleaves X-proline dipeptides from the N-terminus of polypeptides. The substrates of DPP are proline-containing peptides and include growth factors, chemokines, neuropeptides, and vasoactive peptides. DPP plays a major role in glucose metabolism. DPP is responsible for the degradation of incretins such as GLP-1. Furthermore, DPP appears to work as a suppressor in the development of cancer and tumours. DPP plays an important role in tumor biology, and is useful as a marker for various cancers, with its levels either on the cell surface or in the serum increased in some neoplasms and decreased in others.

Alogliptin

(SYR-322 (free base)) Cat. No.: HY-A0023A

Bioactivity: Alogliptin (SYR-322 free base) is a potent, selective inhibitor of DPP-4 with IC50 of <10 nM, exhibits greater than 10,000-fold selectivity over DPP-8 and DPP-9. IC50 value: <10 nM Target: DPP4 Alogliptin is an orally administered, anti-diabetic drug in the DPP-4 inhibitor class. A randomized...

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

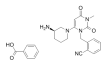


Alogliptin Benzoate

(SYR 322) Cat. No.: HY-A0023

Bioactivity: Alogliptin benzoate(SYR 322) is a potent, selective inhibitor of DPP-4 with IC50 of <10 nM, exhibits greater than 10,000-fold selectivity over DPP-8 and DPP-9. IC50 value: <10 nM Target: DPP4 Alogliptin is an orally administered, anti-diabetic drug in the DPP-4 inhibitor class. A randomized...

Purity: 99.93%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

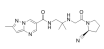


Anagliptin

(SK-0403) Cat. No.: HY-14877

Bioactivity: Anagliptin is a highly selective, potent inhibitor of **dipeptidyl peptidase 4 (DPP-4)**, with an **IC_{50}** of 3.8 nM, and less selective at DPP-8/9 (**IC_{50}**, 68, 60 nM, respectively).

Purity: 97.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

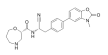


AZD7986

(INS 1007) Cat. No.: HY-101056

Bioactivity: AZD7986 is a **Dipeptidyl peptidase 1** (**DPP1**) inhibitor with **pIC_{50}**s of 6.85, 7.6, 7.7, 7.8, and 7.8 in human, mouse, rat, dog and rabbit, respectively.

Purity: 99.07%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

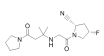


DBPR108

Cat. No.: HY-12528

Bioactivity: DBPR108 is a potent, selective, and orally bioavailable dipeptide-derived inhibitor of DPP4 with IC50 of 15 nM; no inhibition on DDP8 and DPP9.

Purity: 99.90%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

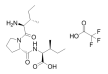


Diprotin A TFA

(Ile-Pro-Pro (TFA)) Cat. No.: HY-111174A

Bioactivity: Diprotin A (TFA) is an inhibitor of dipeptidyl peptidase IV **(DPP-IV)**.

Purity: 98.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 25 mg, 50 mg

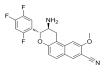


DPP-4 inhibitor 1

Cat. No.: HY-114408

Bioactivity: DPP-4 inhibitor 1 (compound 5) is a potent and long acting **Dipeptidyl peptidase-4 (DPP-4)** inhibitor for t treatment of T2DM, with a K_D of 0.177 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

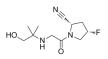


DPP-IV-IN-1

Cat. No.: HY-U00346

Bioactivity: DPP-IV-IN-1 is a potent inhibitor of **dipeptidyl peptidase IV (DPP-IV)**, a highly specific **serine protease**, with an **IC_{50}** of 4.6 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

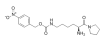


DPP-IV-IN-2

Cat. No.: HY-108319

Bioactivity: DPP-IV-IN-2 is an inhibitor of both **dipeptidyl peptidase IV** (**DPIV**) and **DP8/9** with **IC_{50}**s of 0.1 and 0.95 μM, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

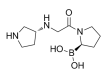


Dutogliptin

Cat. No.: HY-10286

Bioactivity: Dutogliptin is an orally available, potent, and selective **dipeptidyl peptidase-4** (**DPP4**) inhibitor.

Purity: >98%
Clinical Data: Phase 3
Size: 1 mg, 5 mg, 10 mg, 20 mg

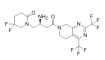


Gemigliptin

(LC15-0444) Cat. No.: HY-14892

Bioactivity: Gemigliptin is a highly selective **dipeptidyl peptidase 4 (DPP4)** inhibitor with a K_D of 7.25 nM.

Purity: 98.31%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

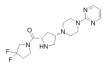


Gosogliptin

(PF-00734200; PF-734200) Cat. No.: HY-10287

Bioactivity: Gosogliptin is a potent and selective inhibitor of **dipeptidyl peptidase-IV** (**DPP-IV**).

Purity: >98%
Clinical Data: Phase 3
Size: 1 mg, 5 mg, 10 mg, 20 mg

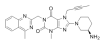


Linagliptin

(BI 1356) Cat. No.: HY-10284

Bioactivity: Linagliptin is a highly potent, selective **DPP-4** inhibitor with **IC_{50}** of 1 nM.

Purity: 99.80%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 250 mg, 1 g

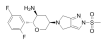


Omarigliptin

(MK-3102) Cat. No.: HY-15981

Bioactivity: Omarigliptin(MK-3102) is a potent, selective and long-acting DPP-4 inhibitor with IC50 of 1.6 nM; highly selective over all proteases tested (IC50 > 67 μM).

Purity: 99.91%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

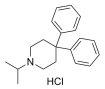


Prodipine hydrochloride

Cat. No.: HY-101605

Bioactivity: Prodipine, a diphenyl-phosphonate derivative. The **IC_{50}**s of Prodipine for purified and plasma **Dipeptidyl peptidase IV** (**DPP IV**) from the rabbit are 4.5 μM and 30 μM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

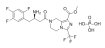


Retagliptin Phosphate

(SP 2086) Cat. No.: HY-112668

Bioactivity: Retagliptin Phosphate is pharmaceutical composition of **DPP-4** inhibitor for treating type-2 diabetes.

Purity: 99.70%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

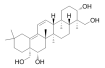


Saikogenin A

Cat. No.: HY-N6584

Bioactivity: Saikogenin A, extracted from a Chinese herbal plant called Tsai-Fu, is a dipeptidyl peptidase-IV (**DPP-IV**) inhibitor.

Purity: 98.31%
Clinical Data: No Development Reported
Size: 5 mg

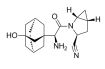


Saxagliptin

(BMS-477118) Cat. No.: HY-10285

Bioactivity: Saxagliptin is an orally active **dipeptidyl peptidase-4 (DPP4)** inhibitor that helps control blood sugar levels.

Purity: 98.03%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

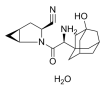


Saxagliptin hydrate

(BMS-477118 hydrate) Cat. No.: HY-10285A

Bioactivity: Saxagliptin H2O(BMS477118 H2O) is a selective and reversible DPP4 inhibitor with IC50 of 26 nM and Ki of 1.3 nM.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

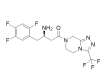


Sitagliptin

(MK0431) Cat. No.: HY-13749

Bioactivity: Sitagliptin is a potent inhibitor of **DPP4** with **IC_{50}** of 19 nM in Caco-2 cell extracts.

Purity: 99.72%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg

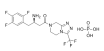


Sitagliptin phosphate

(MK0431 phosphate) Cat. No.: HY-13749A

Bioactivity: Sitagliptin phosphate is a potent inhibitor of **DPP4** with **IC_{50}** of 19 nM in Caco-2 cell extracts.

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 200 mg

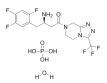


Sitagliptin phosphate monohydrate

(MK-0431 phosphate monohydrate) Cat. No.: HY-13749B

Bioactivity: Sitagliptin phosphate monohydrate is a potent inhibitor of **DPP4** with **IC_{50}** of 19 nM in Caco-2 cell extracts.

Purity: 99.78%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 100 mg, 200 mg

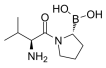


Talabostat

(PT100; Val-boroPro) Cat. No.: HY-13233

Bioactivity: Talabostat (PT100, Val-boroPro) is a potent, nonselective and orally available **dipeptidyl peptidase IV** (DPP-IV) inhibitor with a **K_i** of 0.18 nM.

Purity: >98%
Clinical Data: Phase 3
Size: 5 mg, 10 mg, 50 mg

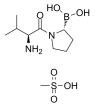


Talabostat mesylate

(PT100 (mesylate); Val-boroPro (mesylate)) Cat. No.: HY-13233A

Bioactivity: Talabostat mesylate (PT100 mesylate; Val-boroPro mesylate) is a potent, nonselective and orally available **dipeptidyl peptidase IV** (DPP-IV) inhibitor with a **K_i** of 0.18 nM.

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

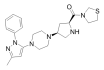


Teneligliptin

(MP-513) Cat. No.: HY-14806

Bioactivity: Teneligliptin (MP-513) is a potent chemotype prolylthiazolidine-based **DPP-4** inhibitor, which competitively inhibits human plasma, rat plasma, and human recombinant DPP-4 in vitro, with **IC_{50}**s of approximately 1 nM.

Purity: 99.82%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 250 mg

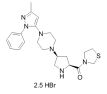


Teneligliptin hydrobromide

(MP-513 (hydrobromide)) Cat. No.: HY-14806A

Bioactivity: Teneligliptin (MP-513) hydrobromide is a potent chemotype prolylthiazolidine-based **DPP-4** inhibitor, which competitively inhibits human plasma, rat plasma, and human recombinant DPP-4 in vitro, with **IC_{50}**s of approximately 1 nM.

Purity: 99.99%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg, 250 mg

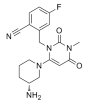


Trelagliptin

(SYR-472) Cat. No.: HY-15408

Bioactivity: Trelagliptin(SYR-472) is a long acting dipeptidyl peptidase-4 (DPP-4) inhibitor that is being developed for the treatment of type 2 diabetes (T2D).

Purity: 99.89%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

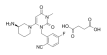


Trelagliptin succinate

(SYR-472 succinate) Cat. No.: HY-15408A

Bioactivity: Trelagliptin(SYR-472) is a long acting dipeptidyl peptidase-4 (DPP-4) inhibitor that is being developed for the treatment of type 2 diabetes (T2D).

Purity: 99.89%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

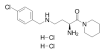


UAMC00039 dihydrochloride

Cat. No.: HY-101769

Bioactivity: UAMC00039 dihydrochloride is a potent, reversible and competitive **dipeptidyl peptidase II** inhibitor with an **IC_{50}** of 0.48 nM.

Purity: 98.44%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

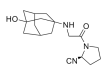


Vildagliptin

(LAF237; NVP-LAF 237) Cat. No.: HY-14291

Bioactivity: Vildagliptin (LAF-237; NVP-LAF 237) inhibits DPP-4 with IC50 of 2.3 nM. IC50 Value: 2.3 nM[1] Target: DPP-4 in vitro: Vildagliptin is an N-substituted glycyl-2-cyanopyrrolidine (figure 2). It is a potent competitive and reversible inhibitor of human and rodent DPP-4 in vitro, with a median...

Purity: 98.03%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg, 500 mg

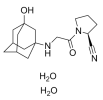


Vildagliptin dihydrate

(LAF237 dihydrate; NVP-LAF 237 dihydrate) **Cat. No.**: HY-14291A

Bioactivity: Vildagliptin (LAF237 dihydrate;NVP-LAF 237 dihydrate) is a **dipeptidyl peptidase 4 (DPP4)** inhibitor that delays the degradation of glucagon-like peptide-1 (GLP-1).

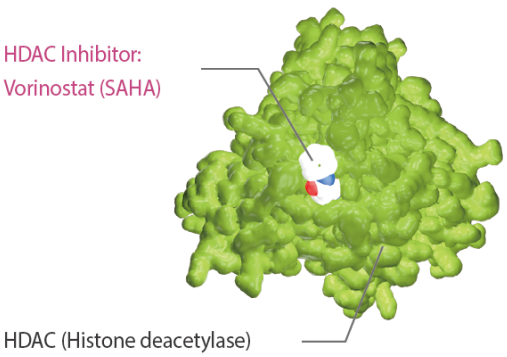
Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg, 100 mg



Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

Dopamine β-hydroxylase

Dopamine beta-hydroxylase;Dopamine beta-monooxygenase;Dopamine β-monooxygenase



Dopamine β-hydroxylase (Dopamine beta-hydroxylase, Dopamine beta-monooxygenase) is an enzyme that in humans is encoded by the DBH gene. Dopamine β-monooxygenase catalyzes the chemical reaction with 3 substrates of 3,4-dihydroxyphenethylamine, ascorbate, and O_2, whereas its 3 products are noradrenaline, dehydroascorbate, and H_2O. Dopamine β-hydroxylase belongs to the family of oxidoreductases, specifically those acting on paired donors, with O_2 as oxidant and incorporation or reduction of oxygen. Dopamine β-hydroxylase participates in tyrosine metabolism. Dopamine β-hydroxylase has 3 cofactors: copper, PQQ, and Fumarate. Dopamine β-hydroxylase is in the catecholamine biosynthetic pathway. Dopamine β-hydroxylase has been shown to be associated with decision making and addictive behaviors such as alcohol and smoking, attention deficit hyperactivity disorder, and also with neurological diseases such as Schizophrenia and Alzheimer's.

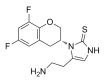
Dopamine β-hydroxylase Inhibitors & Modulators

Etamicastat

(BIA 5-453) **Cat. No.:** HY-14838

Bioactivity: Etamicastat (BIA 5-453) is a potent and reversible peripheral **dopamine-β-hydroxylase** (**DβH**) inhibitor [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

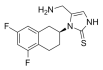


Nepicastat

(SYN117; RS-25560-197) **Cat. No.:** HY-13289

Bioactivity: Nepicastat (SYN117; RS-25560-197) is a dopamine beta-hydroxylase inhibitor with IC50 of 8.5 ± 0.8 and 9.0 ± 0.8 nM for bovine and human, respectively.

Purity: >98%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 50 mg

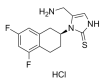


Nepicastat hydrochloride

(SYN-117 hydrochloride; RS-25560-197 hydrochloride) **Cat. No.:** HY-13289A

Bioactivity: Nepicastat hydrochloride (SYN-117 hydrochloride; RS-25560-197 hydrochloride) is a dopamine beta-hydroxylase inhibitor with IC50 of 8.5 ± 0.8 and 9.0 ± 0.8 nM for bovine and human, respectively. IC50 value: 8.5/9.0 nM(bovine/human dopamine beta-hydroxylase) Dopamine beta-hydroxylase is an enzyme that...

Purity: 99.98%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

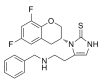


Zamicastat

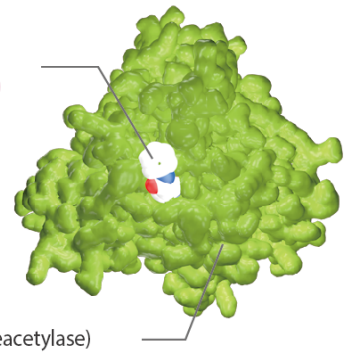
(BIA 5-1058) **Cat. No.:** HY-106004

Bioactivity: Zamicastat (BIA 5-1058) is a **dopamine β-hydroxylase (DBH)** inhibitor that could cross the blood-brain barrier (BBB) and cause central as well as peripheral effects. Zamicastat is also a concentration-dependent dual **P-gp** and **BCRP** inhibitor with $\mathbf{IC_{50}}$ values of 73.8 μM and 17.0 μM, respectively [1]....

Purity: 99.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Drug Metabolite



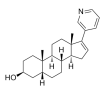
Drug metabolite results when a drug is metabolized into a modified form which continues to produce effects. Drug metabolism redox reactions such as heteroatom dealkylations, hydroxylations, heteroatom oxygenations, reductions, and dehydrogenations can yield active metabolites, and in rare cases even conjugation reactions can yield an active metabolite.

Abiraterone metabolite 1

(3β-OH-5α-Abi) Cat. No.: HY-103687

Bioactivity: Abiraterone metabolite 1 is a 5β-reduced metabolite of abiraterone. Abiraterone, a steroidal drug, inhibits CYP17A1, blocks androgen synthesis and prolongs survival in prostate cancer.

Purity: 98.06%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Allopregnanolone

(3α,5α-THP; SAGE-547; Brexanolone) Cat. No.: HY-101107

Bioactivity: Allopregnanolone is a progesterone metabolite. Allopregnanolone is an allosteric modulator of the **GABA** receptor. Used to treat postpartum depression.

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

Allopurinol riboside

Cat. No.: HY-101397

Bioactivity: Allopurinol riboside, a metabolite of allopurinol, shows potent activities against parasites.

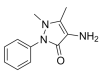
Purity: 99.04%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

Ampyrone

(4-Aminoantipyrine) Cat. No.: HY-B1398

Bioactivity: Ampyrone is a reagent for glucose determination in the presence of peroxidase and phenol.

Purity: 98.86%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

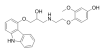


Carvedilol metabolite 4-Hydroxyphenyl Carvedilol

(4-Hydroxyphenyl Carvedilol; 4-Hydroxycarvedilol) Cat. No.: HY-12767

Bioactivity: 4-Hydroxyphenyl Carvedilol is a metabolite of Carvedilol, which is a nonselective beta blocker/alpha-1 blocker.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

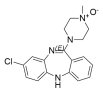


Clozapine N-oxide

Cat. No.: HY-17366

Bioactivity: Clozapine N-oxide (CNO) is a major metabolite of the anti-psychotic drug clozapine. Clozapine N-oxide is a agonist for the chemogenetic Designer Receptors Exclusively Activated by Designer Drug (**DREADD**) system.

Purity: 99.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

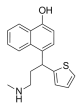


Duloxetine metabolite Para-Naphthol Duloxetine

(Para-Naphthol duloxetine) Cat. No.: HY-G0005

Bioactivity: Para-Naphthol Duloxetine is a metabolite of Duloxetine, which is a serotonin-norepinephrine reuptake inhibitor (SNRI).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

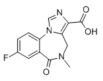


Flumazenil acid

(Ro 15-3890) Cat. No.: HY-118844

Bioactivity: Flumazenil acid is a metabolite of Flumazenil [1]. Flumazenil is a GABAA receptor antagonist [2].

Purity: >98%
Clinical Data: No Development Reported
Size:

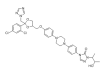


Hydroxy Itraconazole

(Itraconazole metabolite Hydroxy Itraconazole; R-63373) Cat. No.: HY-12772

Bioactivity: Hydroxy Itraconazole is an active metabolite of Itraconazole (ITZ), which is a triazole **antifungal** agent.

Purity: 99.60%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

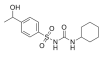


Hydroxyhexamide

((±)-Hydroxyhexamid) Cat. No.: HY-B1103

Bioactivity: Hydroxyhexamide is a pharmacologically active metabolite of Acetohexamide, used as a hypoglycemic agents.

Purity: 99.68%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

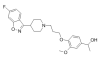


Iloperidone metabolite Hydroxy Iloperidone

(P88; Hydroxy Iloperidone) Cat. No.: HY-G0003

Bioactivity: Hydroxy Iloperidone is a metabolite of Iloperidone, which is an atypical antipsychotic.

Purity: 99.89%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

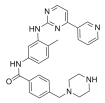


Imatinib metabolite N-Desmethyl Imatinib

(N-Desmethyl Imatinib; Norimatinib) Cat. No.: HY-G0017

Bioactivity: N-Desmethyl Imatinib is a metabolite of Imatinib, which is a multi-target inhibitor of v-Abl, c-Kit and PDGFR.

Purity: 95.34%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

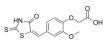


IMR-1A

Cat. No.: HY-100431A

Bioactivity: IMR-1A is the metabolite of IMR-1. IMR-1 is a novel class of Notch inhibitors targeting the transcriptional activation with IC50 of 6 μmol/L. target: Notch IC 50: 6 μmol/L In vitro: IMR-1 prevents the recruitment of Maml1 to the NTC on chromatin, inhibits Notch target gene transcription, and...

Purity: 98.06%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

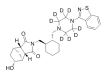


Lurasidone Metabolite 14283 D8

Cat. No.: HY-G0001S

Bioactivity: Lurasidone Metabolite 14283 D8 is the deuterium labeled Lurasidone Metabolite 14283, which is a metabolite of Lurasidone.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 50 mg

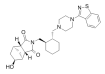


Lurasidone metabolite 14326

Cat. No.: HY-G0002

Bioactivity: Lurasidone metabolite 14326 is an active metabolite of the atypical antipsychotic Lurasidone.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

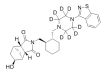


Lurasidone Metabolite 14326 D8

Cat. No.: HY-G0002S

Bioactivity: Lurasidone Metabolite 14326 D8 is the deuterium labeled Lurasidone Metabolite 14326, which is a metabolite of Lurasidone.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 50 mg

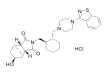


Lurasidone metabolite 14326 hydrochloride

Cat. No.: HY-G0002A

Bioactivity: Lurasidone metabolite 14326 (hydrochloride) is an active metabolite of the atypical antipsychotic Lurasidone.

Purity: 98.76%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

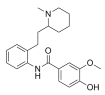


Modecainide

(BMY 40327; MJ 14030) Cat. No.: HY-101723

Bioactivity: Modecainide is a major metabolite of Encainide, which is an antiarrhythmic agent.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

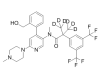


Monohydroxy Netupitant D6

Cat. No.: HY-G0012S

Bioactivity: Monohydroxy Netupitant D6 is the deuterium labeled Monohydroxy Netupitant, which is a metabolite of Netupitant.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

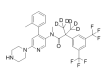


N-desmethyl Netupitant D6

Cat. No.: HY-G0010S

Bioactivity: N-desmethyl Netupitant D6 is the deuterium labeled N-desmethyl Netupitant, which is a metabolite of Netupitant.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

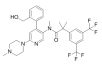


Netupitant metabolite Monohydroxy Netupitant

(Monohydroxy Netupitant) Cat. No.: HY-G0012

Bioactivity: Monohydroxy Netupitant is the metabolite of Netupitant, which is a highly selective NK1 receptor antagonist.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

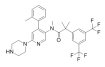


Netupitant metabolite N-desmethyl Netupitant

(N-desmethyl Netupitant) Cat. No.: HY-G0010

Bioactivity: N-desmethyl Netupitant is a metabolite of Netupitant, which is an antiemitic drug.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

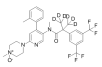


Netupitant N-oxide D6

Cat. No.: HY-G0011S

Bioactivity: Netupitant N-oxide D6 is the deuterium labeled Netupitant N-oxide, which is a metabolite of Netupitant.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Nicotinamide N-oxide

Cat. No.: HY-101407

Bioactivity: Nicotinamide N-oxide, an in vivo nicotinamide metabolite, is a potent, and selective antagonist of the **CXCR2** receptor.

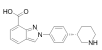
Purity: 99.45%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

Niraparib metabolite M1 (Niraparib carboxylic acid metabolite M1; M1 metabolite of niraparib)

Cat. No.: HY-G0023

Bioactivity: Niraparib metabolite M1 is a metabolite of niraparib, and the latter one acts as a novel poly(ADP-Ribose) polymerase (**PARP**) inhibitor.

Purity: 99.85%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg

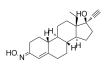


Norgestimate metabolite Norelgestromin

(17-Deacetyl norgestimate; 17-Deacylnorgestimate) Cat. No.: HY-G0018

Bioactivity: Norelgestromin is a metabolite of Norgestimate, which is a progestin or synthetic progestogen.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

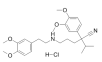


Norverapamil hydrochloride

((±)-Norverapamil hydrochloride; D591 hydrochlorid) Cat. No.: HY-100750

Bioactivity: Norverapamil hydrochloride is a calcium channel blocker it is the main active metabolite of verapamil. In vitro: Norverapamil is similarly effective as verapamil at inhibiting isoniazid and rifampicin tolerance and killing of intracellular M. tuberculosis in the absence of other drugs....

Purity: 99.46%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg

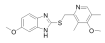


Omeprazole metabolite Omeprazole sulfide

(Ufiprazole; Omeprazole sulfide) Cat. No.: HY-G0006

Bioactivity: Omeprazole sulfide is a metabolite of Omeprazole, which is a proton pump inhibitor.

Purity: 99.91%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

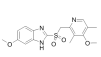


Omeprazole metabolite Omeprazole sulfone

(Omeprazole sulfone; Omeprazole sulphone) Cat. No.: HY-G0007

Bioactivity: Omeprazole sulfone is a metabolite of Omeprazole, which is a proton pump inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

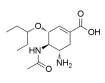


Oseltamivir acid

(GS 4071; Ro 64-0802; oseltamivir carboxylate) Cat. No.: HY-13318

Bioactivity: Oseltamivir acid (GS 4071; Ro 64-0802; oseltamivir carboxylate), the ethyl ester prodrug of GS 4071, is an inhibitor of **influenza virus neuraminidase** with an IC_{50} of approximately 100 nM.

Purity: 98.60%
Clinical Data: Phase 4
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 50 mg

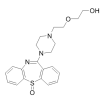


Quetiapine sulfoxide

(Quetiapine S-oxide) Cat. No.: HY-G0014

Bioactivity: Quetiapine sulfoxide (Quetiapine S-oxide) is a main metabolite of Quetiapinem. Quetiapine is a second-generation antipsychotic [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

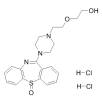


Quetiapine sulfoxide dihydrochloride

(Quetiapine S-oxide dihydrochloride) Cat. No.: HY-G0014A

Bioactivity: Quetiapine sulfoxide dihydrochloride (Quetiapine S-oxide dihydrochloride) is a main metabolite of Quetiapinem. Quetiapine is a second-generation antipsychotic [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

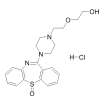


Quetiapine sulfoxide hydrochloride

(Quetiapine S-oxide hydrochloride) Cat. No.: HY-G0014B

Bioactivity: Quetiapine sulfoxide hydrochloride (Quetiapine S-oxide hydrochloride) is a main metabolite of Quetiapinem. Quetiapine is a second-generation antipsychotic [1].

Purity: 96.92%
Clinical Data: No Development Reported
Size: 5 mg

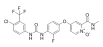


Regorafénib N-oxyde M2

Cat. No.: HY-I0678

Bioactivity: Regorafénib N-oxyde M2 is an active metabolite of Regorafenib. Regorafenib is a multi-target inhibitor for VEGFR1/2/3, PDGFRβ, Kit, RET and Raf-1 with IC_{50}s of 13/4.2/46, 22, 7, 1.5 and 2.5 nM, respectively.

Purity: 99.54%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

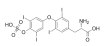


Thyroxine sulfate

(T4 Sulfate) Cat. No.: HY-101406

Bioactivity: Thyroxine sulfate is a thyroid hormone metabolite.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

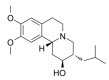


Trans (2,3)-Dihydrotetrabenazine

((2R,3R,11bR)-rel-Dihydrotetrabenazine; ...) Cat. No.: HY-15793A

Bioactivity: Trans (2,3)-Dihydrotetrabenazine, a metabolite of Tetrabenazine, shows remarkable inhibition activity on **vesicular monoamine transporter (VMAT2)** [1].

Purity: >98%
Clinical Data: Phase 3
Size: 5 mg, 10 mg, 50 mg, 100 mg

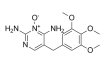


Trimethoprim 3-oxide

(Trimethoprim 3-N-oxide) Cat. No.: HY-100645

Bioactivity: Trimethoprim 3-oxide (Trimethoprim 3-N-oxide) is the primary metabolite of trimethoprim [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg

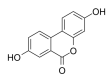


Urolithin A

Cat. No.: HY-100599

Bioactivity: Urolithin A is an intestinal metabolite of ellagic acid with antioxidant and antiproliferative effects; inhibits T24 and Caco-2 cell growth with **IC_{50}** values of 43.9 and 49 μM, respectively.

Purity: 98.06%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

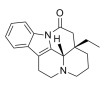


Vinburnine

((-)-Eburnamonine; (-)-Vincamone) Cat. No.: HY-B1180

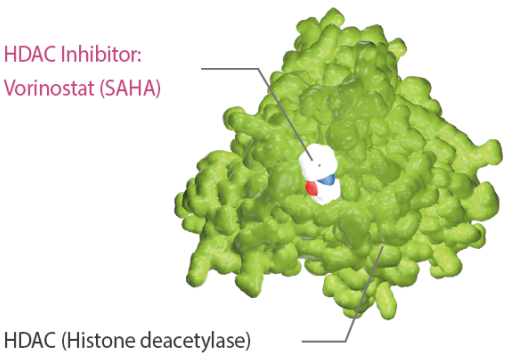
Bioactivity: Vincamone is a vinca alkaloid and a metabolite of vincamine, is a vasodilator.

Purity: 99.78%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg



E1/E2/E3 Enzyme

E1 activating enzyme;E2 conjugating enzyme;E3 ligating enzyme;Ubiquitin activating enzyme;Ubiquitin conjugating enzyme;Ubiquitin ligase



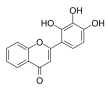
Ubiquitin (UB) is a protein modifier that regulates many essential cellular processes. To initiate protein modification by UB, the E1 enzyme activates the C-terminal carboxylate of UB to launch its transfer through the E1-E2-E3 cascade onto target proteins. The E1 enzyme is the activating enzyme, to which ubiquitin is attached in an ATP-dependent reaction by a thioester bond. The E2 enzyme is the conjugating enzyme, to which the ubiquitin is transferred from the E1. The E3 is the ubiquitin ligase, which directly or indirectly catalyzes the transfer of the ubiquitin to the target protein (the substrate), with the formation of an isopeptide bond.

2-D08

Cat. No.: HY-114166

Bioactivity: 2-D08 is a cell permeable, mechanistically unique inhibitor of protein **SUMOylation**. 2-D08 also inhibits **Axl** with an IC_{50} of 0.49 nM.

Purity: 99.04%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



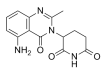
Avadomide

(CC 122)

Cat. No.: HY-100507

Bioactivity: Avadomide (CC122) is a novel agent for DLBCL with antitumor and immunomodulatory activity. Avadomide (CC122) binds CRBN and degrades Aiolos and Ikaros resulting in a mimicry of IFN signaling and apoptosis in DLBCL.

Purity: 99.53%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

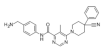


BI8622

Cat. No.: HY-120929

Bioactivity: BI8622 is a specific inhibitor of the ubiquitin ligase **HUWE1** with an IC_{50} of 3.1 μM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

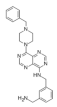


BI8626

Cat. No.: HY-120204

Bioactivity: BI8626 is a specific inhibitor of the ubiquitin ligase **HUWE1** with an IC_{50} of 0.9 μM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

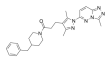


C25-140

Cat. No.: HY-120934

Bioactivity: C25-140, a first-in-class **TRAF6-Ubc13** inhibitor, directly binds to **TRAF6**, thereby blocks the interaction of TRAF6 with Ubc13 and as a consequence lowers TRAF6 activity and combats autoimmunity [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

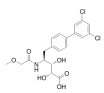


CC0651

Cat. No.: HY-15301

Bioactivity: CC0651 is an allosteric inhibitor of the human **Cdc34 ubiquitin-conjugating enzyme**. CC0651 potently (IC_{50}=1.72 μM) inhibits the ubiquitination of p27 ^{Kip1}, as confirmed by dose-response analysis.

Purity: 99.30%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

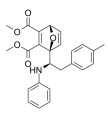


COH000

Cat. No.: HY-114304

Bioactivity: COH000 is an allosteric, covalent and irreversible inhibitor of **ubiquitin-like 1-activating enzyme (SUMO-activating enzyme) (E1)**, with an IC_{50} of 0.2 μM for SUMOylation in vitro [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

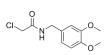


DKM 2-93

Cat. No.: HY-101836

Bioactivity: DKM 2-93 is a relatively selective inhibitor of **UBA5** with an IC_{50} of 430 μM.

Purity: 98.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg



Ginkgolic Acid (Ginkgolic acid (15:1); Ginkgolic acid I; Romanicardic acid)

Cat. No.: HY-N0077

Bioactivity: Ginkgolic Acid is a natural compound that inhibits **SUMOylation** with an IC_{50} of 3.0 μM in in vitro assay.

Purity: 99.59%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

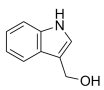
Indole-3-carbinol

(I3C; 3-Indolemethanol)

Cat. No.: HY-N0170

Bioactivity: Indole-3-carbinol (I3C) inhibits **NF-κB** activity and also is an **Aryl hydrocarbon receptor** (**AhR**) agonist, and an inhibitor of **WWP1** (WW domain-containing ubiquitin E3 ligase 1).

Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 200 mg, 1 g

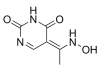


NSC232003

Cat. No.: HY-103236

Bioactivity: NSC232003 is a highly potent and cell-permeable **UHRF1** inhibitor, which inhibits DNA methylation in vitro and disrupts DNMT1/UHRF1 interactions at a cellular level.

Purity: 98.09%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg



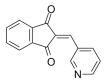
PRT4165

(NSC600157)

Cat. No.: HY-19817

Bioactivity: PRT4165 is a potent inhibitor of **PRC1-mediated H2A ubiquitylation**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

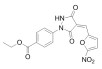


PYR-41

Cat. No.: HY-13296

Bioactivity: PYR-41 is a selective and cell permeable inhibitor of ubiquitin-activating enzyme **E1** with an $\mathbf{IC_{50}}$ of < 10 μM, with little activity at E2 and E3.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

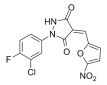


PYZD-4409

Cat. No.: HY-13297

Bioactivity: PYZD-4409 is a novel small molecule inhibitor of Ubiquitin-activating enzyme UBA1/E1 enzyme with an IC50 of 20 uM (cell-free enzymatic assay).

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



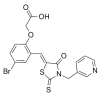
Skp2 Inhibitor C1

(SKPin C1)

Cat. No.: HY-16661

Bioactivity: Skp2 Inhibitor C1(SKPin C1) is a specific small molecule inhibitor of Skp2-mediated p27 degradation, selectively inhibited Skp2-mediated p27 degradation by reducing p27 binding through key compound-receptor contacts. IC50 value: Target: Skp2 inhibitor; p27 regulator in vitro: T47D cells...

Purity: 96.20%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg

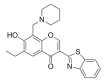


SZL P1-41

Cat. No.: HY-100237

Bioactivity: SZL P1-41 is Skp2 inhibitor, selectively suppresses Skp2 E3 ligase activity, but not activity of other SCF complexes. target: Skp2 In vitro: SZL P1-41 also phenocopies the effects observed upon genetic Skp2 deficiency, such as suppressing survival, Akt-mediated glycolysis as well as triggering...

Purity: 99.18%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



TAK-243

(MLN7243; AOB87172)

Cat. No.: HY-100487

Bioactivity: TAK-243 is a potent and selective ubiquitin-like modifier activating enzyme 1 (**UBA1**) inhibitor.

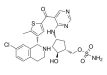
Purity: 99.43%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg

TAK-981

Cat. No.: HY-111789

Bioactivity: TAK-981 is a first in class and selective inhibitor of the **SUMOylation** enzymatic cascade, with potential immune-activating and antineoplastic activities [1] [2].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

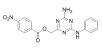


TZ9

Cat. No.: HY-18643

Bioactivity: TZ9 is a novel inhibitor of Rad6 ubiquitin conjugating enzyme(E2 enzyme); inhibits MDA-MB-231 cell proliferation with IC50 of ~6 uM.

Purity: 99.17%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

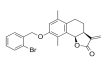


UbcH5c-IN-1

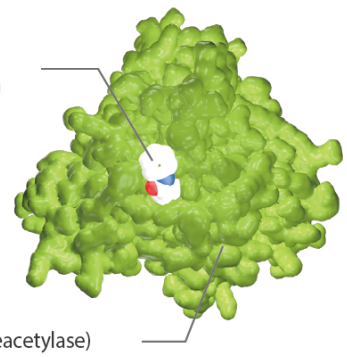
Cat. No.: HY-103046

Bioactivity: UbcH5c-IN-1 (compound 6d) is a potent and selective small-molecule inhibitor of Ubiquitin-conjugating enzyme **UbcH5c**, with a $\mathbf{K_d}$ of 283 nM for E2 UbcH5c-IN-1 by covalent binding with Cys85. A promising lead compound for ...

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



Elastase



Elastases are proteinases capable of solubilizing fibrous elastin. Elastases may belong to the class of serine proteinases, cysteine proteinases and metalloproteinases. Mammalian elastases occur mainly in the pancreas and the phagocytes. Among non-mammalian elastases there is a great variety of bacterial metallo and serine elastases. The elastolytic activity varies from one elastase to another and is usually not correlated with the catalytic efficiency of these proteinases. One may measure this activity using native or labelled elastins. With pure elastases one may use synthetic substrates. There is a large number of natural (proteins) and synthetic elastase inhibitors. Elastases play a pathologic role in pulmonary emphysema, cystic fibrosis, infections, inflammation and atherosclerosis.

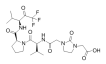
Elastase Inhibitors & Modulators

AE-3763

Cat. No.: HY-19406

Bioactivity: AE-3763 is a peptide-based **human neutrophil elastase** inhibitor with an **IC_{50}** of 29 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



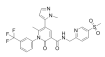
Alvelestat

(AZD9668)

Cat. No.: HY-15651

Bioactivity: Alvelestat (AZD9668) is a novel, oral inhibitor of neutrophil elastase (NE) with the pIC50 of 7.9 for Human NE.

Purity: 99.27%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

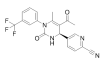


BAY-678

Cat. No.: HY-111457A

Bioactivity: BAY-678 is an orally bioavailable, highly potent, selective and cell-permeable inhibitor of human neutrophil elastase **(HNE)**, with an **IC_{50}** of 20 nM. BAY-678 is also nominated as a chemical probe to the public via the Structural Genomics Consortium (SGC).

Purity: 98.16%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

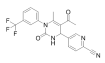


BAY-678 racemate

Cat. No.: HY-111515

Bioactivity: BAY-678 racemate is a racemate of BAY-678. BAY-678 is an orally bioavailable, highly potent, selective and cell-permeable inhibitor of human neutrophil elastase **(HNE)**, with an **IC_{50}** of 20 nM. BAY-678 is also nominated as a chemical probe to the public via the Structural Genomics Consortium...

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

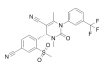


BAY-85-8501

Cat. No.: HY-19908

Bioactivity: BAY-85-8501 is a selective and potent inhibitor of **Human Neutrophil Elastase (HNE)**, with an **IC_{50}** of 65 pM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



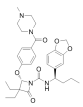
DMP 777

(L-694458)

Cat. No.: HY-75957

Bioactivity: DMP 777 is a potent, selective, and orally active human **leukocyte elastase (HLE)** inhibitor.

Purity: 99.13%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg

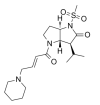


GW311616

Cat. No.: HY-15891

Bioactivity: GW311616 is a potent, intracellular, orally bioavailable, long duration inhibitor of human neutrophil elastase(HNE) with IC50 of 22 nM; free base form of GW311616A.

Purity: 99.30%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



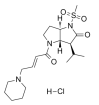
GW311616 hydrochloride

(GW311616A)

Cat. No.: HY-15891A

Bioactivity: GW311616A(GW311616 Hcl) is a potent, intracellular, orally bioavailable, long duration inhibitor of human neutrophil elastase(HNE) with IC50 of 22 nM. IC50 value: 22 nM [1] Target: neutrophil elastase The HNE inhibitor GW311616A is selective over other human serine proteases (IC50 values...

Purity: 98.84%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Lodelaben

(SC-39026; Declaben)

Cat. No.: HY-100240

Bioactivity: Lodelaben is a human neutrophil **elastase** inhibitor with an **IC_{50}** and **K_i** of 0.5 and 1.5 μM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

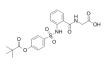
Sivelestat

(EI546; LY544349; ONO5046)

Cat. No.: HY-17443

Bioactivity: Sivelestat(ONO5046; LY544349; EI546) is a competitive inhibitor of human neutrophil elastase(IC50 = 44 nM; Ki=200 nM); also inhibited leukocyte elastase obtained from rabbit, rat, hamster and mouse.

Purity: 98.54%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg

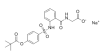


Sivelestat sodium (ONO5046-Na; Sodium sivelestat; EI546 sodium; LY544349 sodium)

Cat. No.: HY-17443A

Bioactivity: Sivelestat sodium(ONO5046; LY544349; EI546) is a competitive inhibitor of human neutrophil elastase(IC50 = 44 nM; Ki=200 nM); also inhibited leukocyte elastase obtained from rabbit, rat, hamster and mouse.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg

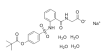


Sivelestat sodium tetrahydrate (EI546 sodium tetrahydrate; LY544349 sodium tetrahydrate; ...)

Cat. No.: HY-17443B

Bioactivity: Sivelestat(ONO5046; LY544349; EI546) is a competitive inhibitor of human neutrophil elastase(IC50 = 44 nM; Ki=200 nM); also inhibited leukocyte elastase obtained from rabbit, rat, hamster and mouse. IC50 value: 44 nM [1] Target: neutrophil elastase ONO-5046 did not inhibit trypsin,...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

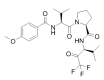


ZD-0892

Cat. No.: HY-19254

Bioactivity: ZD-0892 is a selective and potent inhibitor of a **neutrophil elastase** with K_is of 6.7 and 200 nM for human neutrophil elastase and porcine pancreatic elastase, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

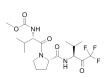


ZD8321

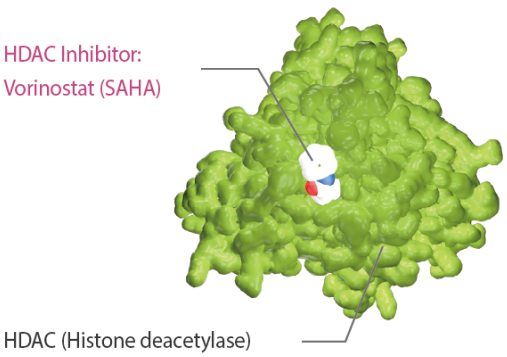
Cat. No.: HY-U00256

Bioactivity: ZD8321 is a potent inhibitor of human **Neutrophil elastase** (**NE**) with a K_i of 13±1.7 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Endogenous Metabolite



Metabolite results when a drug is metabolized into a modified form which continues to produce effects. A metabolome in a given body fluid is influenced by endogenous factors such as age, sex, body composition and genetics as well as underlying pathologies.The levels of the enormous array of unique small-molecule metabolites are usually kept tightly regulated by the activity of a very large array of enzymes and transporters responsible for the production, transformation, degradation, and compartmentalization of these small molecules.The levels of the endogenous small molecules present in the brain are normally tightly regulated.

(-)-(S)-Equol

Cat. No.: HY-100583

Bioactivity: (-)-(S)-Equol is a high affinity ligand for **estrogen receptor β** with a K_i of 0.73 nM.

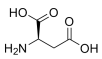
Purity: 99.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

(-)-Aspartic acid

((R)-Aspartic acid; D-(-)-Aspartic acid) Cat. No.: HY-42068

Bioactivity: (-)-Aspartic acid is an endogenous **NMDA** receptor agonist.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 g

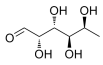


(-)-Fucose

(6-Desoxygalactose; L-(-)-Fucose; L-Galactomethylose) Cat. No.: HY-N1480

Bioactivity: (-)-Fucose is classified as a member of the hexoses, plays a role in A and B blood group antigen substructure determination, selectin-mediated leukocyte-endothelial adhesion, and host-microbe interactions.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

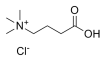


(3-Carboxypropyl)trimethylammonium chloride

(γ-Butyrobetaine hydrochloride) Cat. No.: HY-113270A

Bioactivity: (3-Carboxypropyl)trimethylammonium chloride is angiopathic substance produced as an intermediary metabolite by gut microbiota that feed on carnitine in dietary red meat.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

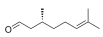


(R)-(+)-Citronellal

((+)-Citronellal) Cat. No.: HY-111664

Bioactivity: (R)-(+)-Citronellal, isolated from citrus, lavender and eucalyptus oils, is a monoterpenoid and main component of citronellal oil with a distinct lemon scent. A flavouring agent. Used for insect repellent and antifungal properties [1] [2].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

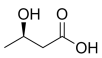


(R)-3-Hydroxybutanoic acid

Cat. No.: HY-W051723

Bioactivity: (R)-3-Hydroxybutanoic acid is a metabolite, and converted from acetoacetic acid catalyzed by 3-hydroxybutyrate dehydrogenase.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 50 mg

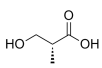


(R)-3-Hydroxyisobutyric acid

Cat. No.: HY-113108

Bioactivity: (R)-3-Hydroxyisobutyric acid is an intermediate in the pathways of l-valine and thymine and plays an important role in the diagnosis of the very rare inherited metabolic diseases 3-hydroxyisobutyric aciduria and methylmalonic semialdehyde dehydrogenase deficiency.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

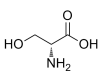


(R)-Serine

Cat. No.: HY-100808

Bioactivity: (R)-Serine is a non-essential amino acid involved in the biosynthesis of amino acids.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g, 5 g

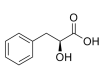


(S)-2-Hydroxy-3-phenylpropanoic acid

Cat. No.: HY-30220

Bioactivity: (S)-2-Hydroxy-3-phenylpropanoic acid is a product of phenylalanine catabolism. An elevated level of phenyllactic acid is found in body fluids of patients with or phenylketonuria.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

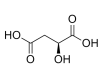


(S)-2-Hydroxysuccinic acid

Cat. No.: HY-Y1069

Bioactivity: (S)-2-Hydroxysuccinic acid is a dicarboxylic acid in naturally occurring form, contributes to the pleasantly sour taste of fruits and is used as a food additive.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

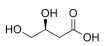


(S)-3,4-Dihydroxybutyric acid

Cat. No.: HY-113304

Bioactivity: (S)-3,4-Dihydroxybutyric acid is a normal human urinary metabolite that is excreted in increased concentration in patients with succinic semialdehyde dehydrogenase (SSADH) deficiency.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

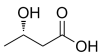


(S)-3-Hydroxybutanoic acid ((S)-β-Hydroxybutanoic acid; L-(+)-3-Hydroxybutyric acid; L-β-Hydroxybutyric acid)

Cat. No.: HY-W050031

Bioactivity: (S)-3-Hydroxybutanoic acid is a normal human metabolite, that has been found elevated in geriatric patients remitting from depression. In humans, 3-Hydroxybutyric acid is synthesized in the liver from acetyl-CoA, and can be used as an energy source by the brain when blood glucose is low.

Purity: 97.0%
Clinical Data:
Size: 10mM x 1mL in Water, 50 mg

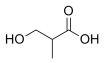


(S)-3-Hydroxyisobutyric acid

Cat. No.: HY-113126

Bioactivity: (S)-3-Hydroxyisobutyric acid is an important interorgan metabolite, an intermediate in the pathways of l-valine and thymine and a good gluconeogenic substrate.

Purity: 92.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

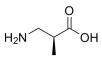


(S)-b-aminoisobutyric acid

Cat. No.: HY-113380

Bioactivity: (S)-b-aminoisobutyric acid is a non-protein amino acid originating from the catabolism of thymine and valine.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



(S)-Glutamic acid

((+)-L-Glutamic acid)

Cat. No.: HY-14608

Bioactivity: (S)-Glutamic acid acts as an excitatory transmitter and an agonist at all subtypes of glutamate receptors (metabotropic, kainate, NMDA, and AMPA). (S)-Glutamic acid shows a direct activating effect on the release of **DA** from dopaminergic terminals.

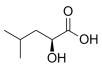
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

(S)-Leucic acid

Cat. No.: HY-30215

Bioactivity: (S)-Leucic acid is an amino acid metabolite.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

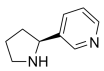


(S)-Nornicotine

Cat. No.: HY-W040430

Bioactivity: (S)-Nornicotine is a metabolite of nicotine.

Purity: >98%
Clinical Data:
Size: 5 mg

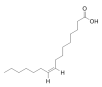


(Z)-Hexadec-9-enoic acid

Cat. No.: HY-W011873

Bioactivity: (Z)-Hexadec-9-enoic acid, a composition of fatty acid, is implicated in the prevention of death from cerebrovascular disorders in SHRSP rats.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

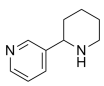


(±) Anabasine

Cat. No.: HY-W052144

Bioactivity: (±) Anabasine is a biphasic muscle relaxant.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg



1,2-Dipalmitoyl-sn-glycerol 3-phosphate

Cat. No.: HY-113437

Bioactivity: 1,2-Dipalmitoyl-sn-glycerol 3-phosphate is a phosphatidic acid.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

1,3-Diaminopropane

Cat. No.: HY-42210

Bioactivity: 1,3-Diaminopropane, a three carbon diamine, is an ornithine decarboxylase inhibitor.

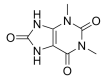
Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

1,3-Dimethyluric acid

Cat. No.: HY-W014993

Bioactivity: 1,3-Dimethyluric acid is a product of theophylline metabolism in man. 1,3-Dimethyluric acid is one of the purine components in urinary calculi.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

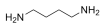


1,4-Butanediamine (1,4-Diaminobutane; 1,4-Tetramethylenediamine; NSC 60545; Putramine; ...)

Cat. No.: HY-N2407

Bioactivity: 1,4-Butanediamine is an indicator of pollution-induced stress in higher plants: barley and rape stressed with Cr(III) or Cr(VI). 1,4-Butanediamine is an important source of GABA.

Purity: >98%
Clinical Data:
Size: 50 mg

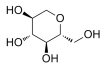


1,5-Anhydrosorbitol

Cat. No.: HY-113075

Bioactivity: 1,5-Anhydrosorbitol is a short-term marker for glycemic control.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

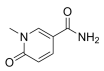


1-Methyl-6-oxo-1,6-dihydropyridine-3-carboxamide

Cat. No.: HY-113432

Bioactivity: 1-Methyl-6-oxo-1,6-dihydropyridine-3-carboxamide is one of the end products of nicotinamide-adenine dinucleotide (NAD) degradation.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

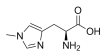


1-Methyl-L-histidine

Cat. No.: HY-W017006

Bioactivity: 1-Methyl-L-histidine is an objective indicator of meat ingestion and exogenous 3-methylhistidine (3MH) intake.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 25 mg

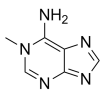


1-Methyladenine

Cat. No.: HY-113306

Bioactivity: 1-Methyladenine is a product of alkylation damage in DNA which can be repaired by damage reversal by oxidative demethylation.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

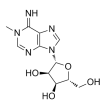


1-Methyladenosine

Cat. No.: HY-113081

Bioactivity: 1-Methyladenosine is an RNA modification originating essentially from two different reaction types, one catalyzed by enzymes and the other the result of the reaction of RNA with certain alkylating agents.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

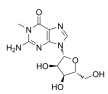


1-Methylguanosine

Cat. No.: HY-113136

Bioactivity: 1-Methylguanosine is a methylated nucleoside.

Purity: 98.39%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

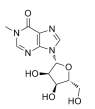


1-Methylinosine (N1-Methylinosine)

Cat. No.: HY-113139

Bioactivity: 1-Methylinosine is a modified nucleotide found at position 37 in tRNA 3' to the anticodon of eukaryotic tRNA [1].

Purity: 99.96%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

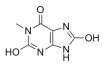


1-Methyluric acid

Cat. No.: HY-W010031

Bioactivity: 1-Methyluric acid acts on the urinary bladder mucosa and increases the blood glucose, insulin, triglyceride, and cholesterol levels.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

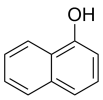


1-Naphthol (Fourrine ERN; Furro ER; NSC 9586; Nako TRB; Naphthol-1; Naphthyl-1-ol; Tertral ERN; Ursol ERN; ...)

Cat. No.: HY-Y1309

Bioactivity: 1-naphthol is an excited state proton transfer (ESPT) fluorescent molecular probe.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 g



1-Arachidoyl-sn-glycero-3-phosphocholine

Cat. No.: HY-113010

Bioactivity: 1-Arachidoyl-sn-glycero-3-phosphocholine is a lysophospholipid (LyP).

Purity: >98%
Clinical Data:
Size: 10 mg

10Z-Nonadecenoic acid

Cat. No.: HY-113450

Bioactivity: 10Z-Nonadecenoic acid is a kind of long-chain fatty acid with anti-tumor activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

11beta-Hydroxyprogesterone

(11β-Hydroxyprogesterone)

Cat. No.: HY-N2337

Bioactivity: 11beta-Hydroxyprogesterone is a potent inhibitors of **11β-Hydroxysteroid dehydrogenase**; also activates human mineralocorticoid receptor in COS-7 cells with an $\mathbf{ED_{50}}$ of 10 nM.

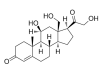
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

18-Hydroxycorticosterone

Cat. No.: HY-W013179

Bioactivity: 18-Hydroxycorticosterone is a corticosteroid and a derivative of corticosterone, which can lead to serious electrolyte imbalances.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg



18β-Glycyrrhetinic acid

Cat. No.: HY-N0180

Bioactivity: 18β-Glycyrrhetinic acid is the major bioactive component of Glycyrrhizae Radix and possesses anti-ulcerative, anti-inflammatory and antiproliferative properties.

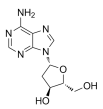
Purity: 99.63%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 500 mg, 5 g

2'-Deoxyadenosine

Cat. No.: HY-W040329

Bioactivity: 2'-Deoxyadenosine is a nucleoside adenosine derivative, pairing with deoxythymidine (T) in double-stranded DNA.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 250 mg

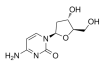


2'-Deoxycytidine (Cytosine deoxyribonucleoside; Cytosine deoxyriboside; Deoxycytidine; Deoxyribose cytidine)

Cat. No.: HY-D0184

Bioactivity: 2'-Deoxycytidine, a deoxyribonucleoside, could inhibit biological effects of **Bromodeoxyuridine (Brdu)**.

Purity: 97.76%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



2'-Deoxyguanosine

(Deoxyguanosine; Guanine deoxyriboside)

Cat. No.: HY-17563

Bioactivity: Deoxyguanosine(2'-Deoxyguanosine) is composed of the purine nucleoside guanine linked by its N9 nitrogen to the C1 carbon of deoxyribose.

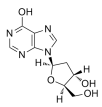
Purity: 99.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g, 5 g

2'-Deoxyinosine

Cat. No.: HY-W008638

Bioactivity: 2'-deoxyadenosine inhibits the growth of human colon-carcinoma cell lines and is found to be associated with purine nucleoside phosphorylase (PNP) deficiency.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

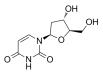


2'-Deoxyuridine

Cat. No.: HY-D0186

Bioactivity: 2'-Deoxyuridine could increase chromosome breakage and results in a decreased thymidylate synthetase activity. A known use of 2'-Deoxyuridine is as a precursor in the synthesis of Edoxudine.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

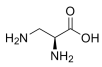


2,3-Diaminopropionic acid

Cat. No.: HY-113379

Bioactivity: 2, 3-Diaminopropionic acid is a metabolite of b-oxalyl-L-a, b-diaminopropionic acid a neurotoxic amino acid (ODAP).

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

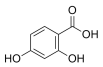


2,4-Dihydroxybenzoic acid

Cat. No.: HY-W012575

Bioactivity: 2,4-Dihydroxybenzoic acid is a degradation product of cyaniding glycoside from tart cheeries in cell culture.

Purity: 99.53%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

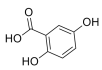


2,5-Dihydroxybenzoic acid

Cat. No.: HY-W001179

Bioactivity: 2,5-Dihydroxybenzoic acid is a derivative of benzoic and a powerful inhibitor of **fibroblast growth factors**.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

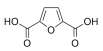


2,5-Furandicarboxylic acid

Cat. No.: HY-W002105

Bioactivity: 2,5-Furandicarboxylic acid is a biomass-derived diacid that can be used to make polymers including polyethylene furandicarboxylate (PEF).

Purity: 98.48%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

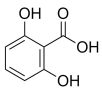


2,6-Dihydroxybenzoic acid

Cat. No.: HY-Y0801

Bioactivity: 2,6-Dihydroxybenzoic acid is a secondary metabolite of salicylic acid which has been hydrolyzed by liver enzymes during phase I metabolism.

Purity: 99.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

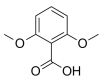


2,6-Dimethoxybenzoic acid

Cat. No.: HY-76504

Bioactivity: 2,6-Dimethoxybenzoic acid is a member of organic compounds known as o-methoxybenzoic acids and derivatives.

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

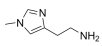


2-(1-Methyl-1H-imidazol-4-yl)ethan-1-amine

Cat. No.: HY-W062542

Bioactivity: 2-(1-Methyl-1H-imidazol-4-yl)ethan-1-amine is a histamine (Him) metabolite.

Purity: >98%
Clinical Data:
Size: 10 mg

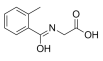


2-(2-Methylbenzamido)acetic acid

Cat. No.: HY-W015060

Bioactivity: 2-(2-Methylbenzamido)acetic acid is a metabolite detected in urine.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

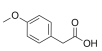


2-(4-Methoxyphenyl)acetic acid

(4-Methoxyphenylacetic acid) Cat. No.: HY-W004206

Bioactivity: 2-(4-Methoxyphenyl)acetic acid is a plasma metabolite, with high sensitivity and specificity value as a biomarker for discriminating between NSCLC and healthy controls.

Purity: 99.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

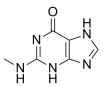


2-(Methylamino)-1H-purin-6(7H)-one

(N2-methylguanine) Cat. No.: HY-101412

Bioactivity: 2-(Methylamino)-1H-purin-6(7H)-one (N2-Methylguanine) is a modified nucleoside. 2-(Methylamino)-1H-purin-6(7H)-one is an endogenous methylated nucleoside found in human fluids.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

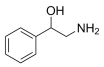


2-Amino-1-phenylethanol

Cat. No.: HY-59132

Bioactivity: 2-Amino-1-phenylethanol is an analogue of noradrenaline.

Purity: 95.69%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

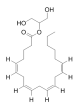


2-Arachidonoylglycerol

Cat. No.: HY-W011051

Bioactivity: 2-Arachidonoylglycerol is a second endogenous cannabinoid ligand in the central nervous system.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 1 mg

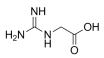


2-Guanidinoacetic acid

Cat. No.: HY-W021448

Bioactivity: 2-Guanidinoacetic acid, a precursor of creatine, is a replacement of dietary arginine and could support overall energy homeostasis of the bird.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

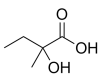


2-Hydroxy-2-methylbutanoic acid

Cat. No.: HY-W015874

Bioactivity: 2-Hydroxy-2-methylbutanoic acid, an unusual metabolite, is associated with 2-hydroxyglutaric aciduria and maple syrup urine disease.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

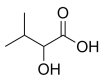


2-Hydroxy-3-methylbutanoic acid

Cat. No.: HY-W008150

Bioactivity: 2-Hydroxy-3-methylbutanoic acid is a close structure analogue of GHB, which is a naturally occurring neurotransmitter and a psychoactive drug.

Purity: 98.57%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

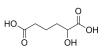


2-Hydroxyadipic acid

Cat. No.: HY-113101

Bioactivity: 2-Hydroxyadipic acid is an organic acid, formed by the reduction of 2-ketoadipic acid.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

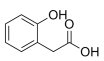


2-Hydroxyphenylacetic acid

Cat. No.: HY-W015590

Bioactivity: 2-Hydroxyphenylacetic acid is a potential biomarker for the food products, and found to be associated with phenylketonuria **(PKU)**.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

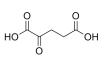


2-Ketoglutaric acid

Cat. No.: HY-W013636

Bioactivity: 2-Ketoglutaric acid is an intermediate compound of the Krebs cycle and is also connected to glutamic acid and glutamine metabolisms through the transamination reactions.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g

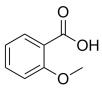


2-Methoxybenzoic acid (NSC 3778; O-Methylsalicylic acid; Salicylic acid methyl ether)

Cat. No.: HY-N1393

Bioactivity: 2-Methoxybenzoic acid (NSC 3778) is used as an internal standard of salicylic acid and its putative biosynthetic precursors in cucumber leaves. Another known use is in the synthesis of Benextramine.

Purity: 99.06%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

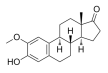


2-Methoxyestrone

Cat. No.: HY-113252

Bioactivity: 2-Methoxyestrone is a methoxylated catechol estrogen and metabolite of estrone, with a pKa of 10.81.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

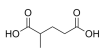


2-Methylpentanedioic acid

Cat. No.: HY-W017524

Bioactivity: 2-Methylpentanedioic acid is a metabolite of succinic acid, a citric acid cycle intermediate.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

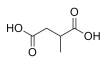


2-Methylsuccinic acid

Cat. No.: HY-W010381

Bioactivity: 2-Methylsuccinic acid is a normal metabolite in human fluids and the main biochemical measurable features in ethylmalonic encephalopathy.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

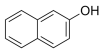


2-Naphthol

Cat. No.: HY-Y0110

Bioactivity: 2-Naphthol is a metabolite of naphthalene, catalyzed by cytochrome P450 (CYP) isozymes (CYP 1A1, CYP 1A2, CYP 2A1, CYP 2E1 and CYP 2F2).

Purity: 99.96%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

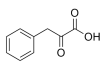


2-Oxo-3-phenylpropanoic acid

Cat. No.: HY-W012530

Bioactivity: 2-Oxo-3-phenylpropanoic acid is used in the synthesis of 3-phenyllactic acid (PLA) by lactate dehydrogenase.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

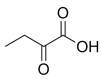


2-Oxobutanoic acid

Cat. No.: HY-W007926

Bioactivity: 2-Oxobutanoic acid is a product in the enzymatic cleavage of cystathionine.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

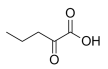


2-Oxovaleric acid

Cat. No.: HY-113098

Bioactivity: 2-Oxovaleric acid is a keto acid that is found in human blood.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

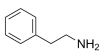


2-Phenylethanamine

Cat. No.: HY-W010483

Bioactivity: 2-Phenylethanamine is believed to function as a neuromodulator or neurotransmitter.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 g

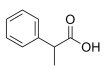


2-Phenylpropionic acid

Cat. No.: HY-W015608

Bioactivity: 2-Phenylpropionic acid is an intermediate in alpha-Methylstyrene metabolism.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



20-HETE

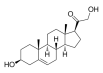
(20-hydroxy Arachidonic Acid) Cat. No.: HY-15598

Bioactivity: 20-HETE(20-hydroxy Arachidonic Acid) is a potent vasoconstrictor produced in vascular smooth muscle (VSM) cells. It depolarizes VSM by blocking the open-state probability of Ca2+-activated K+-channels. IC50 Value: Target: 20-Hydroxyeicosatetraenoic acid (20-HETE) is a cytochrome...
Purity: 95.0%
Clinical Data: No Development Reported
Size: 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

21-Hydroxypregnenolone

Cat. No.: HY-113020

Bioactivity: 21-Hydroxypregnenolone is an essential intermediate in corticosterone synthesis.
Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg



24, 25-Dihydroxy VD3

Cat. No.: HY-76915

Bioactivity: 24, 25-Dihydroxy VD3 is a compound which is closely related to 1,25-dihydroxyvitamin D3, the active form of vitamin D3, but like vitamin D3 itself and 25-hydroxyvitamin D3 is inactive as a hormone both in vitro and in vivo.
Purity: 98.20%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

25,26-Dihydroxyvitamin D3

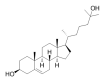
(25,26-Dihydroxycholecalciferol) Cat. No.: HY-15830

Bioactivity: 25,26-Dihydroxyvitamin D3(25,26-dihydroxycholecalciferol) is a metabolite of vitamin D3 with intestinal calcium transport activity. IC50 value: Target: VD metabolite The biological activity of synthetic 24,25 and 25,26 diOHD3 was studied in vitamin D-deficient rats. The purpose of this study was to...
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

25-Hydroxycholesterol

Cat. No.: HY-113134

Bioactivity: 25-Hydroxycholesterol is a metabolite of cholesterol that is produced and secreted by macrophages in response to Toll-like receptor (TLR) activation. 25-hydroxycholesterol is a potent (EC_{50}≈65 nM) and selective suppressor of IgA production by B cells.
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



27-Hydroxycholesterol

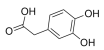
Cat. No.: HY-N2371

Bioactivity: 27-Hydroxycholesterol is a selective **estrogen receptor** modulator and an agonist of the **liver X receptor**.
Purity: 99.38%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg

3,4-Dihydroxybenzeneacetic acid

Cat. No.: HY-W001080

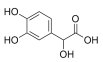
Bioactivity: 3,4-Dihydroxybenzeneacetic acid is the main neuronal metabolite of dopamine.
Purity: 99.74%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 g



3,4-Dihydroxymandelic acid

Cat. No.: HY-113474

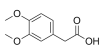
Bioactivity: 3,4-Dihydroxymandelic acid is a metabolite of norepinephrine.
Purity: >98%
Clinical Data: No Development Reported
Size: 25 mg



3,4-Dimethoxyphenylacetic acid

Cat. No.: HY-Y0771

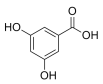
Bioactivity: 3,4-Dimethoxyphenylacetic acid is a building block in the chemical synthesis.
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 g



3,5-Dihydroxybenzoic acid

Cat. No.: HY-W015560

Bioactivity: 3,5-Dihydroxybenzoic acid a potential biomarker for the consumption of many food products, including beer, nuts, peanut, and pulses.
Purity: 99.74%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 g

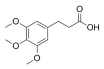


3-(3,4,5-Trimethoxyphenyl)propanoic acid

Cat. No.: HY-W022390

Bioactivity: 3-(3,4,5-Trimethoxyphenyl)propanoic acid is found in herbs and spices. 3-(3,4,5-Trimethoxyphenyl)propanoic acid is a constituent of Piper longum (long pepper) and Piper retrofractum (Javanese long pepper).

Purity: >98%
Clinical Data:
Size: 100 mg

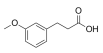


3-(3-Methoxyphenyl)propionic acid

Cat. No.: HY-W016482

Bioactivity: 3-(3-Methoxyphenyl)propionic acid is an organic acid, naturally occurring human metabolite and excreted in human urine.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

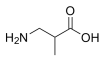


3-Amino-2-methylpropanoic acid

Cat. No.: HY-W012974

Bioactivity: 3-Amino-2-methylpropanoic acid could induce browning of white fat and hepatic β-oxidation and is inversely correlated with cardiometabolic risk factors.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

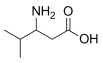


3-Amino-4-methylpentanoic acid

Cat. No.: HY-W012708

Bioactivity: 3-Amino-4-methylpentanoic acid is a beta amino acid and positional isomer of L-leucine which is naturally produced in humans via the metabolism of L-leucine by the enzyme leucine 2,3-aminomutase.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

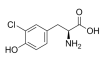


3-Chloro-L-tyrosine

Cat. No.: HY-W041171

Bioactivity: 3-Chloro-L-tyrosine is a specific marker of myeloperoxidase-catalyzed oxidation, and is markedly elevated in low density lipoprotein isolated from human atherosclerotic intima.

Purity: 97.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 250 mg

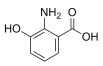


3-Hydroxyanthranilic acid

Cat. No.: HY-W001171

Bioactivity: 3-Hydroxyanthranilic acid is a tryptophan metabolite in the kynurenine pathway.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

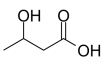


3-Hydroxybutyric acid

Cat. No.: HY-113378

Bioactivity: 3-Hydroxybutyric acid is a butyric acid substituted with a hydroxyl group in the beta or 3 position.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

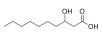


3-Hydroxycapric acid

Cat. No.: HY-113057

Bioactivity: 3-Hydroxycapric acid is an inhibitor for mitotic progression.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

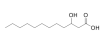


3-Hydroxydodecanoic acid

Cat. No.: HY-113107

Bioactivity: 3-Hydroxydodecanoic acid is a medium-chain fatty acid associated with fatty acid metabolic disorders.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

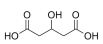


3-Hydroxyglutaric acid

Cat. No.: HY-113411

Bioactivity: 3-Hydroxyglutaric acid is a glutaric acid derivative.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

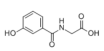


3-Hydroxyhippuric acid

Cat. No.: HY-113085

Bioactivity: 3-Hydroxyhippuric acid is an acyl glycine. Acyl glycines are normally minor metabolites of fatty acids.

Purity: 99.93%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

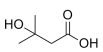


3-Hydroxyisovaleric acid

Cat. No.: HY-113409

Bioactivity: 3-Hydroxyisovaleric acid is a normal human metabolite excreted in the urine.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

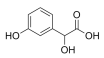


3-Hydroxymandelic Acid

Cat. No.: HY-W015326

Bioactivity: 3-Hydroxymandelic Acid, a metabolite of **Phenylephrine**, Phenylephrine is a **α-receptor** agonist.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



3-Hydroxypicolinic acid (Picolinic acid, 3-hydroxy-(6CI,7CI,8CI); 2-Carboxy-3-hydroxypyridine)

Cat. No.: HY-Y0030

Bioactivity: 3-Hydroxypicolinic acid is a picolinic acid derivative, and belongs to the pyridine family.

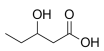
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

3-Hydroxyvaleric acid

Cat. No.: HY-113004

Bioactivity: 3-Hydroxyvaleric acid is a 5-carbon ketone body. 3-Hydroxyvaleric acid is anaplerotic, meaning it can refill the pool of TCA cycle intermediates.

Purity: >98%
Clinical Data:
Size: 5 mg, 10 mg, 25 mg



3-Indoleacetic acid (Indole-3-acetic acid; 3-IAA)

Cat. No.: HY-18569

Bioactivity: Indole-3-acetic acid (3-Indoleacetic acid; IAA) is the most common natural plant growth hormone of the auxin class. It can be added to cell culture medium to induce plant cell elongation and division.

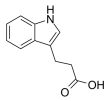
Purity: 99.74%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

3-Indolepropionic acid

Cat. No.: HY-W015229

Bioactivity: 3-Indolepropionic acid is shown to be a powerful antioxidant and has potential in the treatment for Alzheimer's disease.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

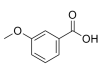


3-Methoxybenzoic acid (3-Anisic acid; 3-Methoxybenzoic acid; NSC 27014; NSC 9264; m-Methoxybenzoic acid)

Cat. No.: HY-Y0760

Bioactivity: 3-Methoxybenzoic acid can be used in the synthesis of 3-methoxybenzoates of europium (III) and gadolinium (III).

Purity: 97.73%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

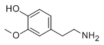


3-Methoxytyramine (3-O-methyl Dopamine)

Cat. No.: HY-103638A

Bioactivity: 3-Methoxytyramine, a well known extracellular metabolite of 3-hydroxytyramine/dopamine, is a neuromodulator.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 250 mg, 500 mg

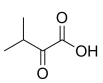


3-Methyl-2-oxobutanoic acid

Cat. No.: HY-W006057

Bioactivity: 3-Methyl-2-oxobutanoic acid is a precursor of pantothenic acid in Escherichia coli.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

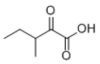


3-Methyl-2-oxovaleric acid

Cat. No.: HY-113063

Bioactivity: 3-Methyl-2-oxovaleric acid is a neurotoxin, an acidogen, and a metabotoxin, and also an abnormal metabolite that arises from the incomplete breakdown of branched-chain amino acids.

Purity: 99.81%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

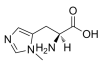


3-Methyl-L-histidine

Cat. No.: HY-W017007

Bioactivity: 3-Methyl-L-histidine is a biomarker for meat consumption, especially chicken. It is also a biomarker for the consumption of soy products.

Purity: 99.85%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



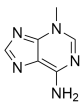
3-Methyladenine

(3-MA)

Cat. No.: HY-19312

Bioactivity: 3-Methyladenine is a **PI3K** inhibitor. 3-Methyladenine is a widely used inhibitor of **autophagy** via its inhibitory effect on class Ⅲ PI3K.

Purity: 99.84%
Clinical Data: No Development Reported
Size: 50 mg, 100 mg, 200 mg, 500 mg

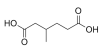


3-Methyladipic acid

Cat. No.: HY-113277

Bioactivity: 3-Methyladipic acid is the final metabolite in the ω-oxidation pathway.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

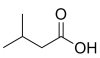


3-Methylbutanoic acid

Cat. No.: HY-W012980

Bioactivity: 3-Methylbutanoic acid is a natural fatty acid and known to effect on neonatal death and possible Jamaican vomiting sickness in human.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

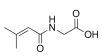


3-Methylcrotonylglycine

Cat. No.: HY-113232

Bioactivity: 3-Methylcrotonylglycine is an acyl glycine, a normal amino acid metabolite found in urine.

Purity: >98%
Clinical Data:
Size: 10 mg

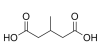


3-Methylglutaric acid

Cat. No.: HY-113410

Bioactivity: 3-Methylglutaric acid is a leucine metabolite.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

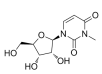


3-Methyluridine

Cat. No.: HY-113138

Bioactivity: 3-Methyluridine is a modified nucleoside of cellular RNA.

Purity: 99.53%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



3-Methylxanthine

Cat. No.: HY-50723

Bioactivity: 3-Methylxanthine, a xanthine derivative, is a cyclic guanosine monophosphate **(GMP)** inhibitor, with an IC_{50} of 920 μM on guinea-pig isolated trachealis muscle.

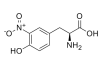
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

3-Nitro-L-tyrosine

Cat. No.: HY-113248

Bioactivity: 3-Nitro-L-tyrosine is a biomarker of nitrogen free radical species modified proteins in systemic autoimmunogenic conditions.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

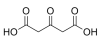


3-Oxopentanedioic acid

Cat. No.: HY-W007752

Bioactivity: 3-Oxopentanedioic acid is a simple dicarboxylic acid, which is well-known to be used in the tropinone synthesis.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

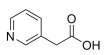


3-Pyridineacetic acid

Cat. No.: HY-W015806

Bioactivity: 3-Pyridineacetic acid is a higher homologue of nicotinic acid, a breakdown product of nicotine (and other tobacco alkaloids).

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

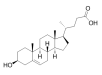


3b-Hydroxy-5-cholenoic acid

Cat. No.: HY-113315

Bioactivity: 3b-Hydroxy-5-cholenoic acid is a monohydroxy bile acid of endogenous origin and could be found in children with the syndrome of hepatic ductular hypoplasia.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

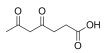


4,6-Dioxoheptanoic acid

Cat. No.: HY-W010184

Bioactivity: 4,6-Dioxoheptanoic acid is a potent inhibitor of heme biosynthesis.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

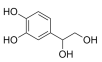


4-(1,2-Dihydroxyethyl)benzene-1,2-diol

Cat. No.: HY-W010066

Bioactivity: 4-(1,2-Dihydroxyethyl)benzene-1,2-diol, a normal norepinephrine metabolite, is found to be associated with Menkes syndrome.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg



4-Acetamidobutanoic acid

(N-acetyl GABA)

Cat. No.: HY-101411

Bioactivity: 4-Acetamidobutanoic acid (N-acetyl GABA) is a γ-aminobutyric acid (**GABA**) derivative.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 200 mg

4-Aminobenzoic acid

(PABA; Vitamin Bx; Vitamin H1)

Cat. No.: HY-B1008

Bioactivity: 4-Aminobenzoic acid is an intermediate in the synthesis of folate by bacteria, plants, and fungi.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 g

4-Aminohippuric acid

(p-Aminohippuric acid)

Cat. No.: HY-B1306

Bioactivity: 4-Aminohippuric acid is a diagnostic agent, useful in medical tests involving the kidney, used in the measurement of renal plasma flow.

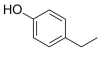
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

4-Ethylphenol

Cat. No.: HY-W012836

Bioactivity: 4-Ethylphenol is a volatile phenolic compound associated with off-odour in wine.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

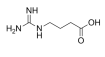


4-Guanidinobutanoic acid

Cat. No.: HY-113286

Bioactivity: 4-Guanidinobutanoic acid is a normal metabolite present in low concentrations.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

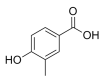


4-Hydroxy-3-methylbenzoic acid

Cat. No.: HY-W002587

Bioactivity: 4-Hydroxy-3-methylbenzoic acid is a normal organic acid identified in urine specimens from a healthy population.

Purity: 98.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

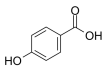


4-Hydroxybenzoic acid

Cat. No.: HY-Y0264

Bioactivity: 4-Hydroxybenzoic acid, a phenolic derivative of benzoic acid, could inhibit most gram-positive and some gram-negative bacteria, with an IC_{50} of 160 μg/mL.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

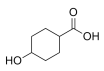


4-Hydroxycyclohexanecarboxylic acid

Cat. No.: HY-W015675

Bioactivity: 4-Hydroxycyclohexanecarboxylic acid belongs to the class of organic compounds known as cyclohexanols.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

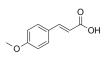


4-Methoxycinnamic acid

Cat. No.: HY-N1387

Bioactivity: 4-Methoxycinnamic acid is detected as natural phenylpropanoid in A. preissii.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 g

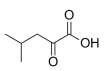


4-Methyl-2-oxopentanoic acid

Cat. No.: HY-W012722

Bioactivity: 4-Methyl-2-oxopentanoic acid, an abnormal metabolite, is both a neurotoxin and a metabotoxin.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

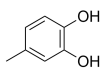


4-Methylcatechol

Cat. No.: HY-W012814

Bioactivity: 4-Methylcatechol, a metabolite of p-toluate, is a substrate as well as a suicide inhibitor of **Catechol 2,3-Dioxygenase**.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

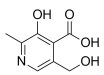


4-Pyridoxic acid

Cat. No.: HY-113493

Bioactivity: 4-Pyridoxic acid is a catabolic product of vitamin B6 which is excreted in the urine.

Purity: >98%
Clinical Data: No Development Reported
Size: 25 mg

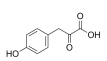


4-Hydroxyphenylpyruvic acid

Cat. No.: HY-W010040

Bioactivity: 4-Hydroxyphenylpyruvic acid is an intermediate in the metabolism of the amino acid phenylalanine.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

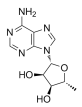


5'-Deoxyadenosine

Cat. No.: HY-113291

Bioactivity: 5'-Deoxyadenosine is an oxidized nucleoside found in the urine of normal subjects.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

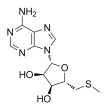


5'-Methylthioadenosine (5'-(Methylthio)-5'-deoxyadenosine; 5'-Deoxy-5'-(methylthio)adenosine; ...)

Cat. No.: HY-16938

Bioactivity: 5'-Methylthioadenosine is produced from S-adenosylmethionine and behaves as a powful inhibitory product.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 25 mg

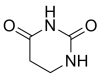


5,6-Dihydrouracil

Cat. No.: HY-W012926

Bioactivity: 5,6-Dihydrouracil is an intermediate breakdown product of uracil.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

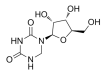


5,6-Dihydrouridine

Cat. No.: HY-113047

Bioactivity: 5,6-Dihydrouridine is a modified base found in conserved positions in the D-loop of tRNA in Bacteria, Eukaryota, and some Archaea.

Purity: 99.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



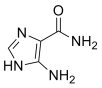
5-Amino-3H-imidazole-4-Carboxamide

(5-Aminoimidazole-4-carboxamide; AICA)

Cat. No.: HY-41461

Bioactivity: 5-Amino-3H-imidazole-4-Carboxamide (AICA) is an important precursor for the synthesis of purines in general and of the nucleobases adenine and guanine in particular.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

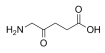


5-Amino-4-oxopentanoic acid

Cat. No.: HY-W000450

Bioactivity: 5-Amino-4-oxopentanoic acid is a non-protein amino acid that plays a rate-limiting role in heme biosynthesis.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

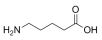


5-Aminovaleric acid

Cat. No.: HY-W015878

Bioactivity: 5-Aminovaleric acid is believed to act as a methylene homologue of gamma-aminobutyric acid (GABA) and functions as a weak **GABA** agonist.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

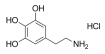


5-Hydroxydopamine hydrochloride

Cat. No.: HY-113523

Bioactivity: 5-Hydroxydopamine is a naturally occurring amine in human urine.

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

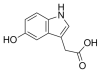


5-Hydroxyindole-3-acetic acid

Cat. No.: HY-W008253

Bioactivity: 5-Hydroxyindole-3-acetic acid is the main metabolite of serotonin or metanephrines, which can be used as a biomarker of neuroendocrine tumors.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

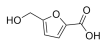


5-Hydroxymethyl-2-furancarboxylic acid

Cat. No.: HY-W005241

Bioactivity: 5-Hydroxymethyl-2-furancarboxylic acid is the main metabolite of 5-hydroxymethyl-2-furfural (HMF) in the body and eliminated renally.

Purity: 97.69%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

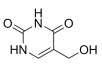


5-Hydroxymethyluracil

Cat. No.: HY-W004924

Bioactivity: 5-Hydroxymethyluracil is a product of oxidative DNA damage. 5-Hydroxymethyluracil can be used as a potential epigenetic mark enhancing or inhibiting transcription with bacterial RNA polymerase.

Purity: 99.60%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

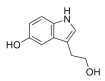


5-Hydroxytryptophol

Cat. No.: HY-W041019

Bioactivity: 5-Hydroxytryptophol is a mammalian serotonin metabolite, acting as a marker of acute alcohol consumption.

Purity: >98%
Clinical Data:
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

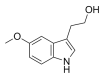


5-Methoxytryptophol

Cat. No.: HY-113440

Bioactivity: 5-Methoxytryptophol is a natural indole present in the pineal gland.

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

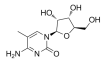


5-Methylcytidine

Cat. No.: HY-113135

Bioactivity: 5-Methylcytidine is a pyrimidine nucleoside detected in multiple biofluids.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

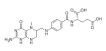


5-Methyltetrahydrofolic acid

Cat. No.: HY-113046

Bioactivity: 5-Methyltetrahydrofolic acid is a biologically active form of folic acid. 5-Methyltetrahydrofolic acid is a methylated derivate of tetrahydrofolate. 5-Methyltetrahydrofolic acid is the predominant natural dietary folate and the principal form of folate in plasma and cerebrospinal fluid [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

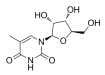


5-Methyluridine

Cat. No.: HY-W009444

Bioactivity: 5-Methyluridine is a is an endogenous methylated nucleoside found in human fluids.

Purity: 98.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

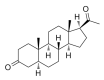


5a-Pregnane-3,20-dione

Cat. No.: HY-W006492

Bioactivity: 5a-Pregnane-3,20-dione is the endogenous progesterone metabolite.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



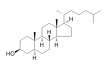
5α-Cholestan-3β-ol

(5α-Cholestanol; Dihydrocholesterol; NSC 18188)

Cat. No.: HY-107819

Bioactivity: 5α-Cholestan-3β-ol is a derivitized steroid compound, which is isolated from the testes of White Carneau pigeons.

Purity: >98%
Clinical Data:
Size: 100 mg



6-Biopterin

(L-Biopterin)

Cat. No.: HY-102015

Bioactivity: 6-Biopterin (L-Biopterin), a pterin derivative, is a **NO synthase** cofactor.

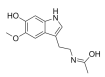
Purity: 98.02%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

6-Hydroxymelatonin

Cat. No.: HY-W011956

Bioactivity: 6-Hydroxymelatonin is a primary metabolic of **Melatonin**, which is metabolized by cytochrome P450 (CYP) 1A2.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

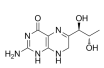


7,8-Dihydro-L-biopterin

Cat. No.: HY-W008646

Bioactivity: 7,8-Dihydro-L-biopterin is an oxidation product of tetrahydrobiopterin.

Purity: 98.29%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

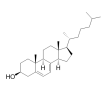


7-Dehydrocholesterol

Cat. No.: HY-113279

Bioactivity: 7-Dehydrocholesterol is biosynthetic precursor of cholesterol and vitamin D_3.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

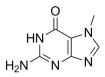


7-Methylguanine

Cat. No.: HY-113352

Bioactivity: 7-Methylguanine is a metabolite of DNA methylation. It can be generated by methylating agents, and used as a probe of protein–DNA interactions and a key component of DNA sequencing method.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

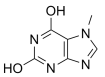


7-Methylxanthine

Cat. No.: HY-W017163

Bioactivity: 7-Methylxanthine, a methyl derivative of xanthine, is one of the purine components in urinary calculi.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

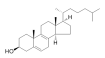


8-Dehydrocholesterol

Cat. No.: HY-113435

Bioactivity: 8-Dehydrocholesterol elevated concentration is one of the diagnostic biochemical hallmarks of classical Smith-Lemli-Opitz syndrome (SLOS).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

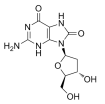


8-Hydroxy-2'-deoxyguanosine

Cat. No.: HY-W011540

Bioactivity: 8-Hydroxy-2'-deoxyguanosine is a critical biomarker of oxidative stress and carcinogenesis.

Purity: 95.62%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

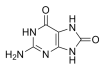


8-Hydroxyguanine

Cat. No.: HY-113338

Bioactivity: 8-Hydroxyguanine is a major pre-mutagenic lesion generated from reactive oxygen species. It causes G-T and A-C substitutions.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

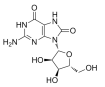


8-Hydroxyguanosine

Cat. No.: HY-113262

Bioactivity: 8-Hydroxyguanosine is a systematic marker of oxidative stress and a marker of hydroxyl radical damage to RNA.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

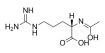


Ac-Arg-OH

Cat. No.: HY-W014130

Bioactivity: Ac-Arg-OH is one of the guanidino compounds found elevated in the serum of an hemodialyzed renal insufficient (uremic) pediatric population.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

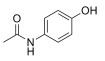


Acetaminophen (Paracetamol; 4'-Hydroxyacetanilide; 4-Acetamidophenol; APAP)

Cat. No.: HY-66005

Bioactivity: Acetaminophen (paracetamol) is a selective cyclooxygenase-2 (**COX-2**) inhibitor with an IC_{50} of 25.8 μM; is a widely used antipyretic and analgesic drug.

Purity: 99.69%
Clinical Data: Launched
Size: 5 g, 10 g



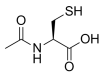
Acetylcysteine

(N-Acetyl-L-cysteine; LNAC; NAC)

Cat. No.: HY-B0215

Bioactivity: Acetylcysteine is a mucolytic agent which reduces the thickness of the mucus. Acetylcysteine is a **ROS** inhibitor [1].

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g, 10 g



Adenine

(6-Aminopurine; Vitamin B4)

Cat. No.: HY-B0152

Bioactivity: Adenine is a purine derivative and a nucleobase with a variety of roles in biochemistry. Target: Nucleoside antimetabolite/analog Adenine is a nucleobase with a variety of roles in biochemistry including cellular respiration, in the form of both the energy-rich adenosine triphosphate (ATP)...

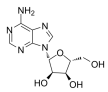
Purity: 98.76%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

Adenosine

(Adenine riboside; D-Adenosine) Cat. No.: HY-B0228

Bioactivity: Adenosine is a nucleoside composed of a molecule of adenine attached to a ribose sugar molecule (ribofuranose) moiety via a β-N9-glycosidic bond. Target: Nucleoside antimetabolite/analog Adenosine plays an important role in biochemical processes, such as energy transfer — as adenosine...

Purity: 99.84%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

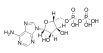


Adenosine 5'-diphosphate

Cat. No.: HY-W010918

Bioactivity: Adenosine 5'-diphosphate is a nucleoside diphosphate. Adenosine 5'-diphosphate is the product of ATP dephosphorylation by ATPases.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg

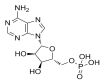


Adenosine monophosphate

(AMP) Cat. No.: HY-A0181

Bioactivity: Adenosine monophosphate is a key cellular metabolite regulating energy homeostasis and signal transduction.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

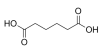


Adipic acid

Cat. No.: HY-W017522

Bioactivity: Adipic acid is found to be associated with HMG-CoA lyase deficiency, carnitine-acylcarnitine translocase deficiency, malonyl-Coa decarboxylase deficiency, and medium Chain acyl-CoA dehydrogenase deficiency, which are inborn errors of metabolism.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

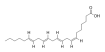


Adrenic Acid

(cis-7,10,13,16-Docosatetraenoic acid) Cat. No.: HY-W013215

Bioactivity: Adrenic Acid is an inflammation enhancer in non-alcoholic fatty liver disease.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

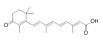


all-trans-4-Oxoretinoic acid

(all-trans 4-Keto Retinoic Acid) Cat. No.: HY-107494A

Bioactivity: all-trans-4-Oxoretinoic acid, an active metabolite of vitamin A, induces gene transcription via binding to nuclear retinoic acid receptors (RARs).

Purity: 94.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg

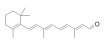


All-trans-retinal

Cat. No.: HY-W004500

Bioactivity: All-trans-retinal is a one of the major vitamin A metabolites in the retina. In physiological conditions, all-trans-RAL is regenerated to the visual chromophore, 11-cis-retinal.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



Allantoin

(5-Ureidohydantoin) Cat. No.: HY-N0543

Bioactivity: Allantoin is a skin conditioning agent that promotes healthy skin, stimulates new and healthy tissue growth.

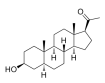
Purity: 98.36%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg

Alloepipregnanolone

Cat. No.: HY-113307

Bioactivity: Alloepipregnanolone, a pregnane with anesthetic, hypnotic, and sedative properties, interferes with the development of rapid tolerance to the anxiolytic effect of ethanol.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Allopregnanolone

(3α,5α-THP; SAGE-547; Brexanolone) Cat. No.: HY-101107

Bioactivity: Allopregnanolone is a progesterone metabolite. Allopregnanolone is an allosteric modulator of the **GABA** receptor. Used to treat postpartum depression.

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

Allopurinol riboside

Cat. No.: HY-101397

Bioactivity: Allopurinol riboside, a metabolite of allopurinol, shows potent activities against parasites.

Purity: 99.04%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

Alpha-Estradiol

(Alfatradiol; Epiestradiol; Epiestrol)

Cat. No.: HY-B0141A

Bioactivity: Alpha-Estradiol is a weak estrogen and a **5α-reductase** inhibitor which is used as a topical medication in the treatment of androgenic alopecia.

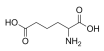
Purity: 99.46%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Aminoadipic acid

Cat. No.: HY-113328

Bioactivity: Aminoadipic acid is an intermediate in the metabolism of lysine and saccharopine.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 1 g

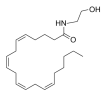


Anandamide

Cat. No.: HY-10863

Bioactivity: Anandamide is an immune modulator in the central nervous system acts via not only **cannabinoid receptors** (**CB1** and **CB2**) but also other targets (e.g., **GPR18**/ **GPR55**).

Purity: 99.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg



Androsterone

(5α-Androstan-3α-ol-17-one)

Cat. No.: HY-N0933

Bioactivity: Androsterone is a metabolic product of testosterone and can activate **Farnesoid X Receptor** (**FXR**).

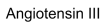
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 250 mg

Angiotensin III

Cat. No.: HY-113035

Bioactivity: Angiotensin III is an **angiotensin 1 (AT1)** and **AT2** receptor agonist.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



Angiotensin III TFA

Cat. No.: HY-113035A

Bioactivity: Angiotensin III (TFA) is an **angiotensin 1 (AT1)** and **AT2** receptor agonist.

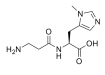
Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 25 mg

Anserine

Cat. No.: HY-113354

Bioactivity: Anserine is a dipeptide found in skeletal muscle of vertebrates.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

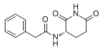


Antineoplaston A10

Cat. No.: HY-128553

Bioactivity: Antineoplaston A10, a naturally occurring substance in human body, is a **Ras** inhibitor potentially for the treatment of glioma, lymphoma, astrocytoma and breast cancer [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg



Arachidonic acid

(Immunocytophyt; Immunocytophyte; Vevodar)

Cat. No.: HY-109590

Bioactivity: Arachidonic acid is an essential fatty acid and a major constituent of biomembranes.

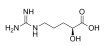
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

Argininic acid

Cat. No.: HY-113079

Bioactivity: Argininic acid is an α-amino acid that is used in the biosynthesis of proteins.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

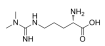


Asymmetric dimethylarginine

Cat. No.: HY-113216

Bioactivity: Asymmetric dimethylarginine is an endogenous inhibitor of **nitric oxide synthase (NOS)**, and functions as a marker of endothelial dysfunction in a number of pathological states.

Purity: 98.0%
Clinical Data:
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 25 mg



ATP

(Adenosine 5'-triphosphate)

Cat. No.: HY-B2176

Bioactivity: ATP is a central component of energy storage and metabolism in vivo, provides the metabolic energy to drive metabolic pumps and serves as a coenzyme in cells.

Purity: 99.18%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg, 500 mg

Azelaic acid

(Nonanedioic acid)

Cat. No.: HY-B0704

Bioactivity: Azelaic acid is an organic compound produced by the ozonolysis of oleic acid; component of a number of hair and skin conditioners.

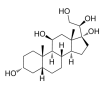
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

Beta-Cortol

Cat. No.: HY-113418

Bioactivity: Beta-Cortol is an androgen metabolite present in adults.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

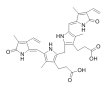


Bilirubin

Cat. No.: HY-N0323

Bioactivity: Bilirubin is a yellow breakdown product of heme catabolism.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

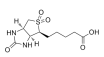


Biotin sulfone

Cat. No.: HY-113268

Bioactivity: Biotin sulfone is first isolated as a natural metabolite of biotin.

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg



Bovinic acid

Cat. No.: HY-113162

Bioactivity: Bovinic acid is a conjugated linoleic acid with anticarcinogenic and anti-atherogenic activities.

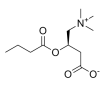
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

Butyrylcarnitine

Cat. No.: HY-113168

Bioactivity: Butyrylcarnitine is a metabolite in plasma, acts as a biomarker to improve the diagnosis and prognosis of heart failure, and is indicative of anomalous lipid and energy metabolism.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



Caffeic acid

Cat. No.: HY-N0172

Bioactivity: Caffeic acid is an inhibitor of both **TRPV1** ion channel and **5-Lipoxygenase** (**5-LO**).

Purity: 98.80%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 100 mg, 5 g

Calcifediol

(25-hydroxy Vitamin D3) Cat. No.: HY-32351

Bioactivity: Calcifediol is a major circulating metabolite of vitamin D3, acting as a competitive inhibitor with an apparent K_i of 3.9 μM, suppresses PTH secretion and mRNA (ED_{50}=2 nM).

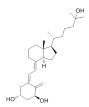
Purity: 98.93%
Clinical Data: Launched
Size: 5 mg, 100 mg

Calcitriol

(1,25-Dihydroxyvitamin D3) Cat. No.: HY-10002

Bioactivity: Calcitriol is the most active metabolite of vitamin D and also a **vitamin D receptor** (**VDR**) agonist.

Purity: 99.81%
Clinical Data: Launched
Size: 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

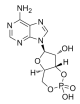


cAMP (Adenosine 3',5'-cyclophosphate; Cyclic 3',5'-monophosphate adenosine; Cyclic AMP)

Cat. No.: HY-B1511

Bioactivity: cAMP is a mitogenic messenger and promotes the G_1 to S phase transition in the cell cycle.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 500 mg, 1 g



Chenodeoxycholic Acid

(CDCA) Cat. No.: HY-76847

Bioactivity: Chenodeoxycholic Acid is a hydrophobic primary bile acid that activates nuclear receptors (**FXR**) involved in cholesterol metabolism.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Cholecalciferol

(Vitamin D3; Colecalciferol) Cat. No.: HY-15398

Bioactivity: Cholecalciferol(Vitamin D3) is a naturally occuring form of vitamin D; Reported that upon metabolic activation, Cholecalciferol induces cell differentiation and prevents proliferation of cancer cells. IC50 value: Target: Vitamin D acts through a receptor that is a member of the...

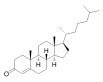
Purity: 98.0%
Clinical Data: Launched
Size: 100 mg, 1 g, 5 g

Cholestenone

Cat. No.: HY-113365

Bioactivity: Cholestenone is the intermediate oxidation product of cholesterol.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Cholesterol

Cat. No.: HY-N0322

Bioactivity: Cholesterol is the major sterol in mammals, and its importance in fundamental cellular processes is becoming more appreciated. IC50 value: Target: In vitro: GT1-7 hypothalamic cells subjected to cholesterol depletion in vitro produced 20-31% reductions in cellular cholesterol content, similar to...

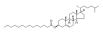
Purity: 98.0%
Clinical Data: Phase 4
Size: 500 mg

Cholesterol myristate

(Cholesteryl myristate; Cholesteryl tetradecanoate) Cat. No.: HY-N2338

Bioactivity: Cholesterol myristate is a natural steroid present in traditional Chinese medicine. Cholesterol myristate binds to several ion channels such as the **nicotinic acetylcholine receptor**, **GABAA receptor**, and the inward-rectifier **potassium ion channel**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 250 mg



Cholesteryl behenate

(Cholesteryl docosanoate; Cholesterol behenate) Cat. No.: HY-N2339

Bioactivity: Cholesteryl behenate is a standard in electrospray ionization tandem mass spectrometry for the analysis of cholesterol and cholesteryl esters.

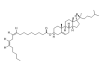
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

Cholesteryl linoleate

Cat. No.: HY-W010697

Bioactivity: Cholesteryl linoleate is shown to be the major cholesteryl ester contained in LDL and atherosclerotic lesions.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Cholesteryl oleate

Cat. No.: HY-113217

Bioactivity: Cholesteryl oleate is a cholesteryl ester.

Purity: 98.0%
Clinical Data:
Size: 1 mg, 5 mg

Cholesteryl palmitate

Cat. No.: HY-W010708

Bioactivity: Cholesteryl palmitate is a useful prognostic biomarker for chronic interstitial pneumonia (CIP).

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

Cholic acid

Cat. No.: HY-N0324

Bioactivity: Cholic acid is a major primary bile acid produced in the liver and usually conjugated with glycine or taurine. It facilitates fat absorption and cholesterol excretion.

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 100 mg, 1 g

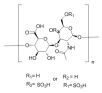
Chondroitin sulfate

(Chondroitin polysulfate)

Cat. No.: HY-B2162

Bioactivity: Chondroitin sulfate, one of five classes of glycosaminoglycans, has been widely used in the treatment of osteoarthritis. Chondroitin sulfate reduces inflammation mediators and the apoptotic process and is able to reduce protein production of inflammatory cytokines, **iNOS** and **MMPs**

Purity: 95.0%
Clinical Data: Launched
Size: 250 mg, 1 g



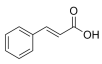
Cinnamic acid

(3-Phenylacrylic acid; β-Phenylacrylic acid)

Cat. No.: HY-N0610A

Bioactivity: Cinnamic acid has potential use in cancer intervention, with **IC_{50}s** of 1-4.5 mM in glioblastoma, melanoma, prostate and lung carcinoma cells.

Purity: 99.51%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

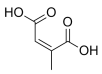


Citraconic acid

Cat. No.: HY-113298

Bioactivity: Citraconic acid belongs to the class of organic compounds known as methyl-branched fatty acids.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



Citric acid

Cat. No.: HY-N1428

Bioactivity: Citric acid is a weak organic tricarboxylic acid found in citrus fruits. Citric acid is a natural preservative and food tartness enhancer.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 g

Coenzyme Q10

(Ubiquinone-10; CoQ10)

Cat. No.: HY-N0111

Bioactivity: Coenzyme Q10 is an essential cofactor of the electron transport chain and a potent antioxidant agent.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 100 mg, 200 mg, 500 mg, 1 g, 5 g

Coenzyme Q9

(Ubiquinone Q9; CoQ9; Ubiquinone 9)

Cat. No.: HY-101415

Bioactivity: Coenzyme Q_9, a nine isoprenyl group-containing member of the ubiquinone family, is a normal constituent of human plasma.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

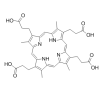
Coproporphyrin III

(Zincphyrin)

Cat. No.: HY-101398

Bioactivity: Coproporphyrin III is a porphyrin derivative.

Purity: 99.50%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg

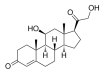


Corticosterone (17-Deoxycortisol; 11β,21-Dihydroxyprogesterone; Kendall's compound B)

Cat. No.: HY-B1618

Bioactivity: Corticosterone is an adrenocortical steroid that has modest but significant activities as a mineralocorticoid and a glucocorticoid.

Purity: 99.70%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 50 mg

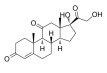


Cortisone (17-Hydroxy-11-dehydrocorticosterone; Kendall's compound E)

Cat. No.: HY-17461

Bioactivity: Cortisone is a 21-carbon steroid hormone. Cortisone is one of the main hormones released by the adrenal gland in response to stress. Target In chemical structure, it is a corticosteroid closely related to cortisol. It is used to treat a variety of ailments and can be administered intravenously,...

Purity: 99.90%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg



Cotinine ((-)-Cotinine; (S)-Cotinine; NIH-10498)

Cat. No.: HY-B1178

Bioactivity: Cotinine is an alkaloid found in tobacco and is also the predominant metabolite of nicotine, used as a biomarker for exposure to tobacco smoke.

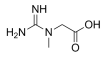
Purity: 99.42%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

Creatine

Cat. No.: HY-W010388

Bioactivity: Creatine, an endogenous amino acid derivative, plays an important role in cellular energy, especially in muscle and brain.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 g



Creatinine (NSC13123)

Cat. No.: HY-B0504

Bioactivity: Creatinine(NSC13123) is a break-down product of creatine phosphate in muscle, and is usually produced at a fairly constant rate by the body. Target: Others Creatinine is a breakdown product of creatine phosphate in muscle, and is usually produced at a fairly constant rate by the body...

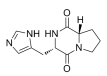
Purity: 99.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in Water, 1 g, 5 g

Cyclo(his-pro) (Cyclo(histidyl-proline); Histidylproline diketopiperazine)

Cat. No.: HY-101402

Bioactivity: Cyclo(his-pro) is a cyclic dipeptide structurally related to tyreotropin-releasing hormone. Cyclo(His-Pro) could inhibit **NF-κB** nuclear accumulation.

Purity: 99.41%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 25 mg, 50 mg, 100 mg



Cytidine (Cytosine β-D-riboside; Cytosine-1-β-D-ribofuranoside)

Cat. No.: HY-B0158

Bioactivity: Cytidine is a nucleoside molecule that is formed when cytosine is attached to a ribose ring, cytidine is a component of RNA. Target: Nucleoside antimetabolite/analog Cytidine is a nucleoside molecule that is formed when cytosine is attached to a ribose ring (also known as a ribofuranose) via a...

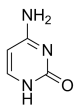
Purity: 98.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

Cytosine

Cat. No.: HY-I0626

Bioactivity: Cytosine is an organic compound that belongs to the class known as pyrimidones.

Purity: 99.52%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

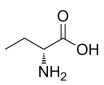


D(-)-2-Aminobutyric acid

Cat. No.: HY-Y0127

Bioactivity: D(-)-2-Aminobutyric acid is a substrate of D-amino acid oxidase.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

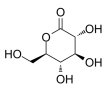


D-(+)-Glucono-1,5-lactone (Gluconic acid lactone)

Cat. No.: HY-I0301

Bioactivity: D-(+)-Glucono-1,5-lactone is a polyhydroxy (PHA) that is capable of metal chelating, moisturizing and antioxidant activity.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 g

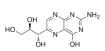


D-(+)-Neopterin

Cat. No.: HY-W040055

Bioactivity: D-(+)-Neopterin, a catabolic product of guanosine triphosphate **(GTM)**, serves as a marker of cellular immune system activation.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

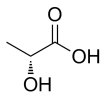


D-(-)-Lactic acid

((R)-2-Hydroxypropionic acid) Cat. No.: HY-111095

Bioactivity: D-(-)-Lactic acid is a normal intermediate in the fermentation (oxidation, metabolism) of sugar. D-(-)-Lactic acid is identified to be a competitive inhibitor of ProDH (proline dehydrogenase) in plants.

Purity: 80.0%
Clinical Data: No Development Reported
Size: 100 mg, 500 mg

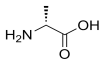


D-Alanine

((R)-Alanine; Ba 2776; D-α-Alanine) Cat. No.: HY-41700

Bioactivity: D-Alanine is a weak **GlyR** (inhibitory glycine receptor) and **PMBA** agonist, with an $\mathbf{EC_{50}}$ of 9 mM for GlyR.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

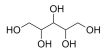


D-Arabitol

Cat. No.: HY-N3686

Bioactivity: Arabinitol, D- is a polyol and its accumulation may cause a neurotoxic effect in human.

Purity: 97.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 1 g



D-Erythro-dihydrosphingosine

Cat. No.: HY-W019838

Bioactivity: D-Erythro-dihydrosphingosin directly inhibits cytosolic phospholipase A $_2\alpha$ ($\mathbf{cPLA_2\alpha}$) activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

D-erythro-Sphingosine (Erythrosphingosine; erythro-C18-Sphingosine; trans-4-Sphingenine)

Cat. No.: HY-101047

Bioactivity: D-erythro-Sphingosine is a very potent activator of **p32-kinase** with an $\mathbf{EC_{50}}$ of 8 μM. D-erythro-Sphingosine inhibits protein kinase C (**PKC**).

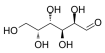
Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

D-Galactose

(D-(+)-Galactose) Cat. No.: HY-N0210

Bioactivity: D-Galactose is a natural aldohexose and C-4 epimer of glucose.

Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in Water, 500 mg, 5 g

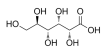


D-Gluconic acid

Cat. No.: HY-Y0569

Bioactivity: D-Gluconic acid is the carboxylic acid by the oxidation with antiseptic and chelating properties.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 g

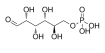


D-Glucose 6-Phosphate

Cat. No.: HY-112537

Bioactivity: D-Glucose 6-Phosphate is a glucose sugar phosphorylated at the hydroxy group on carbon 6.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 50 mg



D-Mannitol

(Mannitol; Mannite) Cat. No.: HY-N0378

Bioactivity: D-Mannitol is an osmotic diuretic agent and a weak renal vasodilator. Target: Others D(-)Mannitol is a sugar alcohol that can be used as an inert osmotic control substance. The uptake and phosphorylation of d-mannitol is catalyzed by the mannitol-specific phosphoenolpyruvate-dependent...

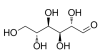
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 5 g, 10 g, 500 g

D-Mannose

Cat. No.: HY-N0379

Bioactivity: D-Mannose is a carbohydrate, which plays an important role in human metabolism, especially in the glycosylation of specific proteins.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

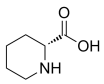


D-Pipecolinic acid

Cat. No.: HY-Y0181

Bioactivity: D-Pipecolinic acid is a normal human metabolite found in human biofluids.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 g



D-Sorbitol

(Glucitol; D-Glucitol; Sorbitol)

Cat. No.: HY-B0400

Bioactivity: D-Sorbitol is a sugar alcohol that is commonly used as a sugar substitute. Target: Others D-Sorbitol occurs naturally and is also produced synthetically from glucose. The food industry uses D-sorbitol as an additive in the form of a sweetener, humectant, emulsifier, thickener, or dietary supplement....

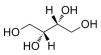
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 100 mg, 500 mg, 500 g

D-Threitol

Cat. No.: HY-W012846

Bioactivity: D-threitol serves as a antifreeze agent in the Alaskan beetle Upis ceramboides.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

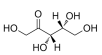


D-Xylulose

Cat. No.: HY-W010256

Bioactivity: D-xylulose is a precursor of the pentiol D-arabitol.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



Decanedioic acid

Cat. No.: HY-W014787

Bioactivity: Decanedioic acid, a normal urinary acid, is found to be associated with carnitine-acylcarnitine translocase deficiency and medium chain acyl-CoA dehydrogenase deficiency.

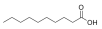
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

Decanoic acid

Cat. No.: HY-W015309

Bioactivity: Decanoic acid belongs to the class of organic compounds known as medium-chain fatty acids.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



Decyl aldehyde

Cat. No.: HY-W012570

Bioactivity: Decyl aldehyde is a simple ten-carbon aldehyde. Decyl aldehyde is a bacterial luciferase substrate.

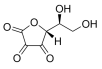
Purity: >98%
Clinical Data: No Development Reported
Size: 1 g

Dehydroascorbic acid

Cat. No.: HY-110281

Bioactivity: Dehydroascorbic acid, a blood-brain barrier transportable form of vitamin C, mediates potent cerebroprotection in experimental stroke.

Purity: >98%
Clinical Data:
Size: 50 mg

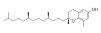


Delta-Tocopherol

Cat. No.: HY-113026

Bioactivity: Delta-Tocopherol is an isomer of Vitamin E.

Purity: >98%
Clinical Data:
Size: 50 mg

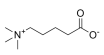


delta-Valerobetaine

Cat. No.: HY-114202

Bioactivity: delta-Valerobetaine is a precursor of trimethylamine N-oxide (TMAO).

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Deoxycholic acid

(Cholanoic Acid; Desoxycholic acid)

Cat. No.: HY-N0593

Bioactivity: Deoxycholic acid is specifically responsible for activating the G protein-coupled bile acid receptor **TGR5** that stimulates brown adipose tissue (BAT) thermogenic activity.

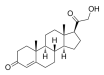
Purity: 99.13%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
100 mg, 500 mg

Deoxycorticosterone

Cat. No.: HY-113414

Bioactivity: Deoxycorticosterone is a steroid hormone produced by the adrenal gland that possesses mineralocorticoid activity and acts as an aldosterone precursor.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg



Deoxycytidine triphosphate

(dCTP)

Cat. No.: HY-101400

Bioactivity: Deoxycytidine triphosphate (dCTP), a nucleoside triphosphate, is a raw material in DNA synthesis. Deoxycytidine triphosphate has many applications, such as real-time PCR, cDNA synthesis, and DNA sequencing.

Purity: 98.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
10 mg, 50 mg

Desaminotyrosine

(3-(4-Hydroxyphenyl)propionic acid)

Cat. No.: HY-W015346

Bioactivity: Desaminotyrosine is a microbially associated metabolite protecting from **influenza** through augmentation of **type I interferon** signaling.

Purity: 99.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
100 mg

Dextrose

(D-Glucose; Grape sugar; Glucopyranose)

Cat. No.: HY-B0389

Bioactivity: Dextrose, a simple sugar (monosaccharide), is an important carbohydrate in biology. Target: Others Dextrose(D-glucose), a simple sugar (monosaccharide), is an important carbohydrate in biology.

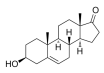
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
1 g, 5 g

DHEA (Prasterone; Dehydroisoandrosterone; Dehydroepiandrosterone)

Cat. No.: HY-14650

Bioactivity: DHEA (Prasterone) is one of the most abundant steroid hormones. DHEA (Prasterone) mediates its action via multiple signaling pathways involving specific membrane receptors and via transformation into androgen and estrogen derivatives (e.g., androgens, estrogens, 7α and 7β DHEA, and 7α and 7β...

Purity: 98.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO,
100 mg, 500 mg



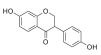
Dihydrodaidzein

((±)-Dihydrodaidzein)

Cat. No.: HY-N1461

Bioactivity: Dihydrodaidzein is one of the most prominent dietary phytoestrogens.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

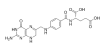


Dihydrofolic acid

Cat. No.: HY-113267

Bioactivity: Dihydrofolic acid is a folic acid derivative acted upon by dihydrofolate reductase to produce tetrahydrofolic acid.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



Dinoprost

(Prostaglandin F2a; PGF2α)

Cat. No.: HY-12956

Bioactivity: Dinoprost(Prostaglandin F2α) is a naturally occurring prostaglandin used in medicine to induce labor and as an abortifacient.

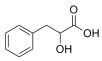
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

DL-3-Phenyllactic acid

Cat. No.: HY-W017162

Bioactivity: DL-3-Phenyllactic acid is a broad-spectrum antimicrobial compound.

Purity: 99.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

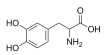


DL-Dopa

Cat. No.: HY-113404

Bioactivity: DL-Dopa is a beta-hydroxylated derivative of phenylalanine.

Purity: 97.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 1 g

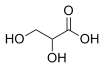


DL-Glyceric Acid

Cat. No.: HY-W018035

Bioactivity: DL-Glyceric Acid is a compound that is secreted excessively in the urine by patients suffering from D-glyceric aciduria.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 2 M * 5 mL in Water

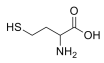


DL-Homocysteine

Cat. No.: HY-W040821

Bioactivity: DL-Homocysteine is a weak neurotoxin, and can affect the production of kynurenic acid in the brain.

Purity: >98%
Clinical Data:
Size: 100 mg

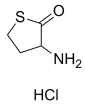


DL-Homocysteine thiolactone hydrochloride

Cat. No.: HY-101404

Bioactivity: DL-Homocysteine thiolactone hydrochloride is a cyclic amino acid derivative that exhibits root-growth inhibitory activity.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 1 g

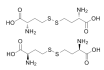


DL-Homocystine

Cat. No.: HY-W009390

Bioactivity: DL-Homocystine is the double-bonded form of homocysteine and homocysteine is recognized as an important substance in the pathogenesis and pathophysiology of schizophrenia.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 5 g



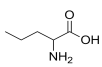
DL-Norvaline

(2-Aminopentanoic acid)

Cat. No.: HY-W010510

Bioactivity: DL-Norvaline, a derivative of **L-norvaline**, L-norvaline is a non-competitive inhibitor of arginase.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 g

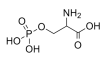


DL-O-Phosphoserine

Cat. No.: HY-15130

Bioactivity: DL-O-Phosphoserine, a normal metabolite in human biofluid, is an ester of serine and phosphoric acid.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Docosahexaenoic Acid

(DHA; Cervonic Acid)

Cat. No.: HY-B2167

Bioactivity: Docosahexaenoic Acid (DHA) is an omega-3 fatty acid abundantly present brain and retina. It can be obtained directly from fish oil and maternal milk.

Purity: 95.04%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg

Docosanoic acid

Cat. No.: HY-W013049

Bioactivity: Docosanoic acid is poorly absorbed, and a cholesterol-raising saturated fatty acid in humans.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

Docosapentaenoic acid 22n-3

Cat. No.: HY-113159

Bioactivity: Docosapentaenoic acid (22n-3) is a component of phospholipids found in all animal cell membranes.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Docosatrienoic Acid (cis-13,16,19-docosatrienoic acid; (13Z,16Z,19Z)-13,16,19-Docosatrienoic acid)

Cat. No.: HY-101408

Bioactivity: Docosatrienoic acid is a rare ω-3 fatty acid; inhibits LTB4 binding to pig neutrophil membranes with an K_i of 5 μM.

Purity: 98.00%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

Dodecanedioic acid

Cat. No.: HY-W012241

Bioactivity: Dodecanedioic acid (C12) is a dicarboxylic acid which is a water-soluble substance with a metabolic pathway intermediate to those of lipids and carbohydrates.

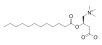
Purity: 97.0%
Clinical Data: No Development Reported
Size: 1 g

Dodecanoylcarnitine

Cat. No.: HY-113166

Bioactivity: Dodecanoylcarnitine is present in fatty acid oxidation disorders such as long-chain acyl CoA dehydrogenase deficiency, carnitine palmitoyltransferase I/II deficiency, and is also associated with celiac disease.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



Dopamine hydrochloride (ASL279)

Cat. No.: HY-B0451A

Bioactivity: Dopamine HCl is a catecholamine neurotransmitter present in a wide variety of animals,And a dopamine D1-5 receptors agonist. Target: Dopamine Receptor Dopamine (or 3,4-dihydroxyphenethylamine) is a neuroendocrine transmitter in the catecholamine and phenethylamine families that plays a...

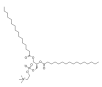
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

DPPC (129Y83)

Cat. No.: HY-109506

Bioactivity: DPPC is a zwitterionic phosphoglyceride that can be used for the preparation of liposomal monolayers.

Purity: 98.0%
Clinical Data:
Size: 10 mg, 50 mg

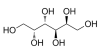


Dulcite (Dulcitol; Dulcose; Euonymit; Melampyrin; Melampyrit; NSC 1944)

Cat. No.: HY-Y0418

Bioactivity: Dulcite is a sugar alcohol with a slightly sweet taste which is a metabolic breakdown product of galactose.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



Eicosadienoic acid

Cat. No.: HY-113130

Bioactivity: Eicosadienoic acid is a rare, naturally occurring n-6 polyunsaturated fatty acid found mainly in animal tissues.

Purity: >98%
Clinical Data: No Development Reported
Size: 25 mg

Eicosapentaenoic Acid (EPA; Timnodonic acid)

Cat. No.: HY-B0660

Bioactivity: Eicosapentaenoic Acid (EPA; Timnodonic acid) is an omega-3 fatty acid.

Purity: 98.72%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg

Elaidic acid

Cat. No.: HY-113016

Bioactivity: Elaidic acid is the major trans fat found in hydrogenated vegetable oils and can be used as a pharmaceutical solvent.

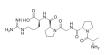
Purity: 98.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 100 mg

Enterostatin, human, mouse, rat

Cat. No.: HY-P1067

Bioactivity: Enterostatin, human, mouse, rat is a pentapeptide that reduces fat intake.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg



Epiandrosterone

(3β-Androsterone; trans-Androsterone; iso-Androsterone) Cat. No.: HY-I0352

Bioactivity: Epiandrosterone is a steroid hormone with weak androgenic activity. Epiandrosterone is naturally produced by the enzyme 5α-reductase from the adrenal hormone DHEA.

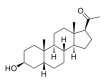
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g, 5 g

Epipregnanolone

Cat. No.: HY-113036

Bioactivity: Epipregnanolone is an endogenous neurosteroid that has anesthetic, hypnotic, and sedative properties.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg



Ercalcidiol

(25-hydroxy Vitamin D2) Cat. No.: HY-32349

Bioactivity: Ercalcidiol is a metabolite of **vitamin D_2**, is regarded as an indicator of vitamin D nutritional status.

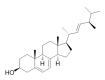
Purity: 98.93%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

Ergosterol

(Ergosterin; Provitamin D; Provitamin D2) Cat. No.: HY-N0181

Bioactivity: Ergosterol is the primary sterol found in fungi, with antioxidative, anti-proliferative, and anti-inflammatory effects.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

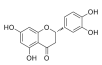


Eriodictyol

(Huazhongilexone) Cat. No.: HY-N0637

Bioactivity: Eriodictyol is a flavonoid isolated from the Chinese herb, with antioxidant and anti-inflammatory activity. Eriodictyol induces **Nrf2** signaling pathway.

Purity: 99.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



Escitalopram

((S)-Citalopram; S-(+)-Citalopram) Cat. No.: HY-14258

Bioactivity: Escitalopram is a selective serotonin reuptake inhibitor (SSRI) with Ki of 0.89 nM. Target: SSRIs Escitalopram, the S-enantiomer of citalopram, belongs to a class of antidepressant agents known as selective serotonin-reuptake inhibitors (SSRIs). Escitalopram may be used to treat major...

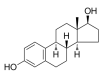
Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

Estradiol

(β-Estradiol; E2; 17β-Estradiol; 17β-Oestradiol) Cat. No.: HY-B0141

Bioactivity: Estradiol is a steroid sex hormone vital to the maintenance of fertility and secondary sexual characteristics in females.

Purity: 99.99%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g



Estriol

(Oestriol) Cat. No.: HY-B0412

Bioactivity: Estriol is an antagonist of the G-protein coupled estrogen receptor in estrogen receptor-negative breast cancer cells. Target: Estrogen Receptor/ERR A recent study shows that estrogen (estrone, estradiol, and estriol) inhibits Alzheimer's disease-associated low-order Aβ oligomer...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Estrone

(E1; Oestrone) Cat. No.: HY-B0234

Bioactivity: Estrone is an estrogenic hormone. Target: Estrogen Receptor/ERR Estrone (E1) is an estrogenic hormone secreted by the ovary as well as adipose tissue with the chemical name of 3-hydroxyestra-1,3,5(10)-triene-17-one and the chemical formula C18H22O2. Estrone is one of several natural estrogens,...

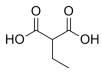
Purity: 99.86%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g, 10 g

Ethylmalonic acid

Cat. No.: HY-34740

Bioactivity: Ethylmalonic acid is non-carcinogenic potentially toxic and associated with anorexia nervosa and malonyl-CoA decarboxylase deficiency.

Purity: 97.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 1 g



Ethynyl Estradiol

(17α-Ethynylestradiol; Ethynylestradiol)

Cat. No.: HY-B0216

Bioactivity: Ethynyl estradiol is an orally bio-active estrogen used in almost all modern formulations of combined oral contraceptive pills. Target: Estrogen Receptor Ethinyl estradiol (EE), also sometimes written as ethinylestradiol, ethynyl estradiol, or ethinyl estradiol, is a derivative of 17β-estradiol (E2), the...

Purity: 99.87%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Farnesol

Cat. No.: HY-Y0248A

Bioactivity: Farnesol is a sesquiterpene alcohol that modulates cell-to-cell communication in Candida albicans, and has the activity in inhibiting bacteria.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 g

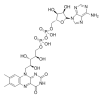
Flavin Adenine Dinucleotide

(FAD; NSC 112207)

Cat. No.: HY-B1654

Bioactivity: Flavin Adenin Dinucleotide is a redox cofactor, more specifically a prosthetic group of a protein, involved in several important enzymatic reactions in metabolism.

Purity: >98%
Clinical Data: No Development Reported
Size: 25 mg



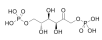
Fosfructose

(Diphosphofructose; Esafosfan; FDP)

Cat. No.: HY-106950

Bioactivity: Fosfructose (Diphosphofructose;Esafosfan;FDP) is a cytoprotective natural sugar phosphate for the potential treatment of cardiovascular ischemia, sickle cell anemia and asthma. It acts by stimulating anaerobic glycolysis which generates adenosine triphosphate under ischemic conditions.

Purity: >98%
Clinical Data:
Size: 100 mg

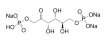


Fosfructose trisodium (Diphosphofructose (trisodium); Esafosfan (trisodium); FDP (trisodium))

Cat. No.: HY-106950A

Bioactivity: Fosfructose trisodium (Diphosphofructose trisodium;Esafosfan trisodium;FDP trisodium) is a cytoprotective natural sugar phosphate for the potential treatment of cardiovascular ischemia, sickle cell anemia and asthma. It acts by stimulating anaerobic glycolysis which generates adenosine...

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg

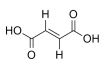


Fumaric acid

Cat. No.: HY-W015883

Bioactivity: Fumaric acid, associated with fumarase deficiency, is identified as an oncometabolite or an endogenous, cancer causing metabolite.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

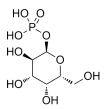


Galactose 1-phosphate

Cat. No.: HY-113143

Bioactivity: Galactose 1-phosphate is an intermediate in the galactose metabolism and nucleotide sugars.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

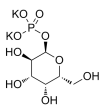


Galactose 1-phosphate Potassium salt

Cat. No.: HY-113143A

Bioactivity: Galactose 1-phosphate Potassium salt is is an intermediate in the galactose metabolism and nucleotide sugars.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 10 mg, 50 mg



Glucagon-Like Peptide (GLP) II, human

Cat. No.: HY-P1841

Bioactivity: Glucagon-Like Peptide (GLP) II, human is a 33-amino acid peptide derived from the C-terminal of proglucagon and mainly produced by the intestinal L cells. Glucagon-Like Peptide (GLP) II, human stimulates intestinal mucosal growth and decreased apoptosis of enterocytes [1].

Purity: >98%
Clinical Data: No Development Reported
Size:

Glucosamine

(D-Glucosamine; Chitosamine) Cat. No.: HY-B1125

Bioactivity: Glucosamine is an amino sugar and a prominent precursor in the biochemical synthesis of glycosylated proteins and lipids, is used as a dietary supplement.

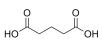
Purity: 97.0%
Clinical Data: Launched
Size: 100 mg

Glutaric acid

Cat. No.: HY-W008820

Bioactivity: Glutaric acid induces oxidative stress in brain of young rats.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

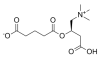


Glutarylcarnitine

Cat. No.: HY-113005

Bioactivity: Glutarylcarnitine is the diagnostic metabolite for malonic aciduria and glutaric aciduria type I monitored in most tandem mass spectrometry newborn screening programmes.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

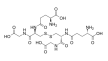


Glutathione oxidized

(L-Glutathione oxidized; GSSG) Cat. No.: HY-D0844

Bioactivity: Glutathione oxidized is produced by the oxidation of glutathione which is a major intracellular antioxidant and detoxifying agent.

Purity: 98.30%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg



Glycerol

(Glycerin) Cat. No.: HY-B1659

Bioactivity: Glycerol is a clear, colourless, viscous, sweet-tasting liquid. Glycerol is used in sample preparation and gel formation for polyacrylamide gel electrophoresis.

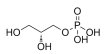
Purity: 99.0%
Clinical Data: Launched
Size: 100mL in

Glycerol 3-phosphate

Cat. No.: HY-113128

Bioactivity: Glycerol 3-phosphate is produced by cytosolic glycerol 3-phosphate dehydrogenase pathway through the reduction of dihydroxyacetone phosphate using NADH formed during glycolysis.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg



Glycine

Cat. No.: HY-Y0966

Bioactivity: Glycine is an inhibitory neurotransmitter in the CNS and also acts as a co-agonist along with glutamate, facilitating an excitatory potential at the glutaminergic **N-methyl-D-aspartic acid (NMDA)** receptors.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

Glycochenodeoxycholic acid

(Chenodeoxycholylglycine) Cat. No.: HY-N2334

Bioactivity: Glycochenodeoxycholic acid is a bile salt formed in the liver from chenodeoxycholate and glycine; used to induce hepatocyte apoptosis in research.

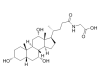
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

Glycocholic acid

Cat. No.: HY-N1423

Bioactivity: Glycocholic acid is a bile acid with anticancer activity, targeting against pump resistance-related and non-pump resistance-related pathways.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

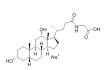


Glycodeoxycholate Sodium

(Sodium glycyldeoxycholate) Cat. No.: HY-N1427

Bioactivity: Glycodeoxycholate Sodium is a bile salt.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Glycogen

Cat. No.: HY-113511

Bioactivity: Glycogen is a glycolytic intermediates and high-energy phosphates that can serve as a form of energy storage in humans, animals, fungi, and bacteria.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 50 mg

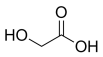
Glycogen

Glycolic acid

Cat. No.: HY-W015967

Bioactivity: Glycolic Acid is an inhibitor of **tyrosinase**, suppressing melanin formation and lead to a lightening of skin colour.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



Glycoursodeoxycholic acid

(Ursodeoxycholylglycine)

Cat. No.: HY-N1424

Bioactivity: Glycoursodeoxycholic acid, a acyl glycine and a bile acid-glycine conjugate, is a metabolite of ursodeoxycholic acid.

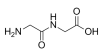
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

Glycylglycine

Cat. No.: HY-D0889

Bioactivity: Glycylglycine is the simplest of all peptides and could function as a gamma-glutamyl acceptor.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



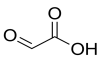
Glyoxalic acid

(NSC 27785; Formylformic acid; Oxalaldehydic acid)

Cat. No.: HY-79494

Bioactivity: Glyoxalic acid (NSC 27785) is an organic compound that is both an aldehyde and a carboxylic acid.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 g



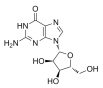
Guanosine

(DL-Guanosine; Vernine)

Cat. No.: HY-N0097

Bioactivity: Guanosine is a purine nucleoside comprising guanine attached to a ribose (ribofuranose) ring via a β-N9-glycosidic bond.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

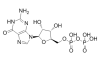


Guanosine 5'-diphosphate

Cat. No.: HY-113066

Bioactivity: Guanosine 5'-diphosphate is a nucleoside diphosphate. Guanosine 5'-diphosphate is a potential iron mobilizer, which prevents the hepcidin-ferroportin interaction and modulating the interleukin-6 (IL-6)/stat-3 pathway [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

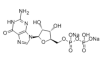


Guanosine 5'-diphosphate disodium salt

Cat. No.: HY-113066A

Bioactivity: Guanosine 5'-diphosphate disodium salt is a nucleoside diphosphate. Guanosine 5'-diphosphate is a potential iron mobilizer, which prevents the hepcidin-ferroportin interaction and modulating the interleukin-6 (IL-6)/stat-3 pathway [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 10 mg, 50 mg



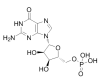
Guanylic acid

(5'-GMP; E 626)

Cat. No.: HY-N5134

Bioactivity: Guanylic acid is involved in several metabolic disorders, including the AICA-ribosiduria pathway, adenosine deaminase deficiency, adenine phosphoribosyltransferase deficiency (aprt), and the 2-hydroxyglutric aciduria pathway.

Purity: >98%
Clinical Data:
Size: 100 mg

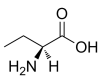


H-Abu-OH

Cat. No.: HY-W010589

Bioactivity: H-Abu-OH, one of the three isomers of aminobutyric acid, is elevated in the plasma of children with with Reye's syndrome, tyrosinemia, homocystinuria, nonketotic hyperglycinemia, and ornithine transcarbamylase deficiency.

Purity: 97.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

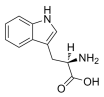


H-D-Trp-OH

Cat. No.: HY-W012479

Bioactivity: H-D-Trp-OH is a D-stereoisomer of tryptophan and occasionally found in naturally produced peptides such as the marine venom peptide.

Purity: 99.69%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

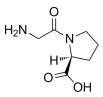


H-Gly-Pro-OH

Cat. No.: HY-W016887

Bioactivity: H-Gly-Pro-OH is an end product of collagen metabolism that is further cleaved by prolidase.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 99 mg

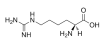


H-HoArg-OH

Cat. No.: HY-W008385

Bioactivity: H-HoArg-OH, a homologue arginine, is a strong inhibitor of human bone and liver **alkaline phosphatase**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

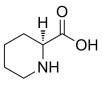


H-HoPro-OH

Cat. No.: HY-W012734

Bioactivity: H-HoPro-OH is a breakdown product of lysine, accumulates in body fluids of infants with generalized genetic peroxisomal disorders, such as Zellweger syndrome, neonatal adrenoleukodystrophy.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

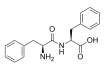


H-Phe-Phe-OH

Cat. No.: HY-W007970

Bioactivity: H-Phe-Phe-OH is a peptide made of two phenylalanine molecules; Phenylalanine is an essential amino acid and the precursor for the amino acid tyrosine.

Purity: 97.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

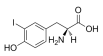


H-Tyr(3-I)-OH

Cat. No.: HY-W008452

Bioactivity: H-Tyr(3-I)-OH is an effective tyrosine hydroxylase inhibitor.

Purity: 99.75%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 50 mg

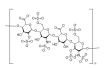


Heparan Sulfate

Cat. No.: HY-101916

Bioactivity: Heparan sulfate, a complex and linear polysaccharide, exists as part of glycoproteins named heparan sulfate proteoglycans, which are expressed abundantly on the cell surface and in the extracellular matrix.

Purity:
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

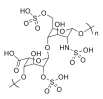


Heparin

Cat. No.: HY-17567

Bioactivity: Heparin is a highly sulfated glycosaminoglycan,that is widely used as an injectable anticoagulant, and has the highest negative charge density of any known biological molecule (50-400 U/Kg).

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 500 mg



Hexacosanoic acid

Cat. No.: HY-113301

Bioactivity: Hexacosanoic acid is a long-chain fatty acid related to various diseases such as adrenoleukodystrophy (ALD), adrenomyeloneuropathy (AMN) and atherosclerosis.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

Hexadecanedioic acid

Cat. No.: HY-W018161

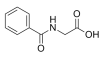
Bioactivity: Hexadecanedioic acid is covalently linked to Sepharose 4B, shows better performance in terms of specificity than dye-based resins and could be used for depletion of SA from plasma samples.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

Hippuric acid
(2-Benzamidoacetic acid) Cat. No.: HY-W016562

Bioactivity: Hippuric Acid, an acyl glycine produced by the conjugation of benzoic acid and glycine, is a normal component in urine as a metabolite of aromatic compounds from food.

Purity: 99.21%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



Histamine
(Ergamine) Cat. No.: HY-B1204

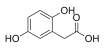
Bioactivity: Histamine is an organic nitrogenous compound involved in local immune responses as well as regulating physiological function in the gut and acting as a neurotransmitter.

Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 100 mg

Homogentisic acid
Cat. No.: HY-113283

Bioactivity: Homogentisic acid is a specific metabolite in urine and serum, which is used for diagnosis of alkaptonuria.

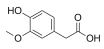
Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg



Homovanillic acid
(Vanilacetic acid) Cat. No.: HY-N0384

Bioactivity: Homovanillic acid is a dopamine metabolite found to be associated with aromatic L-amino acid decarboxylase deficiency, celiac disease, growth hormone deficiency, and sepiapterin reductase deficiency.

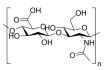
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



Hyaluronic acid
Cat. No.: HY-B0633A

Bioactivity: Hyaluronic acid is a biopolymer composed of repeating units of disaccharides with various applications.

Purity:
Clinical Data: Phase 4
Size: 50 mg, 100 mg, 200 mg, 500 mg, 1 g



Hydrocinnamic acid (3-Phenyl-n-propionic acid; 3-Phenylpropanoic acid; 3-Phenylpropionic acid)
Cat. No.: HY-Y1088

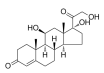
Bioactivity: Hydrocinnamic acid is the major rhizospheric compound with known growth regulatory activities.

Purity: 99.76%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

Hydrocortisone
(Cortisol) Cat. No.: HY-N0583

Bioactivity: Hydrocortisone is a steroid hormone or glucocorticoid secreted by the adrenal cortex.

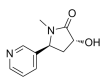
Purity: 99.66%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g



Hydroxycotinine
Cat. No.: HY-113239

Bioactivity: Hydroxycotinine is the main nicotine metabolite detected in smokers urine.

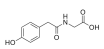
Purity: >98%
Clinical Data:
Size: 1 mg



Hydroxyphenylacetylglycine
Cat. No.: HY-113210

Bioactivity: Hydroxyphenylacetylglycine is an acyl glycine, and an endogenous human metabolite.

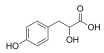
Purity: >98%
Clinical Data:
Size: 10 mg



Hydroxyphenyllactic acid
Cat. No.: HY-113219

Bioactivity: Hydroxyphenyllactic acid is an **antifungal** metabolite.

Purity: >98%
Clinical Data:
Size: 10mM x 1mL in DMSO, 50 mg

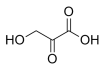


Hydroxypyruvic acid

Cat. No.: HY-113013

Bioactivity: Hydroxypyruvic acid is an intermediate in the metabolism of Glycine, serine and threonine. It is a substrate for Serine--pyruvate aminotransferase and Glyoxylate reductase/hydroxypyruvate reductase.

Purity: >98%
Clinical Data:
Size: 5 mg



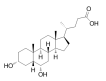
Hyodeoxycholic acid

(HDCA)

Cat. No.: HY-N0169

Bioactivity: Hyodeoxycholic acid is a secondary bile acid formed in the small intestine by the gut flora, and acts as a **TGR5 (GPCR19)** agonist, with an $\mathbf{EC_{50}}$ of 31.6 μM in CHO cells.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Hypotaurine

(2-Aminoethanesulfinic acid)

Cat. No.: HY-100803

Bioactivity: Hypotaurine (2-aminoethanesulfinic acid), an intermediate in taurine biosynthesis from cysteine in astrocytes, is an endogenous inhibitory amino acid of the **glycine receptor**.

Purity: 98.36%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 50 mg

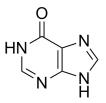
Hypoxanthine

(Purin-6-ol; Sarcine)

Cat. No.: HY-N0091

Bioactivity: Hypoxanthine, a purine derivative, is a potential free radical generator and could be used as an indicator of hypoxia.

Purity: 99.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg



i-Inositol

(myo-Inositol; meso-Inositol)

Cat. No.: HY-B1411

Bioactivity: i-Inositol is a chemical compound, associated lipids are found in many foods, in particular fruit, especially cantaloupe and oranges.

Purity: 98.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in Water, 5 g

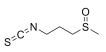
Iberin

(NSC 321801)

Cat. No.: HY-101413

Bioactivity: Iberin, a sulfoxide analogue of sulforaphane, is a naturally occurring member of isothiocyanate family. It inhibits cell survival with an $\mathbf{IC_{50}}$ of 2.3 μM in HL60 cell.

Purity: 98.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg

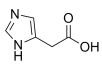


Imidazoleacetic acid

Cat. No.: HY-113413

Bioactivity: Imidazoleacetic acid is an endogenous ligand that stimulates **imidazole receptors**.

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg



Impulsin

(AM 3112; Loramine P 256; Mackpeart DR 14V)

Cat. No.: HY-20685

Bioactivity: Impulsin (AM 3112) is an active endogenous compound which can used for preventing virus infection of the respiratory tract.

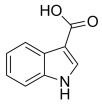
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

Indole-3-carboxylic acid

Cat. No.: HY-40161

Bioactivity: Indole-3-carboxylic acid is a normal urinary indolic tryptophan metabolite and has been found elevated in patients with liver diseases [1] [2].

Purity: 99.55%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

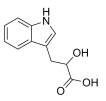


Indolelactic acid

Cat. No.: HY-113099

Bioactivity: Indolelactic acid is a tryptophan (Trp) catabolite in Azotobacter vinelandii cultures.

Purity: 98.42%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

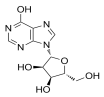


Inosine

Cat. No.: HY-N0092

Bioactivity: Inosine, an endogenous purine nucleoside, has immunomodulatory, neuroprotective, and analgesic properties. In vitro: Inosine has been shown to stimulate axonal growth in cell culture and promote corticospinal tract axons to sprout collateral branches after stroke, spinal cord injury and TBI...

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 1 g, 10 g, 25 g, 100 g

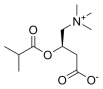


Isobutyryl-L-carnitine

Cat. No.: HY-113165

Bioactivity: Isobutyryl-L-carnitine is a product of the acyl-CoA dehydrogenases. Isobutyryl-L-carnitine is a member of the class of compounds known as acyl carnitines.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

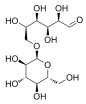


Isomaltose

(6-O-α-D-Glucopyranosyl-D-glucose; D-Isomaltose) Cat. No.: HY-N3018

Bioactivity: Isomaltose is composed of two glucose units and suitable as a non-cariogenic sucrose replacement and is favorable in products for diabetics and prediabetic dispositions.

Purity: >98%
Clinical Data:
Size: 50 mg

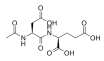


Isospaglumic acid

(N-Acetylaspartylglutamic acid; NAAG; α-Spaglumic acid) Cat. No.: HY-100921

Bioactivity: Isospaglumic acid is a neuropeptide found in millimolar concentrations in brain.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg



Isotretinoin

(13-cis-Retinoic acid) Cat. No.: HY-15127

Bioactivity: Isotretinoin(13-cis-Retinoic acid) is a medication used for the treatment of severe acne. It was first developed to be used as a chemotherapy medication for the treatment of brain cancer, pancreatic cancer and more. Target: RAR/RXR Isotretinoin has been the most effective and long-lasting drug...

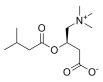
Purity: 94.86%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Isovalerylcarnitine

Cat. No.: HY-113221

Bioactivity: Isovalerylcarnitine is a product of the catabolism of L-leucine. It increases calpain activity.

Purity: 99.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 5 mg

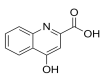


Kynurenic acid

(Quinurenic acid) Cat. No.: HY-100806

Bioactivity: Kynurenic acid, an endogenous tryptophan metabolite, is a broad-spectrum antagonist targeting <b >NMDA, glutamate, α7 nicotinic acetylcholine receptor. Kynurenic acid is also a selective ligand of the **GPR35** receptor.

Purity: 98.75%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

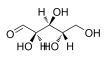


L-(+)-Arabinose

Cat. No.: HY-W015611

Bioactivity: L-(+)-Arabinose selectively inhibits intestinal sucrase activity in a noncompetitive manner and suppresses the plasma glucose increase due to sucrose ingestion.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

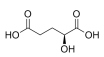


L-2-Hydroxyglutaric acid

Cat. No.: HY-113039

Bioactivity: L-2-Hydroxyglutaric acid is an epigenetic modifier and putative oncometabolite in renal cancer.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

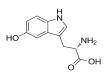


L-5-Hydroxytryptophan

(L-5-HTP; Oxitriptan) Cat. No.: HY-B1716

Bioactivity: L-5-Hydroxytryptophan (L-5-HTP), a naturally occurring amino acid and a dietary supplement for use as an antidepressant, appetite suppressant, and sleep aid, is the immediate precursor of the neurotransmitter serotonin and a **reserpine** antagonist [1]. L-5-Hydroxytryptophan (L-5-HTP) is used to...

Purity: 99.75%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg

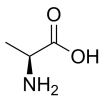


L-Alanine

(L-2-Aminopropionic acid) Cat. No.: HY-N0229

Bioactivity: L-Alanine is a non-essential amino acid, involved in sugar and acid metabolism, increases immunity, and provides energy for muscle tissue, brain, and central nervous system.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

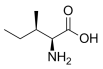


L-Alloisoleucine

((3R)-LS-Isoleucine; L-Allo-isoleucine) Cat. No.: HY-I1060

Bioactivity: L-Alloisoleucine is a branched chain amino acid and is a stereo-isomer of L-isoleucine. L-Alloisoleucine is a common constituent of human plasma (albeit at low levels).

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 25 mg

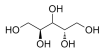


L-Arabinitol

Cat. No.: HY-W040141

Bioactivity: L-Arabinitol is a potential biomarker for the comsuption of the food products such as sweet potato, deerberry, moth bean, and is also associated with Alzheimer's disease and ribose-5-phosphate isomerase deficiency.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



L-Arginine

((S)-(+)-Arginine) Cat. No.: HY-N0455

Bioactivity: L-Arginine is the nitrogen donor for synthesis of nitric oxide, a potent vasodilator that is deficient during times of sickle cell crisis. Target: Others L-Arginine is an α-amino acid. It was first isolated in 1886. The L-form is one of the 20 most common natural amino acids. At the level of molecular...

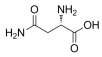
Purity: 98.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in Water, 1 g, 5 g, 100 g, 500 g

L-Asparagine

((-)-Asparagine; Asn; Asparamide) Cat. No.: HY-N0667

Bioactivity: L-Asparagine is a non-essential amino acid that is involved in the metabolic control of cell functions in nerve and brain tissue.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg



L-Aspartic acid

Cat. No.: HY-N0666

Bioactivity: L-Aspartic acid is is an amino acid, shown to be a suitable prodrug for colon-specific drug deliverly.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g

L-Carnitine

(Levocarnitine) Cat. No.: HY-B0399

Bioactivity: L-carnitine is constituent of striated muscle and liver. It is used therapeutically to stimulate gastric and pancreatic secretions and in the treatment of hyperlipoproteinemias. Target: Others L-Carnitine is an endogenous molecule involved in fatty acid metabolism, biosynthesized within the human body...

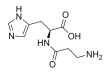
Purity: 98.0%
Clinical Data: Launched
Size: 5 g, 10 g

L-Carnosine

Cat. No.: HY-W013494

Bioactivity: L-Carnosine is a dipeptide of the amino acids beta-alanine and histidine and has the potential to suppress many of the biochemical changes that accompany aging.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

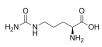


L-Citrulline

Cat. No.: HY-N0391

Bioactivity: L-Citrulline is an amino acid derived from ornithine in the catabolism of proline or glutamine and glutamate, or from l-arginine via arginine-citrulline pathway.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g

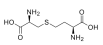


L-Cystathionine

Cat. No.: HY-W009749

Bioactivity: L-Cystathionine is a key nonprotein amino acid related to metabolic conditions.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

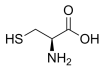


L-Cysteine

Cat. No.: HY-Y0337

Bioactivity: L-Cysteine is a thiol-containing non-essential amino acid that is oxidized to form cystine.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g, 250 g

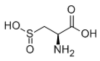


L-Cysteinesulfinic acid

Cat. No.: HY-100804

Bioactivity: L-Cysteinesulfinic acid is a potent agonist at several rat metabotropic glutamate receptors (**mGluR**s) with pEC $_{50}$s of 3.92±0.03, 4.6±0.2, 3.9±0.2, 2.7±0.2, 4.0±0.2, and 3.94±0.08 for mGluR1, mGluR5, mGluR2, mGluR4, mGluR6, and mGluR8, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

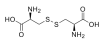


L-Cystine

Cat. No.: HY-N0394

Bioactivity: L-Cystine is an amino acid and intracellular thiol, which plays a critical role in the regulation of cellular processes.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



L-DABA

(L-2,4-Diaminobutyric acid)

Cat. No.: HY-101414

Bioactivity: L-DABA (L-2,4-Diaminobutyric acid) is a week **GABA** transaminase inhibitor with an **IC_{50}** of larger than 500 μM; exhibits antitumor activity in vivo and in vitro.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg

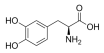
L-DOPA

(Levodopa; 3,4-Dihydroxyphenylalanine)

Cat. No.: HY-N0304

Bioactivity: L-DOPA is a natural form of DOPA used in the treatment of Parkinson's disease. L-DOPA is the precursor of dopamine and product of tyrosine hydroxylase. Target: Dopamine Receptor L-DOPA (L-3,4-dihydroxyphenylalanine) is a chemical that is made and used as part of the normal biology of humans, some...

Purity: >98%
Clinical Data: Launched
Size: 200 mg, 1 g



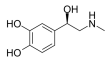
L-Epinephrine

((-)-Epinephrine; L-Adrenaline; (-)-Adrenalin)

Cat. No.: HY-B0447B

Bioactivity: L-Epinephrine is a hormone secreted by the medulla of the adrenal glands. L-Epinephrine is an **α-adrenergic** and **β-adrenergic** receptor agonist.

Purity: 99.0%
Clinical Data: Launched
Size: 1 g, 5 g, 25 g



L-Glutamine

(L-Glutamic acid 5-amide)

Cat. No.: HY-N0390

Bioactivity: L-Glutamine is a non-essential amino acid present abundantly throughout the body and is involved in gastrointestinal disorders. Target: mGluR Glutamine (abbreviated as Gln or Q) is one of the 20 amino acids encoded by the standard genetic code. It is not recognized as an essential amino acid, but may...

Purity: 98.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in Water, 100 mg, 500 mg

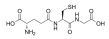
L-Glutathione reduced

(GSH; γ-L-Glutamyl-L-cysteinyl-glycine)

Cat. No.: HY-D0187

Bioactivity: L-Glutathione reduced (GSH; γ-L-Glutamyl-L-cysteinyl-glycine) is an endogenous antioxidant and is capable of scavenging oxygen-derived free radicals.

Purity: 99.83%
Clinical Data: No Development Reported
Size: 1 g, 5 g

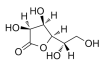


L-Gulono-1,4-lactone

Cat. No.: HY-W016628

Bioactivity: L-Gulono-1,4-lactone is a substrate of L-gulono-1,4-lactone oxidoreductase, which catalyzes the last step of the biosynthesis of L-ascorbic (Vatamin) C. In other words, L-Gulono-1,4-lactone is a direct precursor of vitamin C in animals, in plants and in some protists.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g

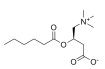


L-Hexanoylcarnitine

Cat. No.: HY-113144

Bioactivity: L-Hexanoylcarnitine is an acylcarnitine and is found to be associated with celiac disease.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

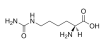


L-Homocitrulline

Cat. No.: HY-W018004

Bioactivity: L-Homocitrulline is metabolized to homoarginine through homoargininosuccinate via the urea cycle pathway and its metabolic abnormality could lead to Lysinuric Protein Intolerance (LPI).

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

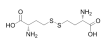


L-Homocystine

Cat. No.: HY-W011690

Bioactivity: L-Homocystine is the oxidized member of the L-homocysteine. Homocysteine is a pro-thrombotic factor, vasodilation impairing agent, pro-inflammatory factor and endoplasmatic reticulum-stress inducer used to study cardiovascular disease mechanisms.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 100 mg

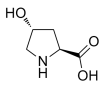


L-Hydroxyproline

Cat. No.: HY-40135

Bioactivity: L-Hydroxyproline, one of the hydroxyproline (Hyp) isomers, is a useful chiral building block in the production of many pharmaceuticals.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



L-Kynurenine

Cat. No.: HY-104026

Bioactivity: L-Kynurenine is a metabolite of the amino acid L-tryptophan. L-Kynurenine is an **aryl hydrocarbon receptor** agonist.

Purity: 99.40%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

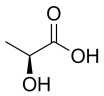
L-Lactic acid

((S)-2-Hydroxypropanoic acid)

Cat. No.: HY-Y0479

Bioactivity: L-Lactic acid is a buildiing block which can be used as a precursor for the production of the bioplastic polymer poly-lactic acid.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

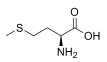


L-Methionin

Cat. No.: HY-N0326

Bioactivity: L-Methionine is the L-isomer of Methionine, an essential amino acid for human development. Methionine acts as a hepatoprotectant.

Purity: 98.60%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g



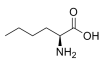
L-Norleucine

(S)-2-Aminohexanoic acid; (S)-Norleucine)

Cat. No.: HY-Y0017

Bioactivity: L-Norleucine is an isomer of leucine, specifically affects protein synthesis in skeletal muscle, and has antivirus activity.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g

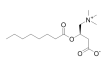


L-Octanoylcarnitine

Cat. No.: HY-113161

Bioactivity: L-Octanoylcarnitine is the physiologically active form of octanoylcarnitine.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

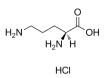


L-Ornithine Hydrochloride

Cat. No.: HY-W017018

Bioactivity: L-Ornithine Hydrochloride is a free amino acid that plays a central role in the urea cycle and is also important for the disposal of excess nitrogen.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg



L-Palmitoylcarnitine

Cat. No.: HY-113147

Bioactivity: L-Palmitoylcarnitine is a fatty acid metabolite.

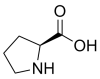
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

L-Proline

Cat. No.: HY-Y0252

Bioactivity: L-Proline is one of the twenty amino acids used in living organisms as the building blocks of proteins.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

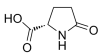


L-Pyroglutamic acid

Cat. No.: HY-76082

Bioactivity: L-Pyroglutamic acid is the levo-isomer of Pyroglutamic acid. L-Pyroglutamic acid is the biologically active enantiomer in humans. Pyroglutamic acid is an intermediate in glutathione metabolism.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



L-SelenoMethionine

Cat. No.: HY-B1000A

Bioactivity: L-SelenoMethionine is a major natural food-form of selenium. Target The median lethal dose (LD50) of L-SelenoMethionine in rats given an intraperitoneal injection was determined to 4.25 mg Se/kg body and thus is comparable to that of selenite or selenate. In mice, the LD50 of L-SelenoMethionine was 8.8 ±...

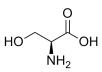
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 100 mg, 500 mg

L-Serine ((-)-Serine; (S)-2-Amino-3-hydroxypropanoic acid; (S)-Serine)

Cat. No.: HY-N0650

Bioactivity: L-Serine, one of the so-called non-essential amino acids, plays a central role in cellular proliferation.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g



L-Thyroxine (Levothyroxine; T4)

Cat. No.: HY-18341

Bioactivity: L-Thyroxine (Levothyroxine; T4) is a synthetic hormone in the treatment of hypothyroidism. DIO enzymes convert biologically active thyroid hormone (Triiodothyronine,T3) from L-Thyroxine (T4).

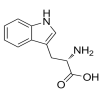
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 500 mg, 1 g

L-Tryptophan (Tryptophan; Tryptophane)

Cat. No.: HY-N0623

Bioactivity: L-Tryptophan (Tryptophan) is an essential amino acid that is the precursor of serotonin, melatonin, and vitamin B3 [1].

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg



L-Tyrosine

Cat. No.: HY-N0473

Bioactivity: L-Tyrosine is a non-essential amino acid which can inhibit **citrate synthase** activity in the posterior cortex.

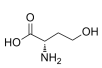
Purity: 99.01%
Clinical Data: Phase 2
Size: 200 mg, 500 mg

L-Homoserine

Cat. No.: HY-W002292

Bioactivity: L-Homoserine is a non - protein amino acid, which is an important biosynthetic intermediate of threonine, methionine and lysine.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

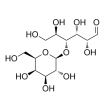


Lactose

Cat. No.: HY-B2123

Bioactivity: Lactose, a major sugar in the milk of most species, could regulate human's intestinal microflora.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

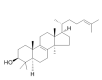


Lanosterol

Cat. No.: HY-W020033

Bioactivity: Lanosterol is a key triterpenoid intermediate in the biosynthesis of Cholesterol.

Purity: 98.0%
Clinical Data:
Size: 1 mg

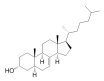


Lathosterol

Cat. No.: HY-113486

Bioactivity: Lathosterol is a cholesterol-like molecule. Serum Lathosterol concentration is an indicator of whole-body cholesterol synthesis.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Lauric acid

Cat. No.: HY-Y0366

Bioactivity: Lauric acid is a middle chain-free fatty acid with strong bactericidal properties. The EC_{50}s for P. acnes, S.aureus, S. epidermidis, are 2, 6, 4 μg/mL, respectively.

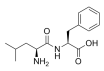
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

Leucyl-phenylalanine

Cat. No.: HY-113278

Bioactivity: Leucyl-phenylalanine belongs to the class of organic compounds known as dipeptides.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg



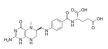
Levomefolic acid

(5-MTHF)

Cat. No.: HY-14781

Bioactivity: Levomefolic acid (5-MTHF) is the natural, active form of folic acid used at the cellular level for DNA reproduction, the cysteine cycle and the regulation of homocysteine among other functions. IC50 value: Target: Folate analog Levomefolic acid has been proposed for treatment of cardiovascular disease and...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 50 mg

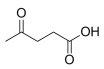


Levulinic acid (4-Oxovaleric acid; Laevulinic acid; Levulic acid; NSC 3716; β-Acetylpropionic acid; ...)

Cat. No.: HY-Y0839

Bioactivity: Levulinic acid is a precursor for the synthesis of biofuels, such as ethyl levulinate.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



Linoleic acid

Cat. No.: HY-N0729

Bioactivity: Linoleic acid is a critical component of polyunsaturated fatty acids.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g, 5 g

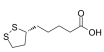
Lipoic acid

((R)-(+)-α-Lipoic acid; R-(+)-Thioctic acid)

Cat. No.: HY-18733

Bioactivity: Lipoic acid ((R)-(+)-α-Lipoic acid) is an antioxidant, which is an essential cofactor of **mitochondrial** enzyme complexes. (R)-(+)-α-Lipoic acid is more effective than racemic Lipoic acid.

Purity: 99.59%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 500 mg



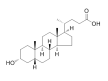
Lithocholic acid

(3α-Hydroxy-5β-cholanic acid)

Cat. No.: HY-B0172

Bioactivity: Lithocholic acid is a toxic secondary bile acid, causes intrahepatic cholestasis, has tumor-promoting activity. Target: Others Lithocholic acid has been used in a study to assess cholestasis and its action on several organs and tissues in rats. It has also been used in a study to...

Purity: 98.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g, 5 g



LysoPC(14:0/0:0)

Cat. No.: HY-113123

Bioactivity: LysoPC(14:0/0:0) is a lysophospholipid (LyP). It is a monoglycerophospholipid in which a phosphorylcholine moiety occupies a glycerol substitution site.

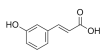
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

m-Coumaric acid

Cat. No.: HY-113357

Bioactivity: m-Coumaric acid is a polyphenol metabolite from caffeic acid, formed by the gut microflora and the amount in human biofluids is diet-dependant.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

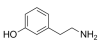


m-Tyramine

Cat. No.: HY-113356

Bioactivity: m-Tyramine is an endogenous trace amine neuromodulator. m-Tyramine has effects on the **adrenergic** and **dopaminergic** receptor.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



Maleic Acid

Cat. No.: HY-Y0367

Bioactivity: Maleic Acid is a Glutamate Decarboxylase (GAD) inhibitor of **E. coli** and **L. monocytogenes**.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

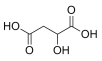
Malic acid

(E 296; FDA 2018; Hydroxybutanedioic acid)

Cat. No.: HY-Y1311

Bioactivity: Malic acid is a dicarboxylic acid that is naturally found in fruits such as apples and pears. It plays a role in many sour or tart foods.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

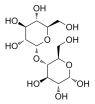


Maltose

Cat. No.: HY-N2024

Bioactivity: Maltose is a disaccharide formed from two units of glucose joined with an α(14) bond. Maltose is a reducing sugar.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 g



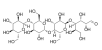
Maltotetraose

(Amylotetraose; Fujioligo 450; α-1,4-Tetraglucose)

Cat. No.: HY-N2464

Bioactivity: Maltotetraose can be used as a substrate for the enzyme-coupled determination of amylase activity in biological fluids.

Purity: 99.59%
Clinical Data:
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

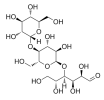


Maltotriose

Cat. No.: HY-113011

Bioactivity: Maltotriose is a ligosaccharide metabolite found in human urine.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg



Melanin

Cat. No.: HY-113485

Bioactivity: Melanin is a unique pigment with myriad functions. It is multifunctional, providing defense against environmental stresses such as ultraviolet (UV) light, oxidizing agents and ionizing radiation.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

Melanin

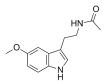
Melatonin

(N-Acetyl-5-methoxytryptamine)

Cat. No.: HY-B0075

Bioactivity: Melatonin is a hormone made by the pineal gland that can activates **melatonin receptor**. Melatonin plays a role in sleep and possesses important antioxidative and anti-inflammatory properties.

Purity: 98.95%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g



Menadione

(Vitamin K3)

Cat. No.: HY-B0332

Bioactivity: Menadione, a synthetic naphthoquinone, can be converted to active vitamin K2 in vivo. Target: Others Menadione (Vitamin K3) is a synthetic analogue of of 1,4-naphthoquinone with a methyl group in the 2-position. Menadione is used as a phosphatase inhibitor and an inhibitor of mitochondrial DNA...

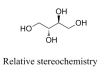
Purity: 98.57%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 500 mg, 1 g

meso-Erythritol

Cat. No.: HY-100551

Bioactivity: meso-Erythritol is a sugar alcohol that occurs naturally in a variety of foods (e.g., pear, watermelon), is 60-80% as sweet as sucrose, and is an approved low-calorie sweetener food additive [1].

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg

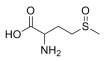


Methionine sulfoxide

Cat. No.: HY-W010104A

Bioactivity: Methionine sulfoxide is an oxidation product of methionine with reactive oxygen species and can be regarded as a biomarker of oxidative stress in vivo.

Purity: >98%
Clinical Data:
Size: 1 g

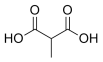


Methylmalonate (Isosuccinic acid; Methylmalonic acid; Methylpropanedioic acid)

Cat. No.: HY-103395

Bioactivity: Methylmalonate is an indicator of Vitamin B-12 deficiency in cancer.

Purity: 97.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 1 g

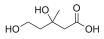


Mevalonic acid

Cat. No.: HY-113071

Bioactivity: Mevalonic acid is a dihydroxy monocarboxylic acid and precursor in the biosynthetic pathway known as the mevalonate pathway, which produces terpenes and steroids that are vital for diverse cellular functions.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

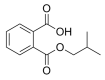


Monoisobutyl phthalic acid

Cat. No.: HY-113220

Bioactivity: Monoisobutyl phthalic acid is a phthalate metabolite that is in human semen and in meconium.

Purity: >98%
Clinical Data:
Size: 50 mg



Myristic acid

Cat. No.: HY-N2041

Bioactivity: Myristic acid is a saturated 14-carbon fatty acid occurring in most animal and vegetable fats, particularly butterfat and coconut, palm, and nutmeg oils.

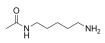
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

N-(5-Aminopentyl)acetamide (Monoacetylcadaverine)

Cat. No.: HY-101403

Bioactivity: N-(5-Aminopentyl)acetamide is the acetylated form of the polyamine cadaverine.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

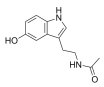


N-Acetyl-5-hydroxytryptamine (N-Acetylserotonin; Normelatonin; O-Demethylmelatonin)

Cat. No.: HY-107854

Bioactivity: N-Acetyl-5-hydroxytryptamine is a Melatonin precursor, and that it can potently activate **TrkB** receptor.

Purity: >98%
Clinical Data:
Size: 50 mg

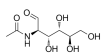


N-Acetyl-D-glucosamine (N-Acetyl-2-amino-2-deoxy-D-glucose; N-Acetyl-2-amino-2-deoxyglucose)

Cat. No.: HY-A0132

Bioactivity: N-Acetyl-D-Glucosamine is a monosaccharide derivative of glucose.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

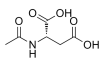


N-Acetyl-L-aspartic acid

Cat. No.: HY-113524

Bioactivity: N-Acetyl-L-aspartic acid is a derivative of aspartic acid.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

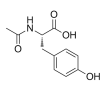


N-Acetyl-L-tyrosine

Cat. No.: HY-W012382

Bioactivity: N-Acetyl-L-tyrosine originates from tyrosine through an AA acetylase, is associated with aromatic L-amino acid decarboxylase deficiency and tyrosinemia I.

Purity: 98.50%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

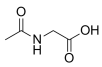


N-Acetylglycine

(Acetamidoacetic acid; Aceturic acid) Cat. No.: HY-Y0069

Bioactivity: N-Acetylglycine is a minor constituent of numerous foods with no genotoxicity or acute toxicity. N-acetylglycine is used in biological research of peptidomimetics.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



N-Acetylneuraminic acid

(NANA; Lactaminic acid) Cat. No.: HY-I0400

Bioactivity: N-Acetylneuraminic acid is a nine-carbon, sialic acid monosaccharide commonly found in glycoproteins on cell membranes and in glycolipids such as gangliosides in mammalian cells. Studies suggest that N-Acetylneuraminic acid is useful biologically in neurotransmission, leukocyte extravasation,...

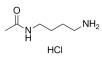
Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg, 1 g

N-Acetylputrescine hydrochloride

Cat. No.: HY-113100

Bioactivity: N-Acetylputrescine hydrochloride is a putrescine derivative.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

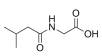


N-Isovaleroylglycine

Cat. No.: HY-W015464

Bioactivity: N-Isovaleroylglycine is an acyl glycine and could be used as a biomarker for the predispositon for weight gain and obesity.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

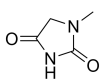


N-Methylhydantoin

Cat. No.: HY-113382

Bioactivity: N-Methylhydantoin is a product of degradation of creatinine by bacteria.

Purity: 99.92%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

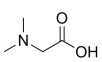


N-Methylsarcosine (DMG; Dimethylglycine; N,N-Dimethylaminoacetic acid; N,N-Dimethylglycine)

Cat. No.: HY-Y0511

Bioactivity: N-Methylsarcosine is an amino acid building block for protein, found in a small amount in the body.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



N-Oleoyl glycine

Cat. No.: HY-113204

Bioactivity: N-Oleoyl glycine is a lipoamino acid, which stimulates adipogenesis associated with activation of **CB1 receptor** and **Akt** signaling pathway in 3T3-L1 adipocyte.

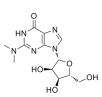
Purity: >98%
Clinical Data:
Size: 10 mg

N2,N2-Dimethylguanosine

Cat. No.: HY-113137

Bioactivity: N2,N2-Dimethylguanosine is an urinary nucleoside, a primary degradation product of tRNA.

Purity: 99.30%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

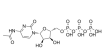


N4-Acetylcytidine triphosphate

(ac4CTP) Cat. No.: HY-111815

Bioactivity: N4-Acetylcytidine triphosphate is a endogenous nucleoside metabolite from the degradation of tRNA, primes and activates **NLRP3** inflammation by inducing HMGB1 expression [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

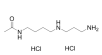


N8-Acetylspermidine dihydrochloride

Cat. No.: HY-113253A

Bioactivity: N8-Acetylspermidine dihydrochloride is a polyamine.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

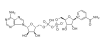


NAD+

(β-DPN; β-NAD; β-Nicotinamide Adenine Dinucleotide) Cat. No.: HY-B0445

Bioactivity: NAD+ is a coenzyme composed of ribosylnicotinamide 5'-diphosphate coupled to adenosine 5'-phosphate by pyrophosphate linkage.

Purity: 99.56%
Clinical Data: Phase 3
Size: 10mM x 1mL in Water, 1 g, 5 g

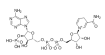


NADP

Cat. No.: HY-113325

Bioactivity: NADP is nicotinamide adenine dinucleotide phosphate, acting as a key cofactor for electron transfer in the metabolism of all organisms, being alternately oxidized ($NADP^+$) and reduced (NADPH).

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

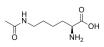


Nepsilon-Acetyl-L-lysine

Cat. No.: HY-113426

Bioactivity: Nepsilon-Acetyl-L-lysine is a derivative of the amino acid lysine.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



Nervonic acid

(Selacholeic acid; cis-15-Tetracosenoic acid) Cat. No.: HY-N2526

Bioactivity: Nervonic acid is a monounsaturated fatty acid important in the biosynthesis of myelin.

Purity: >98%
Clinical Data:
Size: 50 mg

Niacin

(Nicotinic acid; Vitamin B3) Cat. No.: HY-B0143

Bioactivity: Niacin (Vitamin B3) is a water-soluble vitamin and is part of the vitamin B group. Target: Others Niacin (also known as vitamin B3 and nicotinic acid) is an organic compound with the formula C6H5NO2 and, depending on the definition used, one of the 20 to 80 essential human nutrients. Not enough niacin in...

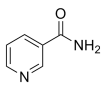
Purity: 99.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 1 g, 5 g

Nicotinamide

(Niacinamide; Nicotinic acid amide; Vitamin B3) Cat. No.: HY-B0150

Bioactivity: Nicotinamide is a form of vitamin B3 that plays essential roles in cell physiology through facilitating NAD+ redox homeostasis and providing NAD+ as a substrate to a class of enzymes that catalyze non-redox reactions. Nicotinamide is an inhibitor of **SIRT1**.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g



Nicotinamide N-oxide

Cat. No.: HY-101407

Bioactivity: Nicotinamide N-oxide, an in vivo nicotinamide metabolite, is a potent, and selective antagonist of the **CXCR2** receptor.

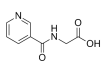
Purity: 99.45%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

Nicotinuric acid

Cat. No.: HY-113353

Bioactivity: Nicotinuric acid is an acyl glycine. Nicotinuric acid is a metabolite of nicotinic acid.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

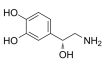


Norepinephrine

(Levarterenol; L-Noradrenaline) Cat. No.: HY-13715

Bioactivity: Norepinephrine (Levarterenol; L-Noradrenaline) is a β_1-selective **adrenergic receptor** agonist with EC_{50} of 5.37 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg

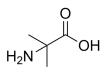


NSC 16590

(α,α-Dimethylglycine; α-Aminoisobutanoic acid) Cat. No.: HY-Y0124

Bioactivity: NSC 16590 inhibits the production of endogenous **ethylene** in the cotyledonary segments of cocklebur.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 g



O-Acetylserine

(O-Acetyl-L-serine) Cat. No.: HY-101409

Bioactivity: O-Acetylserine (O-Acetyl-L-serine) is an intermediate in the biosynthesis of the amino acid cysteine in bacteria and plants.

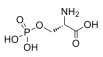
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg, 500 mg

O-Phospho-L-serine

(L-Serine O-phosphate; L-SOP) Cat. No.: HY-15129

Bioactivity: O-Phospho-L-serine is the immediate precursor to L-serine in the serine synthesis pathway, and an agonist at the **group III mGluR receptors** (mGluR4, mGluR6, mGluR7, and mGluR8); O-Phospho-L-serine also acts as a weak antagonist for **mGluR1** and a potent antagonist for **mGluR2**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg

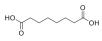


Octanedioic acid

Cat. No.: HY-W015300

Bioactivity: Octanedioic acid is found to be associated with carnitine-acylcarnitine translocase deficiency, malonyl-Coa decarboxylase deficiency.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

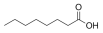


Octanoic acid

Cat. No.: HY-41417

Bioactivity: Octanoic acid is an oily liquid with a slightly unpleasant rancid taste and used commercially in the production of esters used in perfumery and also in the manufacture of dyes.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



Oleamide

Cat. No.: HY-N2327

Bioactivity: Oleamide is an endogenous fatty acid amide which can be synthesized de novo in the mammalian nervous system, and has been detected in human plasma.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

Oleanolic Acid

(Oleanic acid; Caryophyllin) Cat. No.: HY-N0156

Bioactivity: Oleanolic acid (Caryophyllin) is a natural compound from plants with anti-tumor activities.

Purity: 98.0%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Oleic acid

(9-cis-Octadecenoic acid; 9Z-Octadecenoic acid) Cat. No.: HY-N1446

Bioactivity: Oleic acid is an abundant monounsaturated fatty acid.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg

Oleoylethanolamide (N-(2-Hydroxyethyl)oleamide; N-Oleoyl-2-aminoethanol; N-Oleoylethanolamide; ...)

Cat. No.: HY-107542

Bioactivity: Oleoylethanolamide is a high affinity endogenous **PPAR-α** agonist, which plays an important role in the treatment of obesity and arteriosclerosis.

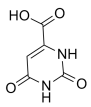
Purity: >98%
Clinical Data:
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

Orotic acid

(6-Carboxyuracil; Vitamin B13) Cat. No.: HY-N0157

Bioactivity: Orotic acid (OA) is an intermediate in pyrimidine metabolism. IC50 Value: Target: Nucleoside antimetabolite/analog in vitro: OA increases cell proliferation and decreases apoptosis in serum-starved SK-Hep1 hepatocellular carcinoma cells, which may ascribe to the inhibition of AMP-activated protein kinase...

Purity: 95.75%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

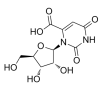


Orotidine

Cat. No.: HY-113226

Bioactivity: Orotidine is an intermediate in pyrimidine nucleotide biosynthesis in RNA and DNA, and plays a crucial role in contemporary biology.

Purity: >98%
Clinical Data:
Size: 1 mg

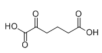


Oxoadipic acid

Cat. No.: HY-113227

Bioactivity: Oxoadipic acid is a key metabolite of the essential amino acids tryptophan and lysine.

Purity: >98%
Clinical Data:
Size: 10 mg



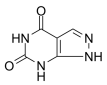
Oxypurinol

(Oxipurinol)

Cat. No.: HY-19657

Bioactivity: Oxipurinol (Oxipurinol), the major active metabolite of Allopurinol, is an inhibitor of **xanthine oxidase**. Oxipurinol can be used to regulate blood urate levels and treat gout [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

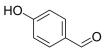


p-Hydroxybenzaldehyde

Cat. No.: HY-Y0313

Bioactivity: p-Hydroxybenzaldehyde is a one of the major components in Dendrocalamus asper bamboo shoots, with antagonistic effect on **$GABA_A$ receptor** of the $\alpha_1\beta_2\gamma_2S$ subtype at high concentrations.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 g

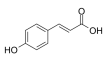


p-Hydroxycinnamic acid

Cat. No.: HY-N2391

Bioactivity: p-Hydroxycinnamic acid, a common dietary phenol, could **inhibit platelet** activity, with **IC_{50}s** of 371 μM, 126 μM for thromboxane B_2 production and lipopolysaccharide-induced prostaglandin E_2 generation, respectively.

Purity: 99.85%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg, 500 mg

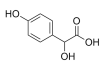


p-Hydroxymandelic acid

Cat. No.: HY-113027

Bioactivity: p-Hydroxymandelic acid is a valuable aromatic fine chemical and widely used for production of pharmaceuticals and food additives.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 100 mg

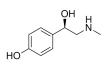


p-Synephrine

Cat. No.: HY-113236

Bioactivity: p-Synephrine is an organic compound, found in multiple biofluids, such as urine and blood.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
50 mg



Palmitic acid

(Hexadecoic acid)

Cat. No.: HY-N0830

Bioactivity: Palmitic acid is a long-chain saturated fatty acid commonly found in both animals and plants.

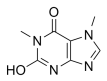
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 g

Paraxanthine

Cat. No.: HY-W016498

Bioactivity: Paraxanthine, a caffeine metabolite, provides protection against Dopaminergic cell death via stimulation of Ryanodine Receptor Channels.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg



Paullinic acid

Cat. No.: HY-113094

Bioactivity: Paullinic acid is a long-chain fatty acid that has been detected in multiple biofluids, such as blood and urine.

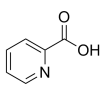
Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

PCL 016

Cat. No.: HY-I0660

Bioactivity: PCL 016 is a topical antiviral agent, which inhibits adenovirus replication in rabbit.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 g



Pentadecanoic acid

Cat. No.: HY-W004283

Bioactivity: Pentadecylic acid is a saturated fatty acid with a 15-carbon backbone.

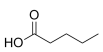
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

Pentanoic acid

Cat. No.: HY-N6056

Bioactivity: Pentanoic acid, a short-chain fatty acid, is a product of bacterial metabolism and are associated with allergic skin disorders. Pentanoic acid activates **ROCK** signaling pathway.

Purity: >98%
Clinical Data:
Size: 10 mg



Petroselinic acid

Cat. No.: HY-113362

Bioactivity: Petroselinic acid, a positional isomer of oleic acid, is isolated from the vegetable oil of Coriandrum sativum fruits.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

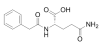
Phenylacetylglutamine

(NSC 203800; Phenylacetyl-L-glutamine)

Cat. No.: HY-W050026

Bioactivity: Phenylacetylglutamine is a colonic microbial metabolite from amino acid fermentation.

Purity: 95.74%
Clinical Data:
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



Phytic acid (myo-Inositol, hexakis(dihydrogen phosphate); Inositol hexaphosphate)

Cat. No.: HY-N0814

Bioactivity: Phytic acid is a major phosphorus storage compound of most seeds and cereal grains.

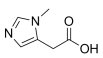
Purity:
Clinical Data: Phase 3
Size: 10mM x 1mL in Water, 250 mg

Pi-Methylimidazoleacetic acid

Cat. No.: HY-113274

Bioactivity: Pi-Methylimidazoleacetic acid is a potential neurotoxin.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

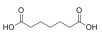


Pimelic acid (1,5-Pentanedicarboxylic acid; 1,7-Heptanedioic acid; Pileric acid)

Cat. No.: HY-Y1139

Bioactivity: Pimelic acid is the organic compound and its derivatives are involved in the biosynthesis of the amino acid called lysine.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

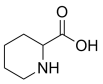


Pipecolic acid

Cat. No.: HY-Y0669

Bioactivity: Pipecolic acid is a metabolite of lysine.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

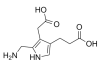


Porphobilinogen

Cat. No.: HY-W013495

Bioactivity: Porphobilinogen could act as a phototoxin, a neurotoxin, and a metabotoxin.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg



Pregnenolone

(Arthenolone; 3β-Hydroxy-5-pregnen-20-one)

Cat. No.: HY-B0151

Bioactivity: Pregnenolone acts as a signaling-specific inhibitor of **cannabinoid CB1 receptor**, reduces several effects of tetrahydrocannabinol (THC).

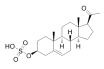
Purity: 98.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 1 g, 5 g

Pregnenolone monosulfate

(Pregn-5-en-20-on-3β-yl sulfuric acid) Cat. No.: HY-B1739

Bioactivity: Pregnenolone monosulfate acts as a signaling-specific inhibitor of **cannabinoid CB1 receptor**, reduces several effects of tetrahydrocannabinol (THC).

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

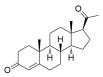


Progesterone

(Pregn-4-ene-3,20-dione) Cat. No.: HY-N0437

Bioactivity: Progesterone is a steroid hormone that regulates the menstrual cycle and is crucial for pregnancy.

Purity: 98.79%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 1 g, 5 g

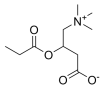


Propionylcarnitine

Cat. No.: HY-113092

Bioactivity: Propionylcarnitine is a propionyl ester of L-carnitine.

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

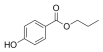


Propylparaben

(Propyl parahydroxybenzoate; Propyl 4-hydroxybenzoate) Cat. No.: HY-N2026

Bioactivity: Propylparaben is an antimicrobial agent, preservative, flavouring agent.

Purity: 99.76%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

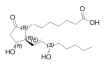


Prostaglandin E1

(PGE1) Cat. No.: HY-B0131

Bioactivity: Prostaglandin E1 (PGE1) is a potent vasodilator and activates the **prostaglandin E1 (EP)** receptor.

Purity: 98.0%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg

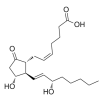


Prostaglandin E2

(Dinoprostone) Cat. No.: HY-101952

Bioactivity: Prostaglandin E2 is a hormone-like substance that participate in a wide range of body functions such as the contraction and relaxation of smooth muscle, the dilation and constriction of blood vessels, control of blood pressure, and modulation of inflammation.

Purity: 98.01%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

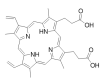


Protoporphyrin IX

Cat. No.: HY-B1247

Bioactivity: Protoporphyrin IX is the final intermediate in the heme biosynthetic pathway.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg

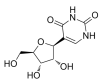


Pseudouridine

Cat. No.: HY-113061

Bioactivity: Pseudouridine, the most abundant modified nucleoside in non-coding RNAs, enhances the function of transfer RNA and ribosomal RNA by stabilizing RNA structure.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



Pyridoxal phosphate

(Pyridoxal 5'-phosphate; Pyridoxyl phosphate) Cat. No.: HY-B1744

Bioactivity: Pyridoxal phosphate is the active form of vitamin B6, acts as an inhibitor of **reverse transcriptases**, and is used for the treatment of tardive dyskinesia.

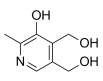
Purity: 98.22%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg, 1 g

Pyridoxine

(Pyridoxol; Vitamin B6) Cat. No.: HY-B1328

Bioactivity: Pyridoxine is a pyridine derivative. Pyridoxine exerts antioxidant effects in cell model of Alzheimer's disease via the Nrf-2/HO-1 pathway.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg

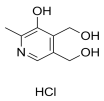


Pyridoxine hydrochloride

(Pyridoxol (hydrochloride); Vitamin B6 (hydrochloride)) Cat. No.: HY-N0682

Bioactivity: Pyridoxine hydrochloride (Pyridoxol; Vitamin B6) is a pyridine derivative. Pyridoxine (Pyridoxol; Vitamin B6) exerts antioxidant effects in cell model of Alzheimer's disease via the **Nrf-2**/HO-1 pathway.

Purity: 99.75%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 100 mg

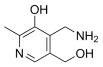


Pyridoxylamine

Cat. No.: HY-B1745

Bioactivity: Pyridoxylamine is an advanced glycation end production **(AGEs)** and lipoxidation end products **(ALEs)** inhibitor, to protect against diabetes-induced retinal vascular lesions.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

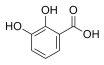


Pyrocatechuic acid

(Catecholcarboxylic acid; NSC 27435) Cat. No.: HY-Y0202

Bioactivity: Pyrocatechuic acid is a normal human benzoic acid metabolite found in plasma, and has increased levels after aspirin ingestion.

Purity: 98.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

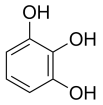


Pyrogallol

Cat. No.: HY-N1579

Bioactivity: Pyrogallol is a polyphenol compound, which has anti-fungal and anti-psoriatic properties. Pyrogallol is a reductant that is able to generate free radicals, in particular superoxide anions.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

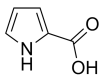


Pyrrole-2-carboxylic acid

Cat. No.: HY-W001963

Bioactivity: Pyrrole-2-carboxylic acid is a natural alkaloid from the marine bacterium Pelomonas puraquae sp. Nov.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

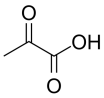


Pyruvic acid

(Acetylformic acid) Cat. No.: HY-Y0781

Bioactivity: Pyruvic acid is an intermediate metabolite in the metabolism of carbohydrates, proteins, and fats.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

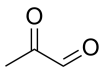


Pyruvic aldehyde

Cat. No.: HY-W020014

Bioactivity: Pyruvic aldehyde is often used as a reagent in organic synthesis, as a flavoring agent, and in tanning.

Purity: 42.0%
Clinical Data:
Size: 10mM x 1mL in DMSO, 5.8 mM * 1 mL in Water,

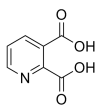


Quinolinic acid

Cat. No.: HY-100807

Bioactivity: Quinolinic acid is an endogenous N-methyl-D-aspartate receptor agonist synthesized from L-tryptophan via the kynurenine pathway and thereby has the potential of mediating N-methyl-D-aspartate neuronal damage and dysfunction.

Purity: 99.81%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

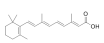


Retinoic acid

(ATRA; Tretinoin; Vitamin A acid; all-trans-Retinoic acid) Cat. No.: HY-14649

Bioactivity: Retinoic acid is a metabolite of vitamin A that plays important roles in cell growth, differentiation, and organogenesis. Retinoic acid is a natural agonist of **RAR** nuclear receptors, with **IC_{50}**s of 14 nM for RARα/β/γ. Retin...

Purity: 98.36%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 1 g, 5 g



Retinol

(Vitamin A1; all-trans-Retinol) Cat. No.: HY-B1342

Bioactivity: Retinol, also known as Vitamin A1, has pleiotropic functions including vison, immunity, hematopoiesis, reproduction, cell differentiation/growth, and development.

Purity:
Clinical Data: Launched
Size: 100 mg

Retinyl palmitate

(Vitamin A palmitate; Retinol palmitate) Cat. No.: HY-B1384

Bioactivity: Retinyl palmitate is an ester of Retinol and is the major form of vitamin A found in the epidermis. Retinyl palmitate has been widely used in pharmaceutical and cosmetic formulations.

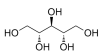
Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

Ribitol

(Adonitol; Adonite) Cat. No.: HY-100582

Bioactivity: Ribitol is a crystalline pentose alcohol formed by the reduction of ribose. Enhancing the flux of D-glucose to the pentose phosphate pathway in Saccharomyces cerevisiae for the production of D-ribose and ribitol.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 500 mg

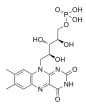


Riboflavine phosphate

(Riboflavine 5'-phosphate) Cat. No.: HY-B0964A

Bioactivity: Riboflavine phosphate is a very effective NAD^+-recycling agent.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Ro 12-1989

(all-cis-8,11,14-Eicosatrienoic acid) Cat. No.: HY-A0143

Bioactivity: Ro 12-1989 is a 20-carbon-chain omega-6 fatty acid unsaturated at positions 8, 11, and 14.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

Rosmarinic acid racemate

Cat. No.: HY-N2336

Bioactivity: Rosmarinic acid racemate is the racemate of Rosmarinic acid. Rosmarinic acid inhibits **MAO-A**, **MAO-B** and **COMT** enzymes with **IC_{50}**s of 50.1, 184.6 and 26.7 μM, respectively.

Purity: 98.01%
Clinical Data: No Development Reported
Size: 50 mg, 100 mg

Ruthenium

Cat. No.: HY-W020867

Bioactivity: Ruthenium is a chemical element with symbol Ru and atomic number 44. Ruthenium is a rare transition metal belonging to the platinum group of the periodic table.

Purity: >98%
Clinical Data:
Size: 100 mg

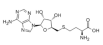
Ru

SAH

(SAH (S-Adenosylhomocysteine)) Cat. No.: HY-19528

Bioactivity: SAH is an amino acid derivative and a modulartor in several metabolic pathways. It is an intermediate in the synthesis of cysteine and adenosine.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 25 mg

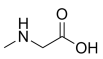


Sarcosine (Methylglycine; N-Methylaminoacetic acid; Sarcosin; Sarcosinic acid)

Cat. No.: HY-101037

Bioactivity: Sarcosine is a glycine transporter type 1 (**GlyT**) inhibitor and an N-methyl-D-aspartate (**NMDA**) receptor co-agonist at the glycine binding site.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

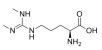


SDMA

(Symmetric dimethylarginine; NG,NG'-Dimethyl-L-arginine) Cat. No.: HY-101410

Bioactivity: SDMA (Symmetric dimethylarginine) is an endogenous inhibitor of nitric oxide (**NO**) synthase activity.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 25 mg, 50 mg, 100 mg

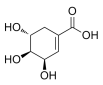


Shikimic acid

Cat. No.: HY-N0130

Bioactivity: Shikimic acid is a key metabolic intermediate of the aromatic amino acid biosynthesis pathway, found in microbes and plants.

Purity: 99.14%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg



sn-Glycero-3-phosphocholine

(Choline Alfoscerate; Alpha-GPC; L-α-GPC) Cat. No.: HY-17552

Bioactivity: L-Alpha glycerylphosphorylcholine (alpha-GPC, choline alfoscerate) is a natural choline compound found in the brain and in milk. It is also a parasympathomimetic acetylcholine precursor which may have potential for the treatment of Alzheimer's disease and dementia. IC50 value: Target: Anti-AD...

Purity: 98.0%

Clinical Data: Launched

Size: 10mM x 1mL in Water, 1 g, 5 g, 10 g

Spermidine

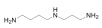
(N-(4-Aminobutyl)-1,3-diaminopropane) Cat. No.: HY-B1776

Bioactivity: Spermidine, a precursor of spermine, is a polyamine derived from putrescine and could help stabilize some membranes and nucleic acid structures.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 100 mg, 5 g



Spermine

(NSC 268508; Neuridine) Cat. No.: HY-B1777

Bioactivity: Spermine (NSC 268508) functions directly as a free radical scabenger to protect DNA from free radical attack.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in Water, 100 mg

Sphingomyelin

Cat. No.: HY-113498

Bioactivity: Sphingomyelin is a type of sphingolipid found in animal cell membranes and implicates in the regulation of trans-membrane signaling.

Purity: >98%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

Sphingomyelin

Squalene

(Super Squalene; trans-Squalene; AddaVax) Cat. No.: HY-N1214

Bioactivity: Squalene is an intermediate product in the synthesis of cholesterol, and shows several pharmacological properties such as hypolipidemic, hepatoprotective, cardioprotective, antioxidant, and antitoxicant activity.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

Stachydrine

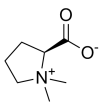
Cat. No.: HY-N0298

Bioactivity: Stachydrine is a major constituent of Chinese herb leonurus heterophyllus sweet used to promote blood circulation and dispel blood stasis. Stachydrine can inhibit the **NF-κB** signal pathway.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg



Stearic acid

Cat. No.: HY-B2219

Bioactivity: Stearic acid is a long chain dietary saturated fatty acid which exists in many animal and vegetable fats and oils.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 1 g

Stearoylcarnitine

Cat. No.: HY-113202

Bioactivity: Stearoylcarnitine is a fatty ester lipid molecule.

Purity:

Clinical Data:

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

Stearoylethanolamide

Cat. No.: HY-113015

Bioactivity: Stearoylethanolamide is an endocannabinoid-like compound with pro-apoptotic activity.

Purity: >98%

Clinical Data:

Size: 5 mg

Stigmastanol

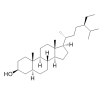
Cat. No.: HY-113494

Bioactivity: Stigmastanol is a phytosterol found in a variety of plant sources.

Purity: >98%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg

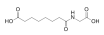


Suberylglycine

Cat. No.: HY-113367

Bioactivity: Suberylglycine is an acyl glycine, which is a normally minor metabolite of fatty acid.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg



Substance P

(Neurokinin P)

Cat. No.: HY-P0201

Bioactivity: Substance P is a neuropeptide, acting as a neurotransmitter and as a neuromodulator.The endogenous receptor for substance P is **neurokinin 1 receptor** (**NK1-receptor**, **NK1R**).

Purity: 98.07%
Clinical Data: Phase 1
Size: 1 mg, 5 mg, 10 mg, 25 mg

Succinic acid

(Wormwood acid)

Cat. No.: HY-N0420

Bioactivity: Succinic acid is an intermediate product of the tricarboxylic acid cycle, as well as one of fermentation products of anaerobic metabolism.

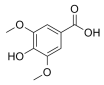
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

Syringic acid

Cat. No.: HY-N0339

Bioactivity: Syringic acid is correlated with high antioxidant activity and inhibition of LDL oxidation.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Taurine

(2-Aminoethanesulfonic acid)

Cat. No.: HY-B0351

Bioactivity: Taurine is an organic acid widely distributed in animal tissues. Target: Others Taurine is a major constituent of bile and can be found in the large intestine and accounts for approximately 0.1% of total human body weight [1]. Taurine is present in high concentration in algae and in the animals...

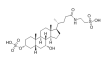
Purity: 98.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in Water, 1 g, 5 g

Taurochenodeoxycholate-3-sulfate

Cat. No.: HY-111769

Bioactivity: Taurochenodeoxycholate-3-sulfate is a bile salt found in urine [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg



Taurochenodeoxycholic acid

(12-Deoxycholyltaurine)

Cat. No.: HY-N2027

Bioactivity: Taurochenodeoxycholic acid is one of the main bioactive substances of animals' bile acid.

Purity: 99.80%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg

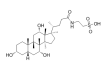
Taurocholic acid

(N-Choloyltaurine; NSC 25505)

Cat. No.: HY-B1788

Bioactivity: Taurocholic acid is a bile acid involved in the emulsification of fats.

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg



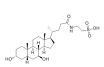
Tauroursodeoxycholate

(TUDCA; UR 906; Taurolite)

Cat. No.: HY-19696

Bioactivity: Tauroursodeoxycholate (TUDCA; UR 906; Taurolite) is an endoplasmic reticulum (ER) stress inhibitor. Tauroursodeoxycholate significantly reduces expression of apoptosis molecules, such as **caspase-3** and **caspase-12**. Tauroursodeoxycholate also inhibits **ERK**.

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

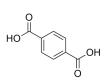


Terephthalic acid

Cat. No.: HY-W010098

Bioactivity: Terephthalic acid is one isomer of the three phthalic, a precursor to the polyester PET, used to make clothing and plastic bottles.

Purity: 99.11%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g



Tetradecanoylcarnitine

Cat. No.: HY-113201

Bioactivity: Tetradecanoylcarnitine is a human carnitine involved in β-oxidation of long-chain fatty acids.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

Tetrahydrobiopterin

(Sapropterin)

Cat. No.: HY-107383

Bioactivity: Tetrahydrobiopterin is a **cofactor** of the **aromatic amino acid hydroxylases enzymes** and also acts as an essential **cofactor** for all **nitric oxide synthase** (NOS) isoforms.

Purity: 98.63%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

Tetrahydrocurcumin

(HZIV 81-2)

Cat. No.: HY-N0893

Bioactivity: Tetrahydrocurcumin is a Curcuminoid found in turmeric (Curcuma longa) that is produced by the reduction of Curcumin. Tetrahydrocurcumin inhibit **CYP2C9** and **CYP3A4**.

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

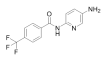
TFAP

(N-(5-Aminopyridin-2-yl)-4-(trifluoromethyl)benzamide)

Cat. No.: HY-112731

Bioactivity: TFAP is a selective cyclooxygenase-1 **(COX-1)** inhibitor, with an $\mathbf{IC_{50}}$ of 0.8 μM.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Theobromine

(3,7-Dimethylxanthine)

Cat. No.: HY-N0138

Bioactivity: Theobromine is a methylxanthine found in cacao beans which can inhibit **adenosine receptor A1** (**AR1**) signaling.

Purity: 99.65%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 100 mg

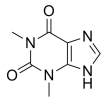
Theophylline

(1,3-Dimethylxanthine; Theo-24)

Cat. No.: HY-B0809

Bioactivity: Theophylline is a nonselective **phosphodiesterase (PDE)** inhibitor, **adenosine receptor** blocker, and **histone deacetylase (HDAC)** activator.

Purity: 99.94%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g

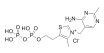


Thiamine pyrophosphate

Cat. No.: HY-113076

Bioactivity: Thiamine pyrophosphate is the coenzyme form of Vitamin B1 and is a required intermediate in the pyruvate dehydrogenase complex and the ketoglutarate dehydrogenase complex.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

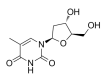


Thymidine (DThyd; Deoxyribothymidine; Deoxythymidine; NSC 21548; Thymidin)

Cat. No.: HY-N1150

Bioactivity: Thymidine is a a pyrimidine deoxynucleoside.

Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

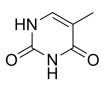


Thymine

Cat. No.: HY-W010450

Bioactivity: Thymine is one of the four nucleobases in the nucleic acid of DNA and can be a target for actions of 5-fluorouracil (5-FU) in cancer treatment, with a K_m of 2.3 μM.

Purity: 99.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



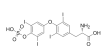
Thyroxine sulfate

(T4 Sulfate)

Cat. No.: HY-101406

Bioactivity: Thyroxine sulfate is a thyroid hormone metabolite.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

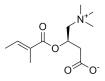


Tiglyl carnitine

Cat. No.: HY-113408

Bioactivity: Tiglyl carnitine is found to be associated with celiac disease and mitochondrial acetoacetyl-CoA thiolase (T2) deficiency.

Purity: >98%
Clinical Data:
Size: 1 mg, 5 mg

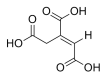


trans-Aconitic acid

Cat. No.: HY-W016813

Bioactivity: trans-Aconitic acid is present in normal human urine, and it has been suggested that is present in larger amounts with Reye's syndrome and organic aciduria. trans-Aconitic acid is a substrate of enzyme trans-aconitate 2-methyltransferase.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

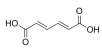


trans-trans-Muconic acid

Cat. No.: HY-113247

Bioactivity: trans-trans-Muconic acid is a urinary metabolite of benzene and has been used as a biomarker of exposure to benzene in human.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



trans-Vaccenic acid

Cat. No.: HY-113427

Bioactivity: trans-Vaccenic acid is a precursor for the synthesis of saturated fatty acid in the rumen and of conjugated linoleic acid (CLA) at the tissue level.

Purity: >98%
Clinical Data: No Development Reported
Size: 25 mg

Tricosanoic acid

Cat. No.: HY-W009081

Bioactivity: Tricosanoic acid is a long-chain fatty acid and shown to be a hair growth stimulant.

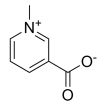
Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg

Trigonelline (Trigenolline)

Cat. No.: HY-N0414

Bioactivity: Trigonelline, an alkaloid with potential antidiabetic activity, is present in considerable amounts in coffee.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



Tryptamine

Cat. No.: HY-B2132

Bioactivity: Tryptamine is a monoamine alkaloid, similar to other trace amines, is believed to play a role as a neuromodulator or neurotransmitter.

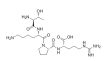
Purity: 99.77%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

Tuftsin

Cat. No.: HY-P0240

Bioactivity: Tuftsin is a tetrapeptide. Tuftsin is a macrophage/microglial activator.

Purity: 98.40%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

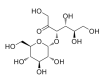


Turanose

Cat. No.: HY-113334

Bioactivity: Turanose is a reducing disaccharide.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

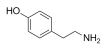


Tyramine

Cat. No.: HY-W007606

Bioactivity: Tyramine is an indirectly acting sympathomimetic amine that releases norepinephrine from presynaptic nerve terminals.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

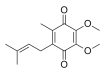


Ubiquinone-1

Cat. No.: HY-113449

Bioactivity: Ubiquinone-1 is an intermediate in the synthesis of Coenzyme Q.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

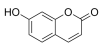


Umbelliferone (7-Hydroxycoumarin; 7-Hydroxylcoumarin; 7-Oxycoumarin; Hydrangin; Hydrangine; NSC 19790; ...)

Cat. No.: HY-N0573

Bioactivity: Umbelliferone, a natural product of the coumarin family, is a fluorescing compound which can be used as a sunscreen agent.

Purity: 99.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



Undecanedioic acid

Cat. No.: HY-W014125

Bioactivity: Undecanedioic acid is associated with intercellular matrix macromolecules and specifically with elastin.

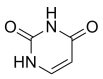
Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

Uracil

Cat. No.: HY-I0960

Bioactivity: Uracil is a common and naturally occurring pyrimidine derivative and one of the four nucleobases in the nucleic acid of RNA.

Purity: 98.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



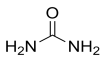
Urea

(Carbamide; Carbonyldiamide)

Cat. No.: HY-Y0271

Bioactivity: Urea is a powerful protein denaturant via both direct and indirect mechanisms [1]. A potent emollient and keratolytic agent [2]. Used as a diuretic agent. Blood urea nitrogen (BUN) has been utilized to evaluate renal function [3]

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

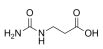


Ureidopropionic acid

Cat. No.: HY-113285

Bioactivity: Ureidopropionic acid is an intermediate in the metabolism of uracil.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

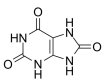


Uric acid

Cat. No.: HY-B2130

Bioactivity: Uric acid is an endogenous antioxidant that scavenges reactive oxygen species (ROS) including singlet oxygen, oxygen radicals, and peroxynitrite.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 1 g



Uridin

(β-Uridine)

Cat. No.: HY-B1449

Bioactivity: Uridin is a glycosylated pyrimidine-analog containing uracil attached to a ribose ring (or more specifically, aribofuranose) via a β-N1-glycosidic bond.

Purity: 99.99%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 100 mg, 500 mg

Uridine diphosphate glucose

Cat. No.: HY-113044

Bioactivity: Uridine diphosphate glucose is an important intermediate in several different metabolic pathways and biosynthetic reactions, including the biosynthesis of polysaccharides such as starch and glycogen, lipopolysaccharides, and glycosphingolipids.

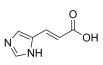
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Urocanic acid

Cat. No.: HY-113008

Bioactivity: Urocanic acid, produced in the upper layers of mammalian skin, is a major absorber of ultraviolet radiation (UVR).

Purity: 97.0%
Clinical Data:
Size: 1 g

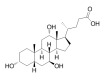


Ursocholic acid

Cat. No.: HY-113212

Bioactivity: Ursocholic acid, a bile acid found predominantly in bile of mammals, is an inhibitor of **7α-hydroxysteroid dehydrogenase** and **hepatocyte nuclear factor 1α**.

Purity: >98%
Clinical Data:
Size: 5 mg, 10 mg



Ursodiol

(Ursodeoxycholic acid; UDCS) Cat. No.: HY-13771

Bioactivity: Ursodiol reduces cholesterol absorption and is used to dissolve gallstones. Target: Others Ursodiol, also known as ursodeoxycholic acid and the abbreviation UDCA, is one of the secondary bile acids, which are metabolic byproducts of intestinal bacteria. The drug reduces cholesterol absorption...

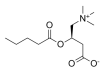
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

Valerylcarnitine

Cat. No.: HY-113266

Bioactivity: Valerylcarnitine is an endogenous metabolite, belonging to the short-chain acylcarnitines.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 5 mg



Vanillin (m-Methoxy-p-hydroxybenzaldehyde; p-Hydroxy-m-methoxybenzaldehyde; p-Vanillin)

Cat. No.: HY-N0098

Bioactivity: Vanillin is a single molecule extracted from vanilla beans and also a popular odor used widely in perfume, food and medicine.

Purity: 99.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 200 mg, 5 g

Vitamin D2

(Ergocalciferol; Calciferol; Ercalciol) Cat. No.: HY-76542

Bioactivity: Vitamin D2 (Ergocalciferol) is a form of vitamin D, used as a vitamin D supplement. Target: Ergocalciferol is a secosteroid formed by a photochemical bond breaking of a steroid, specifically, by the action of ultraviolet light on ergosterol.

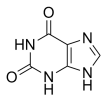
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g, 10 g

Xanthine

Cat. No.: HY-W017389

Bioactivity: Xanthine is a purine base found in most human body tissues and fluids and in other organisms.

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

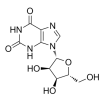


Xanthosine

Cat. No.: HY-W011527

Bioactivity: Xanthosine is a nucleoside derived from xanthine and ribose.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

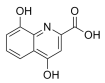


Xanthurenic acid

Cat. No.: HY-W014666

Bioactivity: Xanthurenic acid is a putative endogenous **Group II metabotropic glutamate receptor** agonist, on sensory transmission in the thalamus.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg



Xylose

(D-(+)-Xylose; (+)-Xylose; Wood sugar) Cat. No.: HY-N0537

Bioactivity: Xylose, a natural product, can be catalyzed into xylulose by xylose isomerase, and it is the key step for anaerobic ethanolic fermentation of xylose.

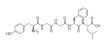
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

[Leu5]-Enkephalin

(Leu-enkephalin; Leucine enkephalin; Leucyl-enkephalin) Cat. No.: HY-P0288

Bioactivity: [Leu5]-Enkephalin is a pentapeptides with morphine like properties. [Leu5]-Enkephalin is a five amino acid endogenous peptide that acts as an agonist at **opioid receptors**.

Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 10 mg, 25 mg



β-Alanine

(2-Carboxyethylamine; 3-Aminopropanoic acid) **Cat. No.:** HY-N0230

Bioactivity: β-Alanine is a non-essential amino acid that is shown to be metabolized into carnosine, which functions as an intracellular buffer.

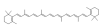
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

β-Carotene

(Provitamin A; beta-Carotene) **Cat. No.:** HY-N0411

Bioactivity: β-Carotene (Provitamin A) is an organic compound and classified as a terpenoid. It is a precursor (inactive form) of vitamin A.

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

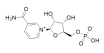


β-Nicotinamide mononucleotide

(β-NM) **Cat. No.:** HY-F0004

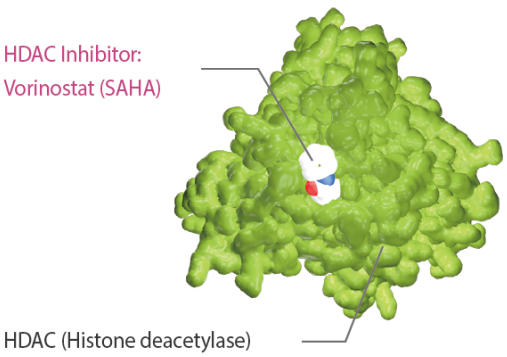
Bioactivity: β-nicotinamide mononucleotide is an intermediate in NAD+ biosynthesis produced from nicotinamide (NAM) and phosphoribosyl pyrophosphate (PRPP) by nicotinamide phosphoribosyl transferase enzyme with no toxicity.

Purity: 99.93%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg



Enolase

Phosphopyruvate hydratase



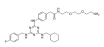
Enolase (phosphopyruvate hydratase) is a metalloenzyme responsible for the catalysis of the conversion of 2-phosphoglycerate (2-PG) tophosphoenolpyruvate (PEP), the ninth and penultimate step of glycolysis. Enolase belongs to the class Lyase. Enolase can also catalyze the reverse reaction, depending on environmental concentrations of substrates. The optimum pH for this enzyme is 6.5. Enolase is present in all tissues and organisms capable of glycolysis or fermentation. Small-molecule inhibitors of enolase have been synthesized as chemical probes of the catalytic mechanism of the enzyme. The most potent of inhibitors is phosphonoacetohydroxamate, which in its unprotonated form has pM affinity for the enzyme. It has structural similarity to the presumed catalytic intermediate, between PEP and 2-PG. Attempts have been made to use this inhibitor as an anti-trypanosome drug, and more recently, as an anti-cancer agent.

AP-III-a4

(ENOblock) Cat. No.: HY-15858

Bioactivity: ENOblock(AP-III-a4) is a novel small molecule which is the first, nonsubstrate analogue that directly binds to enolase and inhibits its activity (IC50=0.576 uM); inhibit cancer cell metastasis in vivo.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

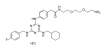


AP-III-a4 hydrochloride

(ENOblock hydrochloride) Cat. No.: HY-15858A

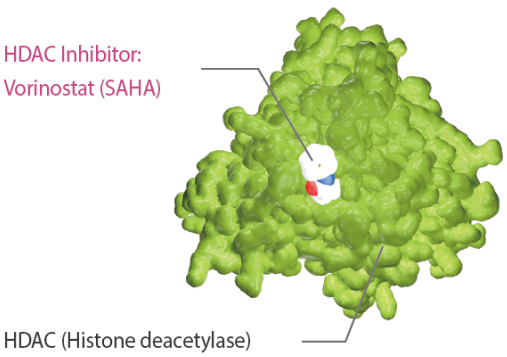
Bioactivity: ENOblock Hcl(AP-III-a4 Hcl) is a novel small molecule which is the first, nonsubstrate analogue that directly binds to enolase and inhibits its activity (IC50=0.576 uM); inhibit cancer cell metastasis in vivo. IC50 value: 0.576 uM [1] Target: enolase Enolase is a component of the glycolysis...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg



FAAH

Fatty acid amide hydrolase



FAAH (Fatty acid amide hydrolase) is an integral membrane enzyme that degrades the fatty acid amide family of signaling lipids, including the endocannabinoid anandamide. Genetic or pharmacological inactivation of FAAH leads to analgesic, anti-inflammatory, anxiolytic, and antidepressant phenotypes in rodents without showing the undesirable side effects observed with direct cannabinoid receptor agonists, indicating that FAAH may represent an attractive therapeutic target for treatment of pain, inflammation, and other central nervous system disorders.

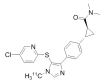
FAAH Inhibitors & Modulators

11C-MK-3168

Cat. No.: HY-111394

Bioactivity: 11C-MK-3168 is a potent, reversible and blood/brain barrier penetrated fatty acid amide hydrolase (**FAAH**) inhibitor, with **IC_{50}**s of 1.0, 1.7 and 5.5 nM for human, rat and rhesus FAAH, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

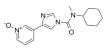


BIA 10-2474

Cat. No.: HY-19740

Bioactivity: BIA 10-2474 is an inhibitor of fatty acid amide hydrolase (**FAAH**) with **IC_{50}** values of 50 to 70mg/kg in various rat brain regions.

Purity: 98.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg



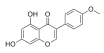
Biochanin A

(4-Methylgenistein; Olmelin)

Cat. No.: HY-14595

Bioactivity: Biochanin A is a naturally occurring fatty acid amide hydrolase (**FAAH**) inhibitor, which inhibits FAAH with **IC_{50}**s of 1.8, 1.4 and 2.4 μM for mouse, rat, and human FAAH, respectively.

Purity: 98.86%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
200 mg, 500 mg

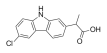


Carprofen

Cat. No.: HY-B1227

Bioactivity: Carprofen is a nonsteroid anti-inflammatory agent, acts as a multi-target **FAAH/COX** inhibitor, with **IC_{50}**s of 3.9 μM, 22.3 μM and 78.6 μM for COX-2, COX-1 and FAAH, respectively.

Purity: 99.76%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
100 mg

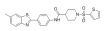


FAAH inhibitor 1

Cat. No.: HY-10862

Bioactivity: FAAH inhibitor 1 is a potent fatty acid amide hydrolase (FAAH) inhibitor with an IC50 of 18±8 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

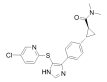


FAAH-IN-1

Cat. No.: HY-111389

Bioactivity: FAAH-IN-1 is a fatty acid amide hydrolase (**FAAH**) inhibitor, with **IC_{50}**s of 145 nM and 650 nM for rat and human FAAH, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

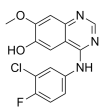


FAAH-IN-2

Cat. No.: HY-79511

Bioactivity: FAAH-IN-2 is a potent FAAH(fatty acid amide hydrolase) inhibitor extracted from Patent WO/2008/100977A2.

Purity: 96.16%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 g, 5 g

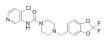


JNJ-42165279

Cat. No.: HY-19636

Bioactivity: JNJ-42165279 is a FAAH inhibitor with IC50 of 70 ± 8 nM and 313 ± 28 nM for hFAAH and rFAAH, respectively.

Purity: 99.97%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

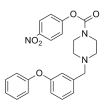


JZL195

Cat. No.: HY-15250

Bioactivity: JZL195 is a selective and efficacious dual FAAH/MAGL inhibitor with IC50 of 13 nM and 19 nM for mouse brain FAAH and MAGL respectively.

Purity: 99.75%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

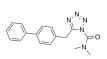


LY2183240

Cat. No.: HY-10865

Bioactivity: LY2183240 is a novel and highly potent blocker of anandamide uptake (IC50 = 270 pM). LY2183240 inhibits fatty acid amide hydrolase (FAAH) activity (IC50 = 12.4 nM). IC50: 270 pM (anandamide uptake); 12.4 nM (FAAH) Target: FAAH; Anandamide uptake Following i.p. administration in rats, LY2183240...

Purity: 99.07%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg



N-Benzylpalmitamide

(N-Benzylhexadecanamide; Macamide 1) Cat. No.: HY-N2365

Bioactivity: N-Benzylpalmitamide is a macamide isolated from Lepidium meyenii, acts as an inhibitor of **fatty acid amide hydrolase (FAAH)**.

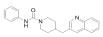
Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg

PF 750

Cat. No.: HY-18081

Bioactivity: PF 750 is a selective and covalent **fatty acid amide hydrolase (FAAH)** inhibitor, with **IC_{50}s** varied from 16.2-595 nM in different pre-incubation times. Covalently modifies the enzyme's active site serine nucleophile [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg

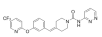


PF-04457845

Cat. No.: HY-14376

Bioactivity: PF-04457845 is a highly efficacious and selective **FAAH** inhibitor with **IC_{50}** values is 7.2±0.63 nM and 7.4±0.62 nM for **hFAAH** and **rFAAH**, respectively.

Purity: 99.09%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

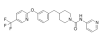


PF-3845

Cat. No.: HY-14380

Bioactivity: PF-3845 is a selective fatty acid amide hydrolase (FAAH) inhibitor (Ki = 0.23 μM); showing negligible activity against FAAH2.

Purity: 98.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

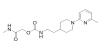


SA 47

Cat. No.: HY-18080

Bioactivity: SA 47 is a selective and potent inhibitor of **fatty acid amide hydrolase (FAAH)** and **carbamate** [1].

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

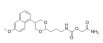


SA72

Cat. No.: HY-U00240

Bioactivity: SA72 is a highly selective **fatty acid amide hydrolase (FAAH)** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

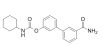


URB-597

(KDS-4103) Cat. No.: HY-10864

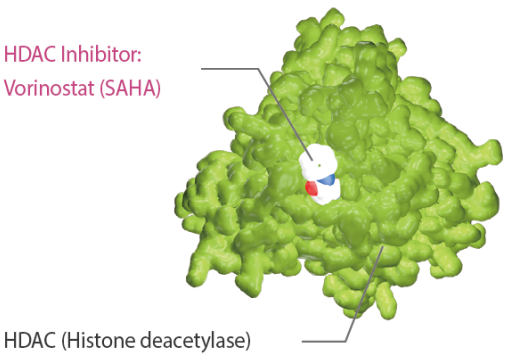
Bioactivity: URB597 is a potent, orally bioavailable FAAH inhibitor with IC50 of 4.6 nM, with no activity on other cannabinoid-related targets. IC50 value: 4.6 nM [1] Target: FAAH in vitro: URB597 binds in the hydrophobic pocket and catalytic core of FAAH that connects the active site residues to the membrane surface...

Purity: 98.71%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



FABP

Fatty acid-binding protein



Fatty acid-binding proteins (FABPs) are members of the intracellular lipid-binding protein (iLBP) family and are involved in reversibly binding intracellular hydrophobic ligands and trafficking them throughout cellular compartments, including the peroxisomes, mitochondria, endoplasmic reticulum and nucleus. FABPs are small, structurally conserved cytosolic proteins consisting of a water-filled, interior-binding pocket surrounded by ten anti-parallel beta sheets, forming a beta barrel. At the superior surface, two alpha-helices cap the pocket and are thought to regulate binding. FABPs have broad specificity, including the ability to bind long-chain (C16-C20) fatty acids, eicosanoids, bile salts and peroxisome proliferators.

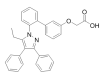
FABPs are ubiquitously expressed throughout tissues that are highly active in FA metabolism and comprise several isoforms. To date, nine FABP protein-coding genes have been identified in the human genome. These include liver (L-FABP), intestine- (I-FABP), heart- (H-FABP), adipocyte- (A-FABP), epidermal- (E-FABP), ileal- (Il-FABP), brain- (B-FABP), myelin- (M-FABP) and testis-FABP (T-FABP).

BMS-309403

Cat. No.: HY-101903

Bioactivity: BMS-309403 is a potent, selective and cell-permeable inhibitor of fatty acid binding protein 4 (**FABP4**) with a K_i of less than 2 nM.

Purity: 99.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

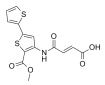


HTS01037

Cat. No.: HY-101503

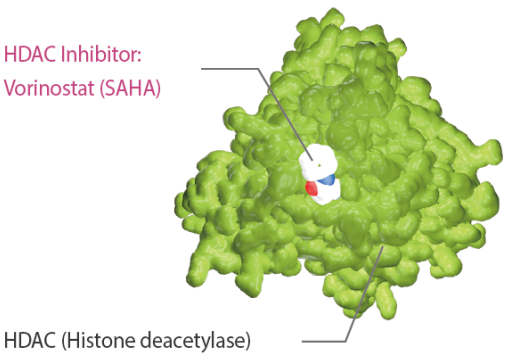
Bioactivity: HTS01037 is an inhibitor of **fatty acid** binding; and a competitive antagonist of **protein-protein** interactions mediated by AFABP/aP2 with a K_i of 0.67 μM.

Purity: 99.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Factor Xa

Fxa



Factor Xa is the activated form of the coagulation factor thrombokinase, known eponymously as Stuart-Prower factor. Factor X is an enzyme, a serine endopeptidase, which plays a key role at several stages of the coagulation system. Factor X is synthesized in the liver. Factor Xa has emerged as an attractive target for novel anticoagulants for its key position in the coagulation cascade and its limited roles outside of coagulation. The most commonly used anticoagulants in clinical practice, warfarin and the heparin series of anticoagulants and fondaparinux, act to inhibit the action of Factor Xa in various degrees. As a result, the past decade has witnessed an explosion of research into small-molecule, oral, direct Factor Xa inhibitors, and several are now in clinical development.

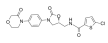
Factor Xa Inhibitors & Modulators

5-R-Rivaroxaban

Cat. No.: HY-76948

Bioactivity: 5-R-Rivaroxaban is (R)-enantiomer of Rivaroxaban. Rivaroxaban (BAY 59-7939) is a highly potent and selective, direct **Factor Xa** (**FXa**) inhibitor, achieving a strong gain in anti-FXa potency (**IC_{50}** 0.7 nM; **K_i** 0.4 nM).

Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



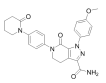
Apixaban

(BMS-562247-01)

Cat. No.: HY-50667

Bioactivity: Apixaban is a highly selective, reversible inhibitor of **Factor Xa** with **K_i** of 0.08 nM and 0.17 nM in human and rabbit, respectively.

Purity: 99.99%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



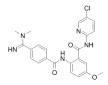
Betrixaban

(PRT054021)

Cat. No.: HY-10268

Bioactivity: Betrixaban is a highly potent, selective, and orally efficacious **factor Xa** (fXa) inhibitor with IC_{50} of 1.5 nM.

Purity: 98.85%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

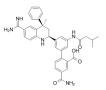


BMS-654457

Cat. No.: HY-12631

Bioactivity: BMS-654457 is a small-molecule, reversible inhibitor of factor XIa (**FXIa**), binding with human and rabbit FXIa with **K_i**s of 0.2 and 0.42 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



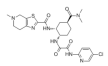
Edoxaban

(DU-176)

Cat. No.: HY-10264

Bioactivity: Edoxaban(DU-176) is an oral factor Xa (FXa) inhibitor in clinical development for stroke prevention IC50 Value: Target: factor Xa Edoxaban is an oral factor Xa (FXa) inhibitor in clinical development for stroke prevention in patients with atrial fibrillation, an elderly population that frequently...

Purity: >98%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



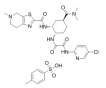
Edoxaban tosylate

(DU-176b)

Cat. No.: HY-10264A

Bioactivity: Edoxaban(DU-176) is an oral factor Xa (FXa) inhibitor in clinical development for stroke prevention IC50 Value: Target: factor Xa Edoxaban is an oral factor Xa (FXa) inhibitor in clinical development for stroke prevention in patients with atrial fibrillation, an elderly population that frequently...

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

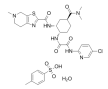


Edoxaban tosylate monohydrate

Cat. No.: HY-10264B

Bioactivity: Edoxaban tosylate monohydrate is an oral factor Xa (FXa) inhibitor in clinical development for stroke prevention IC50 Value: Target: factor Xa Edoxaban is an oral factor Xa (FXa) inhibitor in clinical development for stroke prevention in patients with atrial fibrillation, an elderly population that...

Purity: 99.85%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Fondaparinux sodium

(Fondaparin sodium; SR-90107A)

Cat. No.: HY-B0597

Bioactivity: Fondaparinux sodium is an antithrombin-dependent **factor Xa** inhibitor.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 25 mg, 50 mg

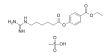
Gabexate mesylate

(FOY)

Cat. No.: HY-B0385

Bioactivity: Gabexate Mesylate is a Factor X inhibitor.

Purity: 98.51%
Clinical Data: Launched
Size: 10mM x 1mL in Water,
10 mg, 100 mg



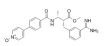
Otamixaban

(FXV673)

Cat. No.: HY-70035

Bioactivity: Otamixaban(FXV673) is a potent (Ki = 0.5 nM), selective, rapid acting, competitive and reversible fXa inhibitor that effectively inhibits both free and prothrombinase-bound fXa.

Purity: 97.78%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
10 mg, 100 mg



Ozagrel

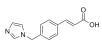
(OKY-046) Cat. No.: HY-B0428

Bioactivity: Ozagrel(OKY-046) is an antiplatelet agent working as a thromboxane A2 synthesis inhibitor. Target: Thromboxane A2 Synthase Ozagrel was selected as the best compound of highly selective inhibitors of TXA2 synthase. The inhibition of TXA2 synthase by ozagrel was more effective on human and rabbit...

Purity: 99.96%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Ozagrel sodium

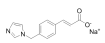
(OKY-046 sodium) Cat. No.: HY-B0428A

Bioactivity: Ozagrel sodium (OKY-046 sodium) is an antiplatelet agent working as a thromboxane A2 synthesis inhibitor.

Purity: 99.91%

Clinical Data: Launched

Size: 10mM x 1mL in Water,
5 mg, 10 mg, 50 mg, 100 mg



Rivaroxaban

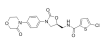
(BAY 59-7939) Cat. No.: HY-50903

Bioactivity: Rivaroxaban (BAY 59-7939) is a highly potentselective and direct **Factor Xa** (**FXa**) inhibitor, achieving a strong gain in anti-FXa potency ($\mathbf{IC_{50}}$ 0.7 nM; $\mathbf{K_i}$ 0.4 nM).

Purity: 99.91%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



RWJ-445167

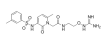
(3DP-10017) Cat. No.: HY-19373

Bioactivity: RWJ-445167 is a dual inhibitor of **thrombin** and **factor Xa** with $\mathbf{K_i}$ of 4.0 nM and 230 nM, respectively, exhibiting potent antithrombotic activity.

Purity: >98%

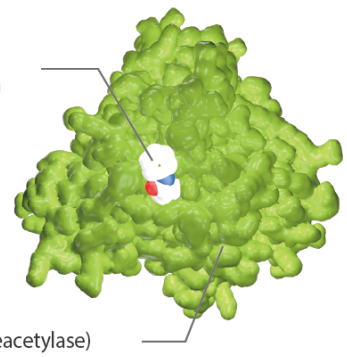
Clinical Data: No Development Reported

Size: 1 mg, 5 mg, 10 mg



Farnesyl Transferase

Ftase



Farnesyltransferase is one of the three enzymes in the prenyltransferase group. Farnesyltransferase's targets include members of the Ras superfamily of small GTP-binding proteins critical to cell cycle progression.

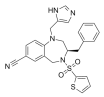
Farnesyltransferase inhibitors (FTIs) are small-molecule inhibitors that selectively inhibit farnesylation of a number of intracellular substrate proteins such as Ras. Farnesyl transferase inhibitors (FTIs) represent a new class of signaling inhibitors that is emerging in the clinical arena of hematologic malignancies and that may inhibit critical growth and survival signals. FTIs are a class of experimental cancer drugs that target protein farnesyltransferase with the downstream effect of preventing the proper functioning of the Ras (protein), which is commonly abnormally active in cancer.

BMS-214662

Cat. No.: HY-16111

Bioactivity: BMS-214662 is a potent and selective **farnesyl transferase** inhibitor with potent antitumor activity with an **IC_{50}** of 1.35 nM.

Purity: 99.69%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

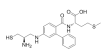


FTI 276

Cat. No.: HY-15873

Bioactivity: FTI-276 is a **protein farnesyl transferase (PFT)** inhibitor with **IC_{50}**s of 0.9 and 0.5 nM for Plasmodium falciparum and human.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

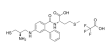


FTI 276 TFA

Cat. No.: HY-15873A

Bioactivity: FTI-276 is a **protein farnesyl transferase (PFT)** inhibitor with **IC_{50}**s of 0.9 nM and 0.5 nM for Plasmodium falciparum and human, respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

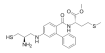


FTI-277

Cat. No.: HY-15872

Bioactivity: FTI-277 is an inhibitor of farnesyl transferase (FTase); a highly potent Ras CAAX peptidomimetic which antagonizes both H- and K-Ras oncogenic signaling.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

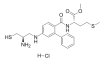


FTI-277 hydrochloride

Cat. No.: HY-15872A

Bioactivity: FTI-277 Hcl is an inhibitor of farnesyl transferase (FTase); a highly potent Ras CAAX peptidomimetic which antagonizes both H- and K-Ras oncogenic signaling.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



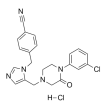
L-778123 hydrochloride

(L-778,123 hydrochloride)

Cat. No.: HY-16273A

Bioactivity: L-778123 hydrochloride is an inhibitor of FPTase and GGPTase-I with IC50 of 2 nM and 98 nM in enzyme inhibition determination.

Purity: 99.64%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

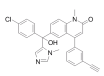


LNK754

Cat. No.: HY-U00401

Bioactivity: LNK754 is a **farnesyltransferase** inhibitor, used for the treatment of cancer and Alzheimer's disease.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



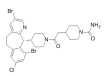
Lonafarnib

(Sch66336)

Cat. No.: HY-15136

Bioactivity: Lonafarnib is an orally bioavailable farnesyl protein transferase (**FPTase**) inhibitor for H-ras, K-ras and N-ras with **IC_{50}** of 1.9 nM, 5.2 nM and 2.8 nM, respectively.

Purity: 98.67%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg

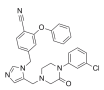


Prenyl-IN-1

Cat. No.: HY-U00327

Bioactivity: Prenyl-IN-1 is a protein prenylation inhibitor, especially a geranylgeranyltransferase (GGT) or a farnesyltransferase (FT) inhibitor, exhibiting potent activity against oxidative stress, and particularly in the treatment of Parkinson's Disease.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

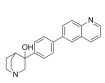


RPR107393 free base

Cat. No.: HY-100299

Bioactivity: RPR107393 free base is a selective **squalene synthase** inhibitor, which inhibits rat liver microsomal squalene synthase with an **IC_{50}** of 0.8±0.2 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

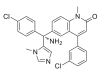


Tipifarnib

(IND 58359; R115777) Cat. No.: HY-10502

Bioactivity: Tipifarnib is a nonpeptidomimetic quinolinone with potential antineoplastic activity. Tipifarnib binds to and inhibits **farnesyltransferase (FTase)** with **IC_{50}** of 0.6 nM.

Purity: 99.89%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

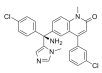


Tipifarnib S enantiomer

((S)-(-)-R-115777; IND-58359 S enantiomer) Cat. No.: HY-10502A

Bioactivity: Tipifarnib S enantiomer is the S-enantiomer of Tipifarnib. Tipifarnib is a potent and specific **farnesyltransferase (FTase)** inhibitor with **IC_{50}** of 0.6 nM. Tipifarnib S enantiomer is the less active isomer.

Purity: 99.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

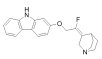


YM-53601 free base

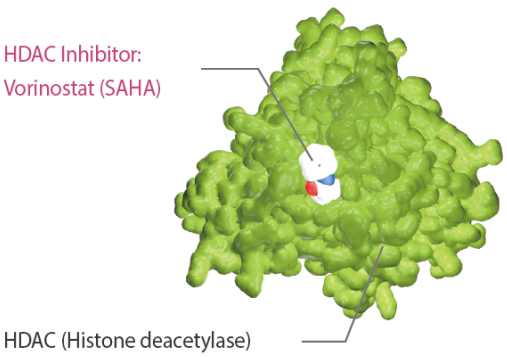
Cat. No.: HY-100313

Bioactivity: YM-53601 free base is a **squalene synthetase** inhibitor which suppresses lipogenic biosynthesis and lipid secretion in rodents.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Fatty Acid Synthase (FAS)



Fatty Acid Synthase (FAS) is a multifunctional homodimeric enzyme protein, and it is the major enzyme required for the anabolic conversion of dietary carbohydrates to fatty acids. Fatty acid synthase catalyzes the conversion of acetyl-CoA and malonyl-CoA, in the presence of NADPH, into long-chain saturated fatty acids.

Human fatty acid synthase is a large homodimeric multifunctional enzyme that synthesizes palmitic acid. The unique carboxyl terminal thioesterase domain of fatty acid synthase hydrolyzes the growing fatty acid chain and plays a critical role in regulating the chain length of fatty acid released. Also, the up-regulation of human fatty acid synthase in a variety of cancer makes the thioesterase a candidate target for therapeutic treatment.

Fatty acid synthase of animal tissues is a complex multifunctional enzyme consisting of two identical monomers.

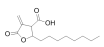
Fatty Acid Synthase (FAS) Inhibitors & Modulators

C75

Cat. No.: HY-12364

Bioactivity: C75 is a synthetic fatty-acid synthase (**FASN**) inhibitor; inhibits prostate cancer cells PC3 with an **IC_{50}** of 35 μM.

Purity: 99.86%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



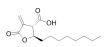
C75 trans

((±)-C75)

Cat. No.: HY-12364A

Bioactivity: C75 trans is an enantiomer of C75. C75 is a synthetic fatty-acid synthase (**FASN**) inhibitor.

Purity: 99.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

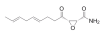


Cerulenin

Cat. No.: HY-A0210

Bioactivity: Cerulenin, the best known natural inhibitor of fatty acid synthase (**FAS**), is an epoxide produced by the fungus Cephalosporium caeruleus.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

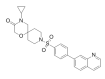


FAS-IN-1

Cat. No.: HY-12648

Bioactivity: FAS-IN-1 is a potent inhibitor of Fatty acid synthase (FAS) wtih IC50 of 10 nM, extracted from Patnet WO2012/064642Al.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

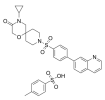


FAS-IN-1 Tosylate

Cat. No.: HY-12648A

Bioactivity: FAS-IN-1 Tosylate is a potent inhibitor of fatty acid synthase (**FAS**) extracted from patent WO 2012064642 A1, compound 29; has an **IC_{50}** of 10 nM.

Purity: 99.30%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

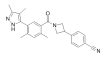


FASN inhibitor 1

Cat. No.: HY-U00436

Bioactivity: FASN inhibitor 1 is a **fatty acid synthase** (**FASN**) inhibitor extracted from patent US20170119786A1, compound 242A.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

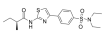


FASN-IN-1

Cat. No.: HY-111777

Bioactivity: FASN-IN-1 is a **fatty acid synthase (FASN)** inhibitor extracted from patent WO2015134790A1, compound 56 [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

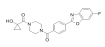


FT113

Cat. No.: HY-111551

Bioactivity: FT113 is a potent and orally active **fatty acid synthase (FASN)** inhibitor, with an **IC_{50}** of 213 nM for full-length recombinant human FASN enzyme. In cell-based assay, FT113 blocks FASN activity in BT474 cells (IC_{50}, 90 nM). FT...

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 500 mg, 250 mg

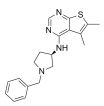


HS79

Cat. No.: HY-112522

Bioactivity: HS-79 is an enantiomer of Fasnall, which is a selective fatty acid synthase (FASN) inhibitor. HS-79 is able to inhibit the incorporation of tritiated acetate into lipids with an IC_{50} of 1.57 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

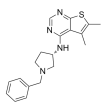


HS80

Cat. No.: HY-112522A

Bioactivity: HS-80 is an enantiomer of Fasnall, which is a selective fatty acid synthase (FASN) inhibitor. HS-80 is able to inhibit the incorporation of tritiated acetate into lipids with an IC_{50} of 7.13 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

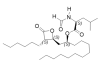


Orlistat

(Tetrahydrolipstatin; Ro-18-0647) **Cat. No.:** HY-B0218

Bioactivity: Orlistat is a **lipase** inhibitor for obesity management that acts by inhibiting the absorption of dietary fats.

Purity: 99.75%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg

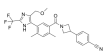


TVB-3664

Cat. No.: HY-120062

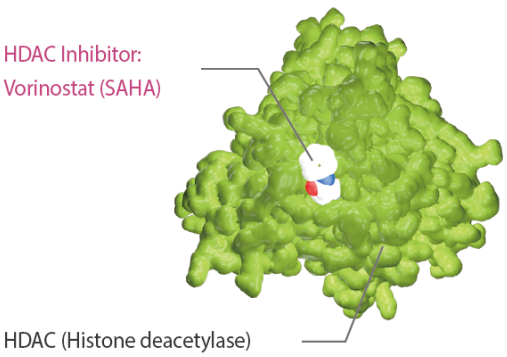
Bioactivity: TVB-3664 is an orally available, reversible, potent, selective and highly bioavailable **fatty acid synthase (FASN)** inhibitor, with $\mathbf{IC_{50}}$ values of 18 nM and 12 nM for human and mouse cell palmitate synthesis, respectively. TVB-3664 significantly reduces tubulin palmitoylation and mRNA...

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



FXR

FXR;NR1H4



Farnesoid X receptor (FXR) is a nuclear hormone receptor critically involved in the regulation of bile acid homeostasis. It is now recognized that bile acids serve as the natural ligands for FXR. Once activated, FXR in turn induces the expression of another nuclear hormone receptor, small heterodimer partner (SHP).

FXR, which is highly expressed in the liver, intestine, kidney, adrenal glands, and adipose tissue, is a master regulator of the synthesis and pleiotropic actions of endogenous bile acids (BAs).

FXR activation inhibits BA synthesis and has anti-inflammatory effects in atherosclerosis, inflammatory bowel disease, and experimental cholestasis, whereas TGR5 activation, via cAMP-mediated pathways, reduces proinflammatory cytokine production in macrophages and Kupffer cells.

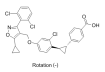
FXR Inhibitors & Modulators

(-)-PX20606 trans isomer

((-)-PX-102 trans isomer; (-)-PX-104) Cat. No.: HY-100443B

Bioactivity: (-)-PX20606 trans isomer is a **FXR** agonist with **EC_{50}**s of 18 and 29 nM for FXR in FRET and M1H assay, respectively.

Purity: 98.39%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 2 mg



Androsterone

(5α-Androstan-3α-ol-17-one) Cat. No.: HY-N0933

Bioactivity: Androsterone is a metabolic product of testosterone and can activate **Farnesoid X Receptor** (**FXR**).

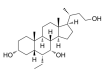
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 250 mg

BAR502

Cat. No.: HY-101273

Bioactivity: BAR502 is a dual **FXR** and **GPBAR1** agonist with **IC_{50}** values of 2 μM and 0.4 μM, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg



Chenodeoxycholic Acid

(CDCA) Cat. No.: HY-76847

Bioactivity: Chenodeoxycholic Acid is a hydrophobic primary bile acid that activates nuclear receptors (**FXR**) involved in cholesterol metabolism.

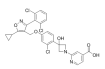
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Cilofexor

Cat. No.: HY-109083

Bioactivity: Cilofexor is a farnesoid X receptor **(FXR)** agonist.

Purity: 98.25%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

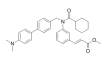


Fexaramine

Cat. No.: HY-10912

Bioactivity: Fexaramine is a small molecule farnesoid X receptor (FXR) agonist with 100-fold increased affinity relative to natural compounds. IC50 value: Target: in vitro: In vitro treatment of CDCA or fexaramine elevated the SHP transcript level and occupancy on secretin promoter [1]. Fexaramine significantly...

Purity: 98.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

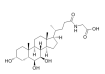


Gly-β-MCA

Cat. No.: HY-114392

Bioactivity: Gly-β-MCA, a bile acid, is a potent, sable, intestine-selective and oral bioactive farnesoid X receptor **(FXR)** inhibitor that may be a candidate for the treatment of metabolic disorders [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

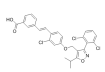


GW 4064

Cat. No.: HY-50108

Bioactivity: GW 4064 is a potent **FXR** agonist with **EC_{50}** of 65 nM.

Purity: 99.42%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

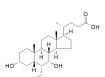


INT-747

(Obeticholic acid; 6-ECDCA; 6-Ethylchenodeoxycholic acid) Cat. No.: HY-12222

Bioactivity: INT-747 (Obeticholic acid; 6-ECDCA; 6-Ethylchenodeoxycholic acid) is a potent and selective **farnesoid X receptor (FXR)** agonist with an **EC_{50}** of 99 nM.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

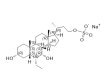


INT-767

Cat. No.: HY-12434

Bioactivity: INT-767 is a dual **farnesoid X receptor (FXR)/TGR5** agonist with mean **EC_{50}**s of 30 and 630 nM, respectively [1] [2].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

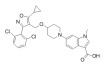


LY2562175

Cat. No.: HY-103704

Bioactivity: LY2562175 is a potent and selective **FXR** agonist with an **EC_{50}** of 193 nM.

Purity: 99.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg

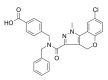


Nidufexor

Cat. No.: HY-109096

Bioactivity: Nidufexor is a **farnesoid X receptor (FXR)** agonist [1].

Purity: 99.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



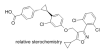
PX20606 trans racemate

(PX-102 trans racemate)

Cat. No.: HY-100443A

Bioactivity: PX20606 trans racemate is a **FXR** agonist with **EC_{50}**s of 32 and 34 nM for FXR in FRET and M1H assay, respectively.

Purity: 99.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 2 mg

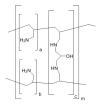


Sevelamer

Cat. No.: HY-13995

Bioactivity: Sevelamer is a phosphate binding drug used to treat hyperphosphatemia in patients with chronic kidney disease; consists of polyallylamine that is crosslinked with epichlorohydrin.

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 500 mg



Sevelamer hydrochloride

Cat. No.: HY-13995A

Bioactivity: Sevelamer Hcl is a phosphate binding drug used to treat hyperphosphatemia in patients with chronic kidney disease; consists of polyallylamine that is crosslinked with epichlorohydrin.

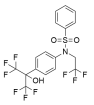
Purity: 98.0%
Clinical Data: Launched
Size: 100 mg, 500 mg

T0901317

Cat. No.: HY-10626

Bioactivity: T0901317 is a potent and selective agonist for **LXR** and **FXR**, with **EC_{50}**s of 50 nM and 5 μM, respectively.

Purity: 99.64%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg



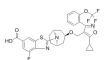
Tropifexor

(LJN452)

Cat. No.: HY-107418

Bioactivity: Tropifexor is a novel and highly potent agonist of **FXR** with an **EC_{50}** of 0.2 nM.

Purity: 99.33%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



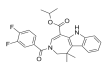
Turofexorate isopropyl

(WAY-362450; FXR-450; XL335)

Cat. No.: HY-50911

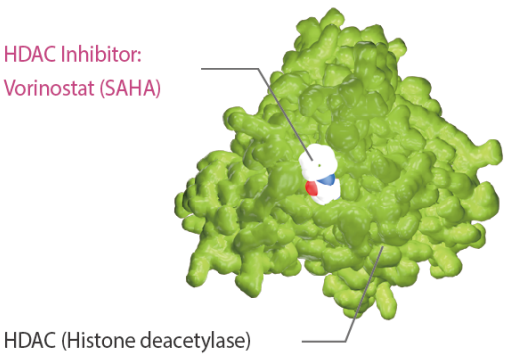
Bioactivity: Turofexorate isopropyl (WAY-362450) is a potent, selective, and orally bioavailable **FXR** agonist with **EC_{50}** of 4 nM.

Purity: 99.41%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Glucokinase

Hexokinase IV;Hexokinase D



Glucokinase is an enzyme that facilitates phosphorylation of glucose to glucose-6-phosphate. Glucokinase occurs in cells in theliver, pancreas, gut, and brain of humans and most other vertebrates. In each of these organs it plays an important role in the regulation of carbohydrate metabolism by acting as a glucose sensor, triggering shifts in metabolism or cell function in response to rising or falling levels of glucose, such as occur after a meal or when fasting. Glucokinase has a lower affinity for glucose than the other hexokinases do, and its activity is localized to a few cell types, leaving the other three hexokinases as more important preparers of glucose for glycolysis and glycogen synthesis for most tissues and organs. Mutations of the gene for this enzyme can cause unusual forms of diabetes or hypoglycemia.

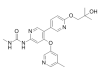
Glucokinase Inhibitors & Modulators

AM-2394

Cat. No.: HY-100221

Bioactivity: AM-2394 is a structurally distinct **glucokinase** activator (GKA). AM-2394 activates glucokinase (GK) with an EC_{50} of 60 nM.

Purity: 98.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

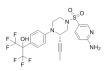


AMG-3969

Cat. No.: HY-12411

Bioactivity: AMG-3969 is a potent glucokinase-glucokinase regulatory protein interaction (**GK-GKRP**) disruptor with an IC_{50} of 4 nM.

Purity: 99.63%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

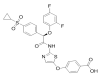


Glucokinase activator 1

Cat. No.: HY-101788

Bioactivity: Glucokinase activator 1 is a liver-directed **glucokinase** activator with an EC_{50} of 34 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

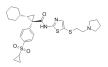


LY2608204

Cat. No.: HY-13529

Bioactivity: LY2608204 is a activator of glucokinase (GK) with EC50 of 42 nM.

Purity: 98.18%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



Palmitelaidic Acid

(9-trans-Hexadecenoic acid; trans-Palmitoleic acid)

Cat. No.: HY-N2341

Bioactivity: Palmitelaidic acid is the trans isomer of palmitoleic acid. Palmitoleic acid is one of the most abundant fatty acids in serum and tissue.

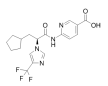
Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Ethanol, 10 mg

PF-04991532

Cat. No.: HY-100181

Bioactivity: PF-04991532 is a potent, hepatoselective **glucokinase** activator with EC_{50}s of 80 and 100 nM in human and rat, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

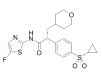


PSN-GK1

Cat. No.: HY-U00411

Bioactivity: PSN-GK1 is a potent **glucokinase** activator with an EC_{50} of 0.13 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

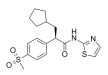


Ro 28-1675

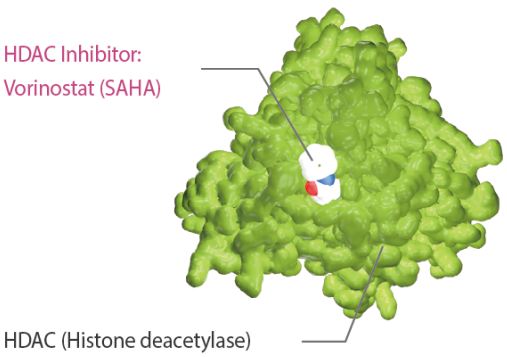
Cat. No.: HY-10595

Bioactivity: Ro 28-1675 (Ro 0281675) is a potent allosteric GK activator with a SC1.5 value of 0.24± 0.0019 uM. IC50 value: 0.24± 0.0019 uM (SC1.5) [1] Target: Glucokinase activator The R stereoisomer Ro 28-1675 activated GK with a SC1.5 of 0.24 uM, while the S isomer did not activated GK up to 10 uM. Oral...

Purity: 99.89%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Glutathione Peroxidase



Glutathione Peroxidase (GPx) is the general name of an enzyme family with peroxidase activity whose main biological role is to protect the organism from oxidative damage. Glutathione peroxidase functions to reduce lipid hydroperoxides to their corresponding alcohols and to reduce free hydrogen peroxide to water.

Glutathione peroxidase plays a role in the development of celiac disease. Several isozymes glutathione peroxidase are encoded by different genes, which vary in cellular location and substrate specificity. Glutathione peroxidase 1 (GPx1) is the most abundant version, existing in the cytoplasm of nearly all mammalian tissues, whose preferred substrate is hydrogen peroxide. Glutathione peroxidase 4 (GPx4) has a high preference for lipid hydroperoxides; it is expressed in almost all the mammalian cells, though at much lower levels. Glutathione peroxidase 2 is an intestinal and extracellular enzyme, while glutathione peroxidase 3 is extracellular, especially abundant in plasma. So far, eight different isoforms of glutathione peroxidase (GPx1-8) have been identified in humans.

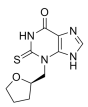
Glutathione Peroxidase Inhibitors & Modulators

AZD5904

Cat. No.: HY-111341

Bioactivity: AZD5904 is a potent and irreversible inhibitor of human **Myeloperoxidase** (**MPO**) with an **IC_{50}** of 140 nM and has similar potency in mouse and rat.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

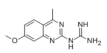


MPO-IN-28

Cat. No.: HY-115486

Bioactivity: MPO-IN-28 (Compound 28) is a **myeloperoxidase** (**MPO**) inhibitor with an **IC_{50}** of 44 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg

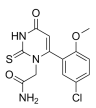


PF-06282999

Cat. No.: HY-19321

Bioactivity: PF-06282999 is a potent and selective **myeloperoxidase** inhibitor which is potential useful for the treatment of cardiovascular diseases.

Purity: 99.05%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



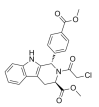
RSL3 1S,3R-

(1S,3R-RSL3)

Cat. No.: HY-100218A

Bioactivity: RSL3 (1S,3R-) is a **glutathione peroxidase 4 (GPX4)** inhibitor with an **EC_{50}** of 10 μM in cellular assay.

Purity: 99.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



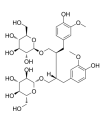
Secoisolariciresinol diglucoside

(SDG; LGM2605)

Cat. No.: HY-105008

Bioactivity: Secoisolariciresinol diglucoside (SDG; LGM2605) is a non-toxic free radical scavenger and antioxidant, reduces reduces **ROS** generation. Secoisolariciresinol diglucoside enhances activatation Nrf2 signaling, inhibits **myeloperoxidase (MPO)**.

Purity: 99.95%
Clinical Data: Phase 2
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



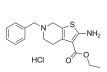
Tinoridine hydrochloride

(Y-3642 hydrochloride)

Cat. No.: HY-111354

Bioactivity: Tinoridine hydrochloride is a nonsteroidal anti-inflammatory drug and also has potent radical scavenger and antiperoxidative activity.

Purity: 98.07%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



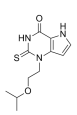
Verdiperstat

(AZD3241)

Cat. No.: HY-17646

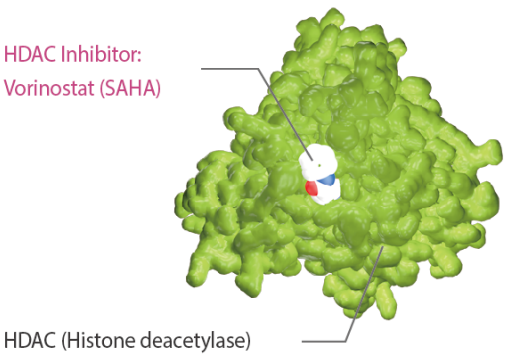
Bioactivity: Verdiperstat (AZD3241) is a selective, irreversible and orally active **myeloperoxidase** inhibitor, with an **IC_{50}** of 630 nM, and can be used in the research of neurodegenerative brain disorders.

Purity: 99.84%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



GSNOR

S-nitrosoglutathione reductase



S-Nitrosoglutathione reductase (GSNOR) is a member of the alcohol dehydrogenase family (ADH) that regulates the levels of S-nitrosothiols (SNOs) through catabolism of S-nitrosoglutathione (GSNO).

GSNOR reduces the nitric oxide (NO) adduct S-nitrosoglutathione (GSNO), an essential reservoir for NO bioactivity. In plants, GSNOR has been found to be important in resistance to bacterial and fungal pathogens. GSNOR is ubiquitously expressed and catalyzes denitrosylation of GSNO, thereby downregulating protein S-nitrosylation in β-cells.

GSNOR activity appears to be necessary for normal development and fertility under optimal growth conditions.

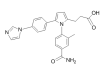
GSNOR Inhibitors & Modulators

N6022

Cat. No.: HY-14984

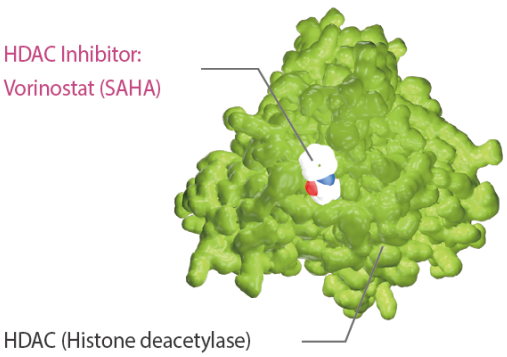
Bioactivity: N6022 is a potent, selective, reversible, and efficacious **S-Nitrosoglutathione reductase(GSNOR)** inhibitor with **IC_{50}** of 8 nM.

Purity: 98.62%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Gutathione S-transferase

Glutathione transferases;GSTs



Glutathione-S-transferases (GSTs) are a family of Phase II detoxification enzymes that catalyse the conjugation of glutathione (GSH) to a wide variety of endogenous and exogenous electrophilic compounds. GSTs are divided into two distinct super-family members: the membrane-bound microsomal and cytosolic family members. Microsomal GSTs are structurally distinct from the cytosolic in that they homo- and heterotrimerize rather than dimerize to form a single active site. Microsomal GSTs play a key role in the endogenous metabolism of leukotrienes and prostaglandins. Glutathione S-transferases (GSTs) function to protect cellular macromolecules from attack by reactive electrophiles. GSTs may be viable drug targets in disease states unrelated to cancer.

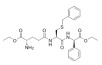
Gutathione S-transferase Inhibitors & Modulators

Ezatiostat

(TER199(free base); TLK199) Cat. No.: HY-13634A

Bioactivity: Ezatiostat (TER199 free base; TLK199) is a glutathione analog inhibitor of **glutathione S-transferase P1-1 (GSTP1-1)**.

Purity: 96.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

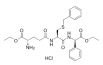


Ezatiostat hydrochloride

(TER199; TLK199 (hydrochloride)) Cat. No.: HY-13634

Bioactivity: Ezatiostat hydrochloride (TER199;TLK199 hydrochloride) is a glutathione analog inhibitor of **glutathione S-transferase P1-1 (GSTP1-1)**.

Purity: >98%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 50 mg, 100 mg

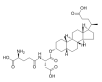


GSTO-IN-2

Cat. No.: HY-112534

Bioactivity: GSTO-IN-2 is a **glutathione S-transferase** inhibitor with IC_{50}s of 3.6, 16.3, and 1.4 μM for GSTA2, GSTM1, and GSTP1-1.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

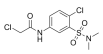


GSTO1-IN-1

Cat. No.: HY-111530

Bioactivity: GSTO1-IN-1 is a potent **glutathione S-transferase omega 1** (**GSTO1**) inhibitor with an IC_{50} of 31 nM.

Purity: 98.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg

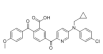


TK05

Cat. No.: HY-117143

Bioactivity: TK05 is a potent and selective inhibitor of **leukotriene C_4 synthase (LTC4S)** with an IC_{50} of 95 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

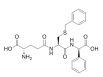


TLK117

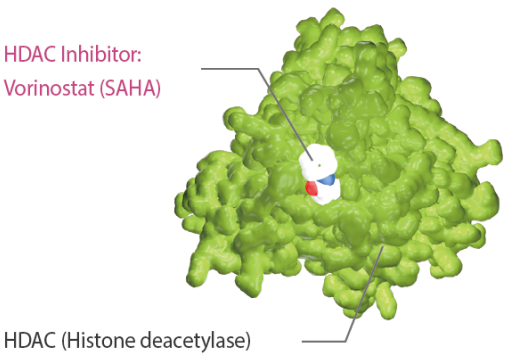
(TER117) Cat. No.: HY-13634B

Bioactivity: TLK117, the active metabolite of TLK199, selective inhibits **Glutathione S-transferase P1–1 (GSTP1-1)** with a K_i of 0.4 μM for GSTP. TLK117 also competitively inhibits **glyoxalase I** with a K_i of 0.56 μM.

Purity: 98.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg



HCV Protease



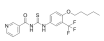
HCV NS3-4A serine protease is a non-covalent heterodimer consisting of a catalytic subunit (the N-terminal one-third of NS3 protein) and an activating cofactor (NS4A protein), and is responsible for cleavage at four sites of the HCV polyprotein. HCV NS3-4A protease is essential for viral replication in cell culture and in chimpanzees, and has been considered as one of the most attractive targets for developing novel anti-HCV therapies. However, discovery of small-molecule, selective inhibitors against HCV NS3-4A protease as oral drug candidates has been hampered by its shallow substrate-binding groove and the lack of robust, reproducible viral replication models in cell culture or in small animals.

ACH-806

(GS9132) Cat. No.: HY-19512

Bioactivity: ACH-806 is an **NS4A** antagonist which can inhibit Hepatitis C Virus (**HCV**) replication with an **EC_{50}** of 14 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

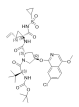


Asunaprevir

(BMS-650032) Cat. No.: HY-14434

Bioactivity: Asunaprevir is a potent **hepatitis C virus (HCV) NS3 protease** inhibitor, with **IC_{50}** of 0.2 nM-3.5 nM.

Purity: 99.27%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

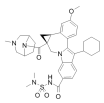


Beclabuvir

(BMS-791325) Cat. No.: HY-12429

Bioactivity: Beclabuvir is an allosteric inhibitor that binds to thumb site 1 of the hepatitis C virus (**HCV**) NS5B RNA-dependent RNA polymerase, and inhibits recombinant NS5B proteins from HCV genotypes 1, 3, 4, and 5 with **IC_{50}** of < 28 nM.

Purity: 99.81%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

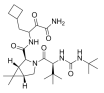


Boceprevir

(EBP 520; SCH 503034) Cat. No.: HY-10237

Bioactivity: Boceprevir is a novel, potent, highly selective, orally bioavailable **HCV NS3 protease** inhibitor with **K_i** of 14 nM in both enzyme assay and **EC_{90}** of 350 nM in cell-based replicon assay.

Purity: 99.12%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

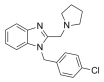


Clemizole

Cat. No.: HY-30234

Bioactivity: Clemizole is an **H1 histamine receptor** antagonist, is found to substantially inhibit **HCV** replication. The **IC_{50}** of Clemizole for RNA binding by **NS4B** is 24±1 nM, whereas its **EC_{50}** for viral replication is 8 μM.

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg

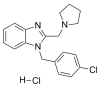


Clemizole hydrochloride

Cat. No.: HY-30234A

Bioactivity: Clemizole hydrochloride is an **H1 histamine receptor** antagonist, is found to substantially inhibit **HCV** replication. The **IC_{50}** of Clemizole for RNA binding by **NS4B** is 24±1 nM, whereas its **EC_{50}** for viral replication is 8 μM.

Purity: 99.32%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

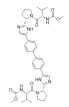


Daclatasvir

(BMS-790052; EBP 883) Cat. No.: HY-10466

Bioactivity: Daclatasvir is a potent **HCV NS5A** protein inhibitor, with mean **EC_{50}** values of 50 and 9 pM against genotype 1a and 1b replicons, respectively.

Purity: 99.31%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

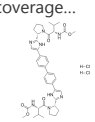


Daclatasvir dihydrochloride

(BMS-790052 dihydrochloride) Cat. No.: HY-10465

Bioactivity: Daclatasvir dihydrochloride (BMS-790052 dihydrochloride) is a highly selective inhibitor of HCV NS5A with EC50 of 9-50 pM, for a broad range of HCV replicon genotypes and the JFH-1 genotype 2a infectious virus in cell culture. IC50 Value: 9-50 pM Target: HCV NS5A Daclatasvir has broad genotype coverage...

Purity: 99.70%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

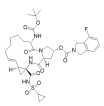


Danoprevir

(ITMN-191; R7227; RO5190591; RG7227) Cat. No.: HY-10238

Bioactivity: Danoprevir is a **NS3/4A protease** inhibitor for **hepatitis C virus (HCV)** with **IC_{50}** of 0.2-3.5 nM. The inhibition effect on HCV genotypes 1A/1B/4/5/6 is approximately 10-fold higher than 2B/3A.

Purity: 97.13%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

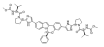


Elbasvir

(MK-8742) Cat. No.: HY-15789

Bioactivity: Elbasvir (MK-8742) is a hepatitis C virus nonstructural protein 5A (**HCV NS5A**) inhibitor with **EC_{50}**s of 4, 3 and 3 nM against genotype 1a, 1b, and 2a, respectively.

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

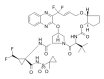


Glecaprevir

(ABT-493) Cat. No.: HY-17634

Bioactivity: Glecaprevir is a novel **HCV NS3/4A protease** inhibitor, with **IC_{50}** values ranging from 3.5 to 11.3 nM.

Purity: 99.65%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg

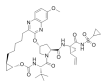


Grazoprevir

(MK-5172) Cat. No.: HY-15298

Bioactivity: Grazoprevir (MK-5172) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with **K_i**s of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

Purity: 99.21%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

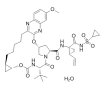


Grazoprevir hydrate

(MK-5172 (hydrate)) Cat. No.: HY-15298B

Bioactivity: Grazoprevir hydrate (MK-5172 hydrate) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with **K_i**s of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

Purity: 99.58%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

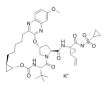


Grazoprevir potassium salt

(MK-5172 (potassium salt)) Cat. No.: HY-15298A

Bioactivity: Grazoprevir potassium salt (MK-5172 potassium salt) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with **K_i**s of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

Purity: 99.35%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

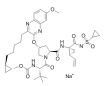


Grazoprevir sodium salt

(MK-5172 (sodium salt)) Cat. No.: HY-15298C

Bioactivity: Grazoprevir sodium salt (MK-5172 sodium salt) is a selective inhibitor of **Hepatitis C virus NS3/4a** protease with broad activity across genotypes and resistant variants, with **K_i**s of 0.01 nM (gt1b), 0.01 nM (gt1a), 0.08 nM (gt2a), 0.15 nM (gt2b), 0.90 nM (gt3a), respectively.

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

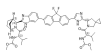


Ledipasvir

(GS-5885) Cat. No.: HY-15602

Bioactivity: Ledipasvir is an inhibitor of the **hepatitis C virus NS5A**, with **EC_{50}**s of 34 pM and 4 pM against genotype 1a and 1b replicon, respectively.

Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

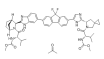


Ledipasvir acetone

(GS-5885 acetone) Cat. No.: HY-15602A

Bioactivity: Ledipasvir acetone is the active pharmaceutical ingredient of Ledipasvir. Ledipasvir is an inhibitor of the **hepatitis C virus NS5A**, with **EC_{50}** values of 34 pM against GT1a and 4 pM against GT1b replicon.

Purity: 99.95%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

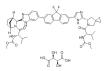


Ledipasvir D-tartrate

(GS-5885 D-tartrate) Cat. No.: HY-15602B

Bioactivity: Ledipasvir D-tartrate is an inhibitor of the **hepatitis C virus NS5A**, with **EC_{50}** values of 34 pM against GT1a and 4 pM against GT1b replicon.

Purity: 99.73%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

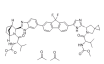


Ledipasvir diacetone

(GS-5885 diacetone) Cat. No.: HY-15602D

Bioactivity: Ledipasvir diacetone is the active pharmaceutical ingredient of Ledipasvir. Ledipasvir is an inhibitor of the **hepatitis C virus NS5A**, with **EC_{50}** values of 34 pM against GT1a and 4 pM against GT1b replicon.

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

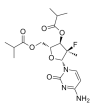


Mericitabine

(RG 7128; R-7128; PSI 6130 diisobutyrate) Cat. No.: HY-10240

Bioactivity: Mericitabine (R-7128) is a nucleoside inhibitor of the **HCV NS5B polymerase** that acts as an RNA chain terminator and prevents elongation of RNA transcripts during replication.

Purity: 99.34%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

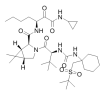


Narlaprevir

(SCH 900518) Cat. No.: HY-10300

Bioactivity: Narlaprevir is a potent, selective, orally bioavailable NS3 protease inhibitor(Ki=6 nM; EC90=40 nM)

Purity: 97.51%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

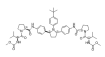


Ombitasvir

(ABT-267) Cat. No.: HY-13997

Bioactivity: Ombitasvir is a potent inhibitor of the **hepatitis C virus protein NS5A**, with **EC_{50}**s of 0.82 to 19.3 pM against HCV genotypes 1 to 5, and 366 pM against genotype 6a.

Purity: 99.79%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

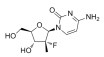


PSI-6130

(R 1656) Cat. No.: HY-10165

Bioactivity: PSI-6130 is a potent and selective inhibitor of **HCV NS5B polymerase**, and inhibits HCV replication with a mean **IC_{50}** of 0.6 μM.

Purity: 99.39%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

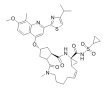


Simeprevir

(TMC435) Cat. No.: HY-10241

Bioactivity: Simeprevir is a potent **HCV NS3/4A protease** inhibitor which suppresses HCV replication with **EC_{50}** of 8 nM.

Purity: 99.34%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

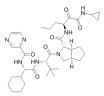


Telaprevir

(VX-950) Cat. No.: HY-10235

Bioactivity: Telaprevir is a highly selective, reversible, and potent peptidomimetic inhibitor of the **HCV NS3-4A protease**, the steady-state inhibitory constant (**K_i**) of Telaprevir is 7 nM against a genotype 1 (H strain) NS3 protease domain plus a NS4A cofactor peptide.

Purity: 99.89%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

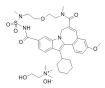


TMC647055 Choline salt

Cat. No.: HY-15591A

Bioactivity: TMC647055 choline salt is a cell-permeating, selective HCV NS5B inhibitor, eliciting a mean IC50 of 34 nM, as assessed in the RdRp primer-dependent transcription assay.

Purity: 99.75%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

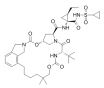


Vaniprevir

(MK-7009) Cat. No.: HY-10243

Bioactivity: Vaniprevir (MK-7009) is a non-covalent competitive inhibitor of the hepatitis C virus (HCV) NS3/4A protease. IC50 Value: Target: HCV NS3/4A Protease; HCV vaniprevir (MK-7009) is a macrocyclic hepatitis C virus NS3/4a protease inhibitor, is active against both the genotype 1 and genotype 2 NS3/4a...

Purity: 99.60%
Clinical Data: Launched
Size: 5 mg, 10 mg

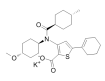


VCH-916

Cat. No.: HY-13465

Bioactivity: VCH-916 is a novel nonnucleoside HCV NS5B polymerase inhibitor.

Purity: 99.51%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

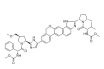


Velpatasvir

(GS-5816) Cat. No.: HY-12530

Bioactivity: Velpatasvir (VEL, GS-5816) is a novel pan-genotypic hepatitis C virus (HCV) nonstructural protein 5A (NS5A) inhibitor with activity against genotype 1 (GT1) to GT6 HCV replicons.

Purity: 99.95%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

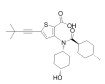


VX-222

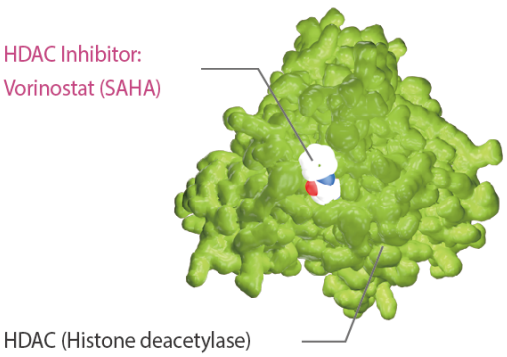
(VCH-222) Cat. No.: HY-75800

Bioactivity: VX-222 (VCH-222) is a novel, potent and selective inhibitor of HCV polymerase with IC50 of 0.94-1.2 μM, 15.3-fold less effective for mutant M423T, and 108-fold less effective for mutant I482L. IC50 Value: 0.94 μM (HCV NS5B 1a); 1.2 μM (HCV NS5B 1b) Target: HCV VX-222 is a small molecule non-nucleoside...

Purity: 99.76%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



Hexokinase



Hexokinases (HK) play a central role in cellular glucose metabolism. Hexokinasescatalyse the first obligatory step of glucose metabolism, the ATP-dependent phosphorylation of glucose (Glc) to yield glucose-6-phosphate (Glc-6-P). In addition to maintaining the downhill concentration gradient that permits facilitated glucose entry into cells, this reaction constitutes the first step of all major pathways of glucose utilization, including glycolysis, the pentose phosphate pathway, (PPP) and glycogenesis. As such hexokinases are uniquely positioned to influence the extent and direction of glucose flux within the cell. The PPP represents the principal cellular source of NADPH and plays important roles in redox homeostasis, anabolism and nucleotide synthesis (Rib-5-P, ribulose 5-phosphate). Similarly, glycolysis and glycogenesis play important roles in energy metabolism and storage, respectively. Other important cellular functions, including hexosamine and nucleotide sugar generation for glycosaminoglycan and glycoprotein biosynthesis, also require Glc-6-P as a precursor (UDP-Glc, uridine diphosphate glucose; UDP-GlcNAc, uridine diphosphate N-acetylglucosamine).

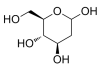
Hexokinase Inhibitors & Modulators

2-Deoxy-D-glucose

(2-Deoxy-D-arabino-hexose; D-Arabino-2-deoxyhexose) Cat. No.: HY-13966

Bioactivity: 2-Deoxy-D-glucose is a glucose analog that acts as a competitive inhibitor of glucose metabolism, inhibiting glycolysis via its actions on **hexokinase**.

Purity: 99.0%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 1 g, 5 g

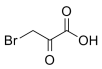


3-Bromopyruvic acid

(Bromopyruvic acid; Hexokinase II Inhibitor II, 3-BP) Cat. No.: HY-19992

Bioactivity: 3-Bromopyruvic acid is a hexokinase II inhibitor, is an effective antitumor agent on the hepatoma cells.

Purity: 99.33%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g, 5 g, 10 g, 25 g

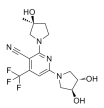


KHK-IN-2

Cat. No.: HY-103478

Bioactivity: KHK-IN-2 is a potent and selective **ketohexokinase (KHK)** inhibitor with an $\mathbf{IC_{50}}$ of 0.45 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg, 100 mg

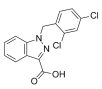


Lonidamine

(DICA; Diclondazolic Acid; AF1890) Cat. No.: HY-B0486

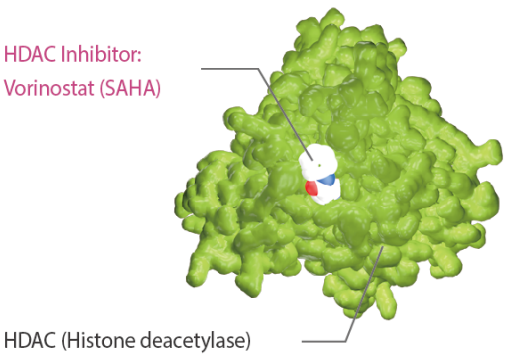
Bioactivity: Lonidamine, a antitumor agent, is a **hexokinase**, **mitochondrial pyruvate carrier** ($\mathbf{K_i}$ 2.5 μM in isolated rat liver mitochondria) and **plasma membrane monocarboxylate transporters** inhibitor, which also inhibits mitochondr...

Purity: 95.45%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



HIF/HIF Prolyl-Hydroxylase

Hypoxia-inducible factors;HIFs;HIF-PH



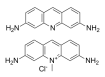
HIFs (Hypoxia-inducible factors) are transcription factors that respond to changes in available oxygen in the cellular environment, to be specific, to decreases in oxygen, or hypoxia. The HIF signaling cascade mediates the effects of hypoxia, the state of low oxygen concentration, on the cell. Hypoxia often keeps cells from differentiating. However, hypoxia promotes the formation of blood vessels, and is important for the formation of a vascular system in embryos, and cancer tumors. The hypoxia in wounds also promotes the migration of keratinocytes and the restoration of the epithelium. In general, HIFs are vital to development. In mammals, deletion of the HIF-1 genes results in perinatal death. HIF-1 has been shown to be vital to chondrocyte survival, allowing the cells to adapt to low-oxygen conditions within the growth plates of bones. HIF plays a central role in the regulation of human metabolism. Recently, several drugs that act as selective HIF prolyl-hydroxylase inhibitors have been developed.

Acriflavine

Cat. No.: HY-100575

Bioactivity: Acriflavine is a fluorescent dye for labeling high molecular weight RNA. It is also a topical antiseptic.

Purity: 98.62%
Clinical Data: Launched
Size: 100 mg

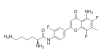


AFP464

Cat. No.: HY-16031

Bioactivity: AFP464, is an active **HIF-1α** inhibitor with an **IC_{50}** of 0.25 μM, also is a potent **aryl hydrocarbon receptor (AhR)** activator.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



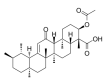
AKBA

(Acetyl-11-keto-β-boswellic acid)

Cat. No.: HY-N0892

Bioactivity: Acetyl-11-Keto-β-Boswellic Acid (AKBA) is an active triterpenoid compound from the extract of Boswellia serrate; a novel Nrf2 activator. IC50 value: Target: Nrf2 activator in vitro: AKBA significantly reduced infarct volumes and apoptotic cells, and also increased neurologic scores by...

Purity: 99.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



BAY 87-2243

Cat. No.: HY-15836

Bioactivity: BAY 87-2243 is a highly potent and selective hypoxia-inducible factor-1 (**HIF-1**) inhibitor.

Purity: 99.41%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

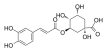
Chlorogenic acid

(3-O-Caffeoylquinic acid; Heriguard; NSC-407296)

Cat. No.: HY-N0055

Bioactivity: Chlorogenic acid is a major phenolic compound in coffee and tea. It plays several important and therapeutic roles such as antioxidant activity, antibacterial, hepatoprotective, cardioprotective, anti-inflammatory, antipyretic, neuroprotective, anti-obesity, antiviral, anti-microbial,...

Purity: 99.29%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 500 mg



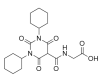
Daprodustat

(GSK1278863)

Cat. No.: HY-17608

Bioactivity: Daprodustat (GSK1278863) is an orally active **hypoxia-inducible factor prolyl hydroxylase** inhibitor being developed for the treatment of anemia associated with chronic kidney disease.

Purity: 99.39%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



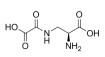
Dencichin

(Dencichine; L-Dencichin; ODAP)

Cat. No.: HY-N1477

Bioactivity: Dencichin is a non-protein amino acid originally extracted from Panax notoginseng, and can inhibit **HIF-prolyl hydroxylase-2 (PHD-2)** activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

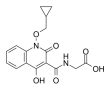


Desidustat

Cat. No.: HY-103227

Bioactivity: Desidustat is an inhibitor of **HIF hydroxylase** extracted from patent WO 2014102818 A1, compound example 2.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg



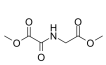
DMOG

(Dimethyloxallyl Glycine)

Cat. No.: HY-15893

Bioactivity: DMOG (Dimethyloxallyl Glycine) is a cell-permeable and competitive inhibitor of **HIF-1α prolyl hydroxylase (HIF-PH)**.

Purity: 99.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg, 500 mg

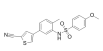


EL-102

Cat. No.: HY-16187

Bioactivity: EL102 is a inhibitor of HIF1α , Which can inhibit tubulin polymerisation and decreased microtubule stability.

Purity: 99.07%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

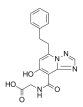


Enarodustat

(JTZ-951) Cat. No.: HY-109057

Bioactivity: Enarodustat is a potent and orally active **factor prolyl hydroxylase** inhibitor, with an $\mathbf{EC_{50}}$ of 0.22 μM; Enarodustat has entered clinical trial for renal anemia.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

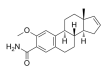


ENMD-119

(ENMD 1198; IRC 110160) Cat. No.: HY-16196

Bioactivity: ENMD-119 is a 2-methoxyestradiol analogue with antiproliferative and antiangiogenic activity, and is suitable for inhibiting HIF-1α and STAT3 in human HCC cells.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

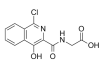


FG-2216

(YM-311) Cat. No.: HY-15641

Bioactivity: FG-2216 is a potent HIF-prolyl hydroxylase inhibitor with IC50 of 3.9 uM for PDH2 enzyme; orally bioavailable and induced significant and reversible Epo induction in vivo.

Purity: 99.31%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

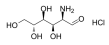


Glucosamine hydrochloride (D-(+)-Glucosamine hydrochloride; Chitosamine hydrochloride)

Cat. No.: HY-N0733

Bioactivity: Glucosamine (hydrochloride) is a natural product. IC50 value: Target: In vitro: Glucosamine hydrochloride exhibited dose-dependent DPPH antioxidant activity [1]. Short-term (4 h) glucosamine hydrochloride treatment inhibited HIF-1α at the protein level, decreased phosphorylation of p70S6K and S6,...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water,
50 mg

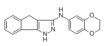


GN44028

Cat. No.: HY-110266

Bioactivity: GN44028 is a **hypoxia inducible factor (HIF)-1** inhibitor, with an $\mathbf{IC_{50}}$ of 14 nM. GN44028 inhibits hypoxia-induced HIF-1α transcriptional activity without suppressing HIF-1α mRNA expression, HIF-1α protein accumulation, or HIF-1α/HIF...

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg

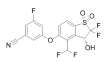


HIF-2α-IN-1

Cat. No.: HY-19949

Bioactivity: HIF-2α-IN-1 is a HIF-2α inhibitor has an IC50 of less than 500 nM in HIF-2α scintillation proximity assay.

Purity: 99.45%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg

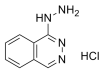


Hydralazine hydrochloride

Cat. No.: HY-B0464

Bioactivity: Hydralazine Hydrochloride is a direct-acting vasodilator that is used as an antihypertensive agent.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water,
100 mg, 500 mg

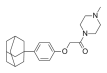


IDF-11774

Cat. No.: HY-111387

Bioactivity: IDF-11774 is a novel **hypoxia-inducible factor** (**HIF**) **-1** inhibitor with an $\mathbf{IC_{50}}$ of 3.65μM. IDF-11774 has been approved as a clinical candidate for a phase I study.

Purity: 98.04%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg

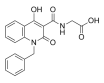


IOX2

Cat. No.: HY-15468

Bioactivity: IOX2 is a specific prolyl hydroxylase-2 (**PHD2**) inhibitor with $\mathbf{IC_{50}}$ of 22 nM.

Purity: 98.41%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

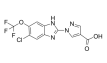


JNJ-42041935

Cat. No.: HY-12832

Bioactivity: JNJ-42041935 is a potent, competitive and selective inhibitor of prolyl hydroxylase **PHD**; inhibits PHD1, PHD2, and PHD3 with $\mathbf{pK_i}$ values of 7.91±0.04, 7.29 ±0.05, and 7.65±0.09, respectively.

Purity: 99.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg

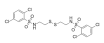


KC7F2

Cat. No.: HY-18777

Bioactivity: KC7F2 is a potent HIF-1 pathway inhibitor and that its potential as a cancer therapy agent warrants further study.

Purity: 99.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



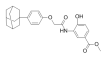
LW6

(HIF-1α inhibitor; LW8)

Cat. No.: HY-13671

Bioactivity: LW6 is a novel **HIF-1** inhibitor with an **IC_{50}** of 4.4 μM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

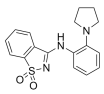


M1001

Cat. No.: HY-111547

Bioactivity: M1001 is a weak agonist of **HIF-2α**, directly binds to the HIF-2α PAS-B domain, with a **K_d** of 667 nM. M1001 enhances the stabilities of HIF-2α-ARNT complex [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

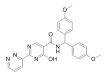


MK-8617

Cat. No.: HY-101023

Bioactivity: MK-8617 is an orally active pan-inhibitor of hypoxia-inducible factor prolyl hydroxylase 1-3 (**HIF PHD1-3**) with an **IC_{50}** of 1 nM for **PHD2**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg



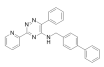
ML228

(CID-46742353)

Cat. No.: HY-12754

Bioactivity: ML228(CID-46742353) is an activator of the Hypoxia Inducible Factor (HIF) pathway; potently activate HIF in vitro as well as its downstream target VEGF.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



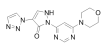
Molidustat

(BAY 85-3934)

Cat. No.: HY-12654

Bioactivity: Molidustat (BAY 85-3934) is a novel inhibitor of hypoxia-inducible factor prolyl hydroxylase (**HIF-PH**) with mean **IC_{50}** values of 480 nM for PHD1, 280 nM for PHD2, and 450 nM for PHD3.

Purity: 98.33%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Oltipraz

(RP 35972; NSC 347901)

Cat. No.: HY-12519

Bioactivity: Oltipraz has an inhibitory effect on HIF-1α activation in a time-dependent manner, completely abrogating HIF-1α induction at ≥10 μM concentrations, the IC50 of Oltipraz for HIF-1α inhibition is 10 μM.

Purity: 99.82%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

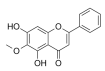
Oroxylin A

(Baicalein 6-methyl ether; 6-Methoxybaicalein)

Cat. No.: HY-N0560

Bioactivity: Oroxylin A is a natural active flavonoid with strong anticancer effects. IC50 value: Target: In vitro: Oroxylin A suppressed the MDM2-mediated degradation of p53 via downregulating MDM2 transcription in wt-p53 cancer cells [1]. Oroxylin A remarkably reduced the generation of lactate and...

Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



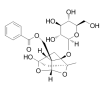
Paeoniflorin

(Peoniflorin)

Cat. No.: HY-N0293

Bioactivity: Paeoniflorin is a herbal constituent extracted from the root of Paeonia albiflora Pall. Target: Others Paeoniflorin (PF) is the principal bioactive component of Radix Paeo- niae alba, which is widely used in Traditional Chinese Medicine for the treatment of neurodegenerative disorders such as Parkinson's...

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg

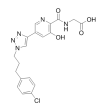


Prolyl Hydroxylase inhibitor 1

Cat. No.: HY-112441

Bioactivity: Prolyl Hydroxylase inhibitor 1 (Compound 15i) is an orally active hypoxia inducible factor (**HIF**)-prolyl hydroxylase (**PHD**) inhibitor with an **IC_{50}** of 62.23 nM [1]. Antianemia agent [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 100 mg, 250 mg

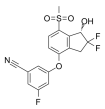


PT-2385

Cat. No.: HY-12867

Bioactivity: PT-2385 is a selective **HIF-2α** inhibitor with a K_i of less than 50 nM [1] [2].

Purity: 99.48%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

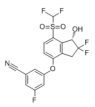


PT2399

Cat. No.: HY-108697

Bioactivity: PT2399 is an inhibitor of **HIF2α** [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

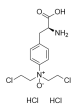


PX-478

Cat. No.: HY-10231

Bioactivity: PX-478 is an antitumor inhibitor of hypoxia-inducible factor-1α (**HIF-1α**).

Purity: 98.0%
Clinical Data: Phase 1
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 50 mg, 100 mg



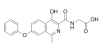
Roxadustat

(FG-4592)

Cat. No.: HY-13426

Bioactivity: Roxadustat (FG-4592) is an oral **hypoxia-inducible factor prolyl-hydroxylase** inhibitor (HIF-PHI) that promotes erythropoiesis through increasing endogenous erythropoietin, improving iron regulation, and reducing hepcidin [1].

Purity: 99.91%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g

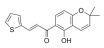


SYP-5

Cat. No.: HY-100693

Bioactivity: SYP-5 is a novel **HIF-1** inhibitor, suppresses tumor cells invasion and angiogenesis.

Purity: 98.06%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

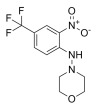


THS-044

Cat. No.: HY-19621

Bioactivity: THS-044 binding stabilizes the HIF2α PAS-B folded state, for regulating HIF2 activity in endogenous and clinical settings.

Purity: 98.48%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

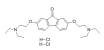


Tilorone dihydrochloride

Cat. No.: HY-B1080

Bioactivity: Tilorone dihydrochloride is the first recognized synthetic, small molecular weight compound that is an orally active interferon inducer, used as an antiviral drug.

Purity: 99.80%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 100 mg, 500 mg

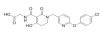


TP0463518

Cat. No.: HY-112144

Bioactivity: TP0463518 is a potent hypoxia-inducible factor prolyl hydroxylases (**PHD**s) inhibitor with a K_i value of 5.3 nM for **human PHD2**. TP0463518 also inhibits **human PHD1**/ **PHD3** with IC_{50}s of 18 and 63 nM as well as **monkey PHD2** with...

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



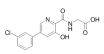
Vadadustat

(PG-1016548; AKB-6548)

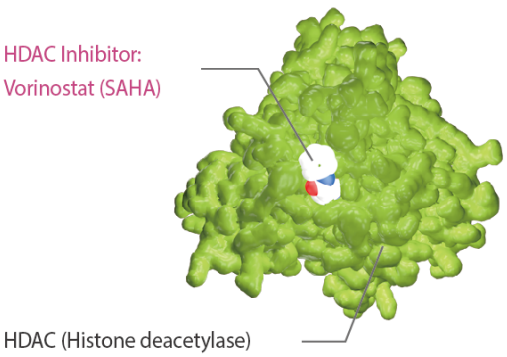
Cat. No.: HY-101277

Bioactivity: Vadadustat is a novel, titratable, oral hypoxia-inducible factor prolyl hydroxylase (**HIF-PH**) inhibitor in development for the treatment of anemia.

Purity: 99.63%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg



HIV Integrase



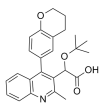
HIV Integrase is an enzyme produced by a HIV that enables its genetic material to be integrated into the DNA of the infected cell. IN is a key component in the retroviral pre-integration complex (PIC). All retroviral integrase proteins contain three canonical domains, connected by flexible linkers: an N-terminal HH-CC zinc-binding domain, a catalytic core domain and a C-terminal DNA-binding domain. Integration occurs following production of the double-stranded viral DNA by the viral RNA/DNA-dependent DNA polymerase reverse transcriptase. The main function of IN is to insert the viral DNA into the host chromosomal DNA, a step that is essential for HIV replication. Integration is a point of no return for the cell, which becomes a permanent carrier of the viral genome (provirus). Integration is in part responsible for the persistence of retroviral infections.

(±)-BI-D

Cat. No.: HY-18601

Bioactivity: (±)-BI-D is a potent ALLINI(An allosteric IN inhibitor) that binds integrase at the LEDGF/p75 binding site.

Purity: 96.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

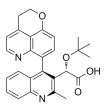


BI 224436

Cat. No.: HY-18595

Bioactivity: BI 224436 is a novel **HIV-1** noncatalytic site integrase inhibitor with **EC_{50}** values of less than 15 nM against different HIV-1 laboratory strains.

Purity: 98.17%
Clinical Data: Phase 1
Size: 5 mg, 10 mg, 50 mg, 100 mg



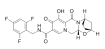
Bictegravir

(GS-9883)

Cat. No.: HY-17605

Bioactivity: Bictegravir is a novel, potent inhibitor of **HIV-1 integrase** with an **IC_{50}** of 7.5 nM.

Purity: 98.27%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

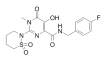


BMS-707035

Cat. No.: HY-13269

Bioactivity: BMS-707035 is an HIV-1 integrase (IN) inhibitor with an IC50 value of 15 nM.

Purity: 99.95%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



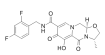
Cabotegravir

(GSK-1265744; S/GSK1265744)

Cat. No.: HY-15592

Bioactivity: Cabotegravir is a potent HIV integrase inhibitor as an oral lead-in tablet and long-acting injectable for the treatment and prevention of HIV infection. Cabotegravir is an inhibitor of OAT1 (IC50 0.81 μM) and OAT3 (IC50 0.41 μM).

Purity: 99.85%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



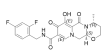
Dolutegravir

(S/GSK1349572; GSK1349572)

Cat. No.: HY-13238

Bioactivity: Dolutegravir is a second-generation HIV integrase strand transfer inhibitor (**INSTI**) with an **IC_{50}** of 2.7 nM.

Purity: 99.54%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



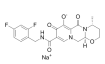
Dolutegravir sodium

(GSK-1349572A)

Cat. No.: HY-13238A

Bioactivity: Dolutegravir sodium is an inhibitor of **HIV-1** integrase-catalyzed strand transfer with **IC_{50}** of 2.7 nM.

Purity: 97.02%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



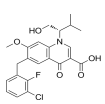
Elvitegravir

(GS-9137; JTK-303; D06677)

Cat. No.: HY-14740

Bioactivity: Elvitegravir is an **HIV integrase** inhibitor for HIV-1_{IIIB}, HIV-2_{EHO} and HIV-2_{ROD} with **IC_{50}** of 0.7 nM, 2.8 nM and 1.4 nM, respectively.

Purity: 99.92%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

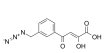


HIV-1 integrase inhibitor

Cat. No.: HY-13025

Bioactivity: HIV-1 integrase inhibitor is uesful for anti-HIV.

Purity: 98.64%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

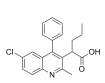


HIV-1 integrase inhibitor 2

Cat. No.: HY-10522

Bioactivity: HIV-1 integrase inhibitor 2, in the treatment of human immunodeficiency virus (HIV) infection.

Purity: 99.41%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

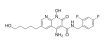


HIV-1 integrase inhibitor 3

Cat. No.: HY-108817

Bioactivity: HIV-1 integrase inhibitor 3 is a **HIV-1 integrase strand transfer** (**INST**) inhibitor with an **IC_{50}** of 2.7 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

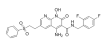


HIV-1 integrase inhibitor 4

Cat. No.: HY-108820

Bioactivity: HIV-1 integrase inhibitor 4 is a **HIV-1 integrase strand transfer** (**INST**) inhibitor with an **IC_{50}** of 3.7 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

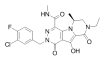


MK-2048

Cat. No.: HY-13305

Bioactivity: MK-2048 is a potent inhibitor of integrase and INR263K with IC50 of 2.6 nM and 1.5 nM, respectively.

Purity: 98.0%
Clinical Data: Phase 1
Size: 1 mg



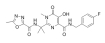
Raltegravir

(MK-0518)

Cat. No.: HY-10353

Bioactivity: Raltegravir is a potent **integrase (IN)** inhibitor, used to treat HIV infection.

Purity: 98.11%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



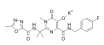
Raltegravir potassium salt

(MK 0518 potassium salt)

Cat. No.: HY-10353A

Bioactivity: Raltegravir (potassium salt) is a potent **integrase (IN)** inhibitor, used to treat HIV infection.

Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



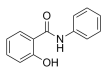
Salicylanilide

(2-Hydroxybenzanilide)

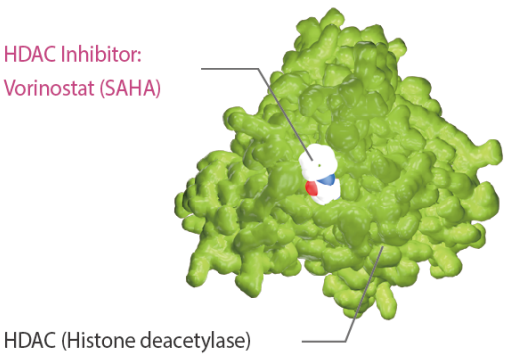
Cat. No.: HY-B1408

Bioactivity: Salicylanilide demonstrates a wide range of biological activities including antiviral potency which can inhibit **HIV virus** by targeting **HIV-1 integrase** or **reverse transcriptase**.

Purity: 99.60%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



HIV Protease



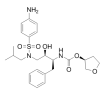
HIV Protease is a retroviral aspartyl protease that is essential for the life-cycle of HIV, the retrovirus that causes AIDS. HIV protease cleaves newly synthesized polyproteins at the appropriate places to create the mature protein components of an infectious HIV virion. Without effective HIV protease, HIV virions remain uninfectious. Thus, mutation of HIV protease's active site or inhibition of its activity disrupts HIV's ability to replicate and infect additional cells, making HIV protease inhibition the subject of considerable pharmaceutical research. Mutations enable HIV to avoid treatments that involve only one drug, so there is growing use of multiple-drug therapies in which both a protease inhibitor AND a reverse transcript inhibitor are combined.

HIV Protease Inhibitors & Modulators

Amprenavir
(VX-478) Cat. No.: HY-17430

Bioactivity: Amprenavir (VX-478) is a HIV protease inhibitor(Ki=0.6 nM) used to treat HIV infection.

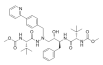
Purity: 99.61%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 5 mg, 25 mg, 50 mg



Atazanavir
(BMS-232632) Cat. No.: HY-17367

Bioactivity: Atazanavir(BMS-232632) is an highly potent HIV-1 protease inhibitor.

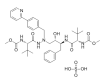
Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



Atazanavir sulfate
(BMS-232632 sulfate) Cat. No.: HY-17367A

Bioactivity: Atazanavir sulfate is a sulfate salt form of atazanavir that is an highly potent HIV-1 protease inhibitor. Target: HIV-1 protease inhibitor Atazanavir sulfate is a sulfate salt form of atazanavir that is an highly potent HIV-1 protease inhibitor. It has a pharmacokinetic profile that supports...

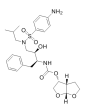
Purity: 99.64%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



Darunavir
(TMC114) Cat. No.: HY-17040

Bioactivity: Darunavir(TMC114) is an HIV protease inhibitor. IC50 Value: Target: HIV Protease Darunavir HIV-1 antiviral structurally is similar to amprenavir and it is second generation HIV-1-protease inhibitor. Darunavir is a drug used to treat HIV infection. It is in the protease inhibitor class. Prezista...

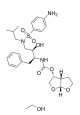
Purity: 99.39%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



Darunavir Ethanolate
(TMC114 (Ethanolate)) Cat. No.: HY-17041

Bioactivity: Darunavir ethanolate (TMC114 Ethanolate) is a potent **HIV** protease inhibitor used to treat and prevent HIV/AIDS. Darunavir has a $\mathbf{K_i}$ of 1 nM for wild type HIV-1 protease.

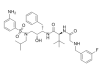
Purity: 99.73%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



DPC-681
(DPH-153893) Cat. No.: HY-19400

Bioactivity: DPC-681 is a potent and selective inhibitor of HIV protease with IC90s for wild-type HIV-1 of 4 to 40 nM.

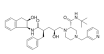
Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg



Indinavir
(MK-639; L-735524) Cat. No.: HY-B0689

Bioactivity: Indinavir(MK-639; L735524) is a potent and specific HIV protease inhibitor that appears to have good oral bioavailability. Target: HIV Protease Indinavir(MK-639) is a protease inhibitor used as a component of highly active antiretroviral therapy (HAART) to treat HIV infection and...

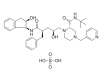
Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



Indinavir sulfate
(MK-639 sulfate; L735524 sulfate) Cat. No.: HY-B0689A

Bioactivity: Indinavir sulfate(MK-639 sulfate; L735524 sulfate) is a potent and specific HIV protease inhibitor that appears to have good oral bioavailability. Target: HIV Protease Indinavir(MK-639) is a protease inhibitor used as a component of highly active antiretroviral therapy (HAART) to treat HIV...

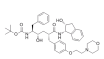
Purity: 99.50%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg



L-689502
Cat. No.: HY-U00261

Bioactivity: L-689502 is a potent inhibitor of **HIV-I protease** with an $\mathbf{IC_{50}}$ of 1 nM.

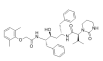
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Lopinavir
(ABT-378) Cat. No.: HY-14588

Bioactivity: Lopinavir is a potent HIV protease inhibitor with Ki of 1.3 pM.

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 250 mg

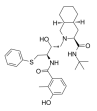


Nelfinavir

(AG1341) Cat. No.: HY-15287

Bioactivity: Nelfinavir(AG-1341) is a potent and orally bioavailable human immunodeficiency virus HIV-1 protease inhibitor (Ki=2 nM) and is widely prescribed in combination with HIV reverse transcriptase inhibitors for the treatment of HIV infection. IC50 Valur: 2 nM (Ki for HIV-1 protease) [2] Target: HIV...

Purity: 98.16%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

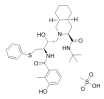


Nelfinavir Mesylate

(AG 1343 Mesylate) Cat. No.: HY-15287A

Bioactivity: Nelfinavir(AG-1341) is a potent and orally bioavailable human immunodeficiency virus HIV-1 protease inhibitor (Ki=2 nM) and is widely prescribed in combination with HIV reverse transcriptase inhibitors for the treatment of HIV infection.

Purity: 99.02%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

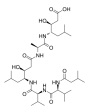


Pepstatin

(Pepstatin A) Cat. No.: HY-P0018

Bioactivity: Pepstatin is a specific **aspartic protease** inhibitor produced by actinomycetes, with **IC_{50}**s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease,...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

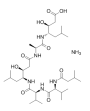


Pepstatin Ammonium

(Pepstatin A Ammonium) Cat. No.: HY-P0018B

Bioactivity: Pepstatin Ammonium is a specific **aspartic protease** inhibitor produced by actinomycetes, with **IC_{50}**s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease,...

Purity: 99.35%
Clinical Data: No Development Reported
Size: 10 mg, 25 mg, 50 mg

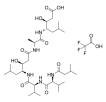


Pepstatin Trifluoroacetate

(Pepstatin A Trifluoroacetate) Cat. No.: HY-P0018A

Bioactivity: Pepstatin Trifluoroacetate is a specific **aspartic protease** inhibitor produced by actinomycetes, with **IC_{50}**s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease,...

Purity: 99.11%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

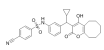


PNU-103017

Cat. No.: HY-19236

Bioactivity: PNU-103017 is an **HIV protease** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

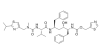


Ritonavir

(ABT 538; RTV) Cat. No.: HY-90001

Bioactivity: Ritonavir (ABT 538) is an inhibitor of **HIV protease** used to treat HIV infection and AIDS.

Purity: 99.68%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 500 mg

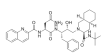


Saquinavir

(Ro 31-8959) Cat. No.: HY-17007

Bioactivity: Saquinavir(Ro 31-8959) is an HIV Protease inhibitor used in antiretroviral therapy.

Purity: 99.91%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

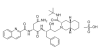


Saquinavir Mesylate

(Ro 31-8959/003) Cat. No.: HY-17003

Bioactivity: Saquinavir mesylate is an HIV Protease Inhibitor used in antiretroviral therapy. IC50 Value: Target: HIV Protease Saquinavir is a protease inhibitor. Proteases are enzymes that cleave protein molecules into smaller fragments. HIV protease is vital for both viral replication within the cell and...

Purity: 99.79%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

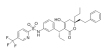


Tipranavir

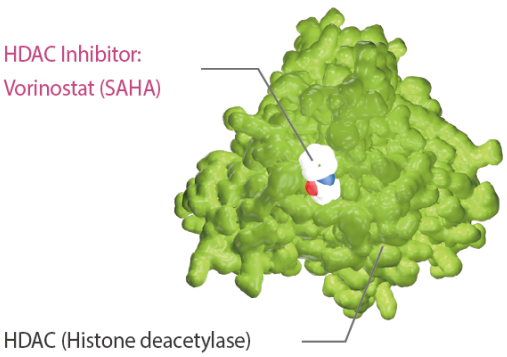
(PNU-140690) Cat. No.: HY-15148

Bioactivity: Tipranavir (PNU-140690) inhibits the enzymatic activity and dimerization of **HIV-1 protease**, exerts potent activity against multi-protease inhibitor (PI)-resistant HIV-1 isolates with **IC_{50}**s of 66-410 nM.

Purity: 99.13%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg



HMG-CoA Reductase (HMGCR)



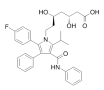
HMG-CoA Reductase (HMGCR) is the rate-controlling enzyme of the mevalonate pathway, the metabolic pathway that produces cholesterol and other isoprenoids. Normally in mammalian cells this enzyme is suppressed by cholesterol derived from the internalization and degradation of low density lipoprotein (LDL) via the LDL receptor as well as oxidized species of cholesterol. Competitive inhibitors of the reductase induce the expression of LDL receptors in the liver, which in turn increases the catabolism of plasma LDL and lowers the plasma concentration of cholesterol, an important determinant of atherosclerosis. HMG-CoA reductase is thus the target of the widely available cholesterol-lowering drugs known collectively as the statins. HMG-CoA reductase is anchored in the membrane of the endoplasmic reticulum, and was long regarded as having seven transmembrane domains, with the active site located in a long carboxyl terminal domain in the cytosol.

Atorvastatin

Cat. No.: HY-B0589

Bioactivity: Atorvastatin is an inhibitor of HMG-CoA reductase used as a cholesterol-lowering medication that blocks the production of cholesterol.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg

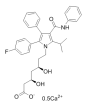


Atorvastatin hemicalcium salt

(CI-981; Atorvastatin hemicalcium) Cat. No.: HY-17379

Bioactivity: Atorvastatin hemicalcium salt is a potent **HMG-CoA reductase** inhibitor with an **IC_{50}** value of 8 nM.

Purity: 99.98%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg, 200 mg, 500 mg

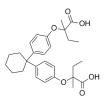


Clinofibrate

(S-8527) Cat. No.: HY-13528

Bioactivity: Clinofibrate (S-8527) is a hypelipidemic agent and a **HMG-CoA** reductase inhibitor.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg

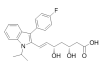


Fluvastatin

(XU 62320) Cat. No.: HY-14664

Bioactivity: Fluvastatin (XU 62320) inhibits HMG-CoA reductase activity with IC $_{50}$ of 8 nM.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg

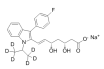


Fluvastatin D6 sodium

(XU 62320 D6 sodium) Cat. No.: HY-14664AS

Bioactivity: Fluvastatin (XU 62320) D6 sodium is deuterium labeled Fluvastatin sodium, which is a competitive inhibitor of hydroxymethylglutaryl-coenzyme A reductase (HMGCR).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

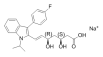


Fluvastatin sodium

(XU 62320 sodium) Cat. No.: HY-14664A

Bioactivity: Fluvastatin (XU 62320) sodium is a competitive inhibitor of hydroxymethylglutaryl-coenzyme A reductase (HMGCR), used to treat hypercholesterolemia and to prevent cardiovascular disease.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water,
50 mg, 100 mg

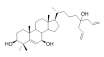


HMG499

Cat. No.: HY-114316

Bioactivity: HMG499 is a potent and selective **HMG-CoA reductase** inhibitor with an **IC_{50}** of 0.41 μM. HMG499 can prevent statins-induced accumulation of HMGCR, reduce serum cholesterol levels and decrease atherosclerosis [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

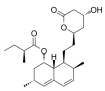


Lovastatin

(Mevinolin) Cat. No.: HY-N0504

Bioactivity: Lovastatin is a cell-permeable **HMG-CoA reductase** inhibitor used to lower cholesterol.

Purity: 99.47%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg, 200 mg

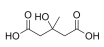


Meglutol

(Dicrotalic acid; 3-Hydroxy-3-methylglutaric acid) Cat. No.: HY-B1189

Bioactivity: Meglutol is an antilipemic agent which lowers cholesterol, triglycerides, serum beta-lipoproteins and phospholipids, and inhibits the activity of hydroxymethylglutarryl CoA reductases, which is the rate limiting enzyme in the biosynthesis of cholesterol.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg

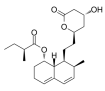


Mevastatin

(Compactin; ML236B) Cat. No.: HY-17408

Bioactivity: Mevastatin (Compactin; ML236B) inhibits HMGCR (HMG-CoA reductase) (Ki for acid form is 1 nM) which in turn inhibits isoprenoid biosynthesis and therefore blocks protein isoprenylation and reduces plasma cholesterol levels in humans. IC50 value: 1 nM (Ki) Target: HMGCR Mevastatin induces...

Purity: 98.45%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg

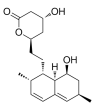


Monacolin J

(Antibiotic MB 530A; Lovastatin diol lactone) Cat. No.: HY-104051

Bioactivity: Monacolin J is an inhibitor of cholesterol biosynthesis, and inhibits the activity of **HMG-CoA reductase**.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



Nicodicosapent

Cat. No.: HY-17640

Bioactivity: Nicodicosapent is a fatty acid niacin conjugate that is also an inhibitor of the sterol regulatory element binding protein (SREBP), a key regulator of cholesterol metabolism proteins such as PCSK9, HMG-CoA reductase, ATP citrate lyase, and NPC1L1.

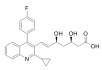
Purity: 98.19%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 50 mg, 100 mg

Pitavastatin

(NK-104) Cat. No.: HY-B0144A

Bioactivity: Pitavastatin (NK-104) is a potent HMG-CoA reductase inhibitor, Pitavastatin inhibited cholesterol synthesis from acetic acid with an IC50 of 5.8 nM in a human liver cancer cell line (HepG2).

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

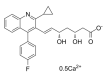


Pitavastatin Calcium

(Pitavastatin (hemicalcium); NK-104 (hemicalcium)) Cat. No.: HY-B0144

Bioactivity: Pitavastatin Calcium is a potent **hydroxymethylglutaryl-CoA (HMG-CoA) reductase** inhibitor. Pitavastatin inhibits cholesterol synthesis from acetic acid with an **IC_{50}** of 5.8 nM in HepG2 cells.

Purity: 99.94%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg

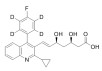


Pitavastatin D4

(NK-104 D4) Cat. No.: HY-B0144AS

Bioactivity: Pitavastatin D4 is deuterium labeled Pitavastatin, which is a potent HMG-CoA reductase inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

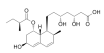


Pravastatin

(CS-514) Cat. No.: HY-B0165

Bioactivity: Pravastatin (CS-514) is an HMG-CoA reductase inhibitor against sterol synthesis with IC_{50} of 5.6 μM.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

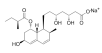


Pravastatin sodium

(CS-514 (sodium)) Cat. No.: HY-B0165A

Bioactivity: Pravastatin (sodium) (CS-514 (sodium)) is an HMG-CoA reductase inhibitor against sterol synthesis with IC_{50} of 5.6 μM.

Purity: 99.32%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg, 200 mg

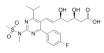


Rosuvastatin

(ZD 4522) Cat. No.: HY-17504A

Bioactivity: Rosuvastatin is a competitive inhibitor of HMG-CoA reductase with IC50 of 11 nM. IC50 Value: 11 nM [1] Target: HMG-CoA reductase in vitro: Rosuvastatin is relatively hydrophilic and is highly selective for hepatic cells; its uptake is mediated by the liver-specific organic anion transporter OATP-C....

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

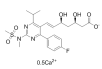


Rosuvastatin Calcium

(Rosuvastatin hemicalcium; ZD 4522 Calcium) Cat. No.: HY-17504

Bioactivity: Rosuvastatin Calcium is a competitive inhibitor of HMG-CoA reductase with IC50 of 11 nM. IC50 Value: 11 nM [1] Target: HMG-CoA reductase in vitro: Rosuvastatin is relatively hydrophilic and is highly selective for hepatic cells; its uptake is mediated by the liver-specific organic anion...

Purity: 97.73%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg, 200 mg

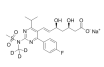


Rosuvastatin D3 Sodium

Cat. No.: HY-17504BS

Bioactivity: Rosuvastatin D3 Sodium is deuterium labeled Rosuvastatin, which is a competitive inhibitor of HMG-CoA reductase with IC50 of 11 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

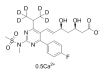


Rosuvastatin D6 Calcium

Cat. No.: HY-17504S

Bioactivity: Rosuvastatin D6 Calcium is deuterium labeled Rosuvastatin, which is a competitive inhibitor of HMG-CoA reductase with IC50 of 11 nM.

Purity: 98.54%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

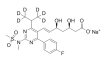


Rosuvastatin D6 Sodium

Cat. No.: HY-17504BS1

Bioactivity: Rosuvastatin D6 Sodium is deuterium labeled Rosuvastatin, which is a competitive inhibitor of HMG-CoA reductase with IC50 of 11 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg



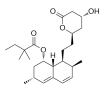
Simvastatin

(MK 733)

Cat. No.: HY-17502

Bioactivity: Simvastatin (MK 733) is a competitive inhibitor of **HMG-CoA reductase** with a K_i of 0.2 nM.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
50 mg, 100 mg, 200 mg, 500 mg



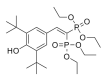
SR12813

(GW 485801)

Cat. No.: HY-100793

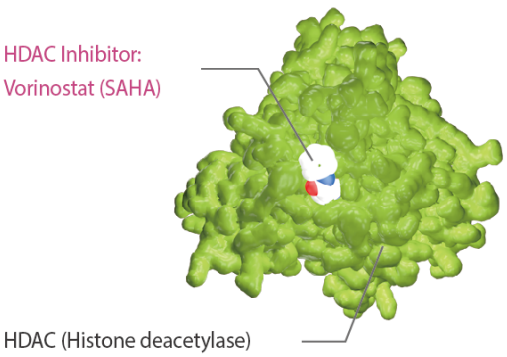
Bioactivity: SR12813 is an inhibitor of **3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase**, with an IC_{50} value of 0.85 μM.

Purity: 99.04%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg



HSP

Heat shock proteins



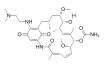
HSP (Heat shock proteins) are a group of proteins induced by heat shock, the most prominent members of this group are a class of functionally related proteins involved in the folding and unfolding of other proteins. HSP expression is increased when cells are exposed to elevated temperatures or other stress. This increase in expression is transcriptionally regulated. The dramatic upregulation of the heat shock proteins is a key part of the heat shock response and is induced primarily by heat shock factor (HSF). HSPs are found in virtually all living organisms, from bacteria to humans. Heat shock proteins appear to serve a significant cardiovascular role. Hsp90, Hsp84, Hsp70, Hsp27, Hsp20 and alpha B crystallin all have been reported as having roles in the cardiovasculature.

Alvespimycin

(17-DMAG; NSC 707545) Cat. No.: HY-10389

Bioactivity: Alvespimycin is a potent inhibitor of **Hsp90**, binding to Hsp90 with an EC_{50} of 62 ± 29 nM.

Purity: >98%
Clinical Data: Phase 2
Size: 1 mg

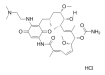


Alvespimycin hydrochloride

(17-DMAG hydrochloride; KOS-1022; BMS 826476) Cat. No.: HY-12024

Bioactivity: Alvespimycin hydrochloride is a potent inhibitor of **Hsp90**, binding to Hsp90 with EC_{50} of 62±29 nM.

Purity: 99.32%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
10 mg, 25 mg, 100 mg, 200 mg

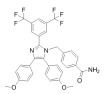


Apoptozole

(Apoptosis Activator VII) Cat. No.: HY-15098

Bioactivity: Apoptozole is an inhibitor of the ATPase domain of **Hsc70** and **Hsp70**, with K_ds of 0.21 and 0.14 μM, respectively, and can induce apoptosis.

Purity: 99.57%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

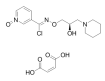


Arimoclomol maleate

(BRX-220) Cat. No.: HY-106443A

Bioactivity: Arimoclomol maleate (BRX-220) is a co-inducer of heat shock proteins (**HSP**).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

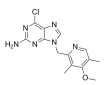


BIIB021

(CNF2024) Cat. No.: HY-10212

Bioactivity: BIIB021 is an orally available, fully synthetic inhibitor of **HSP90** with K_i and EC_{50} of 1.7 nM and 38 nM, respectively.

Purity: 99.93%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg

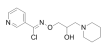


Bimoclomol

Cat. No.: HY-U00398

Bioactivity: Bimoclomol is a **heat shock protein (HSP)** coinducer, used for treatment of cardiovascular diseases.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

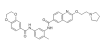


CCT251236

Cat. No.: HY-101026

Bioactivity: CCT251236 is an orally available pirin ligand from a heat shock transcription factor 1 (hsf1) phenotypic screen with an IC_{50} of 19 nM for inhibition of HSF1-mediated **HSP72** induction.

Purity: 99.03%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg

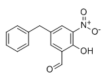


Col003

Cat. No.: HY-124817

Bioactivity: Col003 is a potent inhibitor of **Hsp47**, competitively binds to the collagen binding site on Hsp47 (IC_{50}, 1.8 μM), and inhibits collagen secretion by destabilizing the collagen triple helix [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg

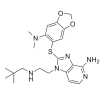


Debio 0932

(CUDC-305) Cat. No.: HY-13469

Bioactivity: Debio 0932 is an orally active **HSP90** inhibitor, with IC_{50}s of 100 and 103 nM for HSP90α and HSP90β, respectively.

Purity: 99.97%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg

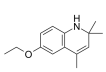


Ethoxyquin

Cat. No.: HY-B1425

Bioactivity: Ethoxyquin is an antioxidant which has been used in animal feed for many years and also an inhibitor of **heat shock protein 90** (**Hsp90**).

Purity: 98.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 g

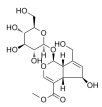


Feretoside

Cat. No.: HY-N6249

Bioactivity: Feretoside, a phenolic compound extracted from the barks of E. ulmoides, is a **HSP inducer** which act as cytoprotective agent.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



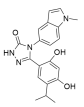
Ganetespib

(STA-9090)

Cat. No.: HY-15205

Bioactivity: Ganetespib is a heat shock protein 90 (**HSP90**) inhibitor which exhibits potent cytotoxicity in a wide variety of hematological and solid tumor cell lines.

Purity: 99.94%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

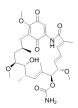


Geldanamycin

Cat. No.: HY-15230

Bioactivity: Geldanamycin is a **Hsp90** inhibitor with antimicrobial activity against many Gram-positive and some Gram-negative bacteria.

Purity: 99.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg

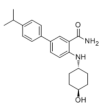


Grp94 Inhibitor-1

Cat. No.: HY-112910

Bioactivity: Grp94 Inhibitor-1 is a potent, selective **Grp94** inhibitor with an **IC_{50}** value of 2 nM, and over 1000-fold selectivity to Grp94 against Hsp90α [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

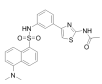


HA15

Cat. No.: HY-100437

Bioactivity: HA15, a molecule that targets specifically **BiP/ GRP78/ HSPA5**, inhibits the ATPase activity of BiP. HA15 strongly increases BiP protein expression in A375 melanoma cells [1].

Purity: 99.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

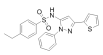


HSF1A

Cat. No.: HY-103000

Bioactivity: HSF1A is a cell-permeable activator of heat shock transcription factor 1 (**HSF1**).

Purity: 99.33%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 25 mg, 50 mg

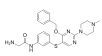


HSP70-IN-1

Cat. No.: HY-12622

Bioactivity: HSP70-IN-1 is a heat shock protein (**HSP**) inhibitor; inhibits the growth of Kasumi-1 cells with an **IC_{50}** of 2.3 μM.

Purity: 98.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg

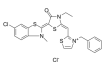


JG-98

Cat. No.: HY-117282

Bioactivity: JG-98 is an allosteric **heat shock protein 70 (Hsp70)** inhibitor with anti-cancer activities, which disrupts **Hsp70 interaction with a co-chaperone Bag3** and affects signaling pathways important for cancer development [1] [2] [3].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg



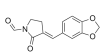
KNK437

(Heat Shock Protein Inhibitor I)

Cat. No.: HY-100110

Bioactivity: KNK437 is a **HSP** inhibitor, and inhibits the induction of HSP105, HSP70, and HSP40.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

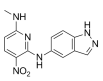


KRIBB11

Cat. No.: HY-100872

Bioactivity: KRIBB11 is an inhibitor of **Heat shock factor 1 (HSF1)**, with **IC_{50}** of 1.2 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

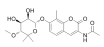


KU-32

Cat. No.: HY-108248

Bioactivity: KU-32 is a novel, novobiocin-based **Hsp90** inhibitor that can protect against neuronal cell death.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

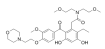


KW-2478

Cat. No.: HY-13468

Bioactivity: KW-2478 is an inhibitor of **Hsp90α**, with an **IC_{50}** of 3.8 nM, and has antitumor activity against various human hematological tumor cells.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



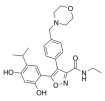
Luminespib

(NVP-AUY922; AUY922; VER-52296)

Cat. No.: HY-10215

Bioactivity: Luminespib (NVP-AUY922) is a potent **HSP90** inhibitor with **IC_{50}**s of 7.8 and 21 nM for HSP90α and HSP90β, respectively.

Purity: 99.14%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 25 mg, 100 mg, 200 mg, 500 mg



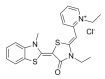
MKT-077

(FJ-776)

Cat. No.: HY-15096

Bioactivity: MKT-077 is a rhodacyanine dye and also a heat shock protein 70 (**Hsp70**) inhibitor which exhibits significant antitumor activity.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



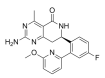
NVP-HSP990

(HSP-990)

Cat. No.: HY-15190

Bioactivity: NVP-HSP990 is a potent and selective **Hsp90** inhibitor, with **IC_{50}** values of 0.6, 0.8, and 8.5 nM for Hsp90α, Hsp90β, and Grp94, respectively.

Purity: 98.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



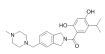
Onalespib

(AT13387)

Cat. No.: HY-14463

Bioactivity: Onalespib (AT13387) is a potent inhibitor of **Hsp90**, with a **K_d** of 0.71 nM.

Purity: 99.96%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

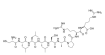


p5 Ligand for Dnak and DnaJ

Cat. No.: HY-P1887

Bioactivity: p5 Ligand for Dnak and DnaJ is a nonapeptide, which corresponds to the main binding site for the 23-residue part of the presequence of mitochondrial aspartate aminotransferase. p5 Ligand for Dnak and DnaJ is a high-affinity ligand for DnaK and DnaJ [1].

Purity: >98%
Clinical Data: No Development Reported
Size:



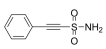
Pifithrin-μ

(PFTμ; 2-Phenylethynesulfonamide)

Cat. No.: HY-10940

Bioactivity: Pifithrin-μ is an inhibitor of **p53** and **HSP70**, with antitumor and neuroprotective activity.

Purity: 98.31%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

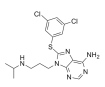


PU-WS13

Cat. No.: HY-18680

Bioactivity: PU-WS13 is a selective **Grp94** inhibitor, with an **EC_{50}** of 0.22 μM.

Purity: 95.69%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

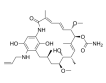


Retaspimycin

Cat. No.: HY-15263

Bioactivity: Retaspimycin is a potent and water-soluble inhibitor of **Hsp90**, with **EC_{50}**s of 119 nM for both Hsp90 and Grp9.

Purity: >98%
Clinical Data: Phase 3
Size: 5 mg, 10 mg, 100 mg

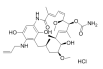


Retaspimycin Hydrochloride

(IPI-504) Cat. No.: HY-10210

Bioactivity: Retaspimycin Hydrochloride is a potent and water-soluble inhibitor of **Hsp90** with **EC_{50}**s of 119 nM for both Hsp90 and Grp9.

Purity: 95.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg



Shepherdin 79-87

Cat. No.: HY-P1750

Bioactivity: Shepherdin (79-87) is amino acids 79 to 87 fragment of Shepherdin. Shepherdin is a peptidomimetic antagonist of the complex between Hsp90 and Survivin. Anticancer activity [1].

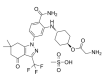
Purity: >98%
Clinical Data: No Development Reported
Size:

SNX-5422 Mesylate

(PF-04929113 (Mesylate)) Cat. No.: HY-10213A

Bioactivity: SNX-5422 Mesylate (PF-04929113 Mesylate), a prodrug of SNX-2112, is an orally active **Hsp90** inhibitor, with a **K_d** of 41 nM, and also induces Her-2 degradation, with an **IC_{50}** of 37nM.

Purity: >98%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 50 mg

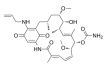


Tanespimycin

(17-AAG; NSC 330507; CP 127374) Cat. No.: HY-10211

Bioactivity: Tanespimycin (17-AAG) is a potent **HSP90** inhibitor with an **IC_{50}** of 5 nM, having a 100-fold higher binding affinity for tumour cell derived HSP90 than normal cell derived HSP90.

Purity: 99.03%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
10 mg, 25 mg, 100 mg, 200 mg

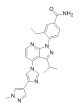


TAS-116

Cat. No.: HY-15785

Bioactivity: TAS-116 is an oral bioavailable, ATP-competitive, highly specific **HSP90α/HSP90β** inhibitor (**K_i**s of 34.7 nM and 21.3 nM, respectively) without inhibiting other HSP90 family proteins such as GRP94 [1]. TAS-116 demonstrates less ocu...

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



Teprenone

(Geranylgeranylacetone) Cat. No.: HY-B0779

Bioactivity: Teprenone is a anti-ulcer drug, and works as an inducer of heat shock proteins (**HSPs**).

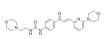
Purity: 99.82%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
100 mg, 500 mg

TRC051384

Cat. No.: HY-101712

Bioactivity: TRC051384 is a heat shock protein 70 (**HSP70**) inducer.

Purity: 97.40%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg

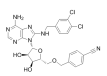


VER-155008

Cat. No.: HY-10941

Bioactivity: VER-155008 is an inhibitor of **Hsp70**, with **IC_{50}**s of 0.5 μM, 2.6 μM, and 2.6 μM for **Hsp70**, Hsc70 and Grp7, respectively, and with a **K_d** of 0.3 μM for **Hsp70**.

Purity: 99.64%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

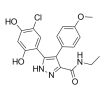


VER-49009

(CCT 129397) Cat. No.: HY-15986

Bioactivity: VER-49009 is a **Hsp90** inhibitor, with an **IC_{50}** of 25 nM and a **K_d** of 78 nM.

Purity: 99.26%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 50 mg, 100 mg

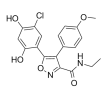


VER-50589

Cat. No.: HY-15984

Bioactivity: VER-50589 is a **Hsp90** inhibitor, with an **IC_{50}** of 21 nM and a **K_d** of 4.5 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg



VER-82576

(NVP-BEP800)

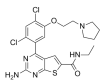
Cat. No.: HY-10942

Bioactivity: VER-82576 (NVP-BEP800) is a potent, orally available and selective **Hsp90** inhibitor, with an **IC_{50}** of 58 nM for Hsp90β; VER-82576 also slightly blocks Grp94 and Trap-1, with **IC_{50}**s of 4.1 and 5.5 μM, respectively.

Purity: 99.48%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



XL888

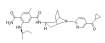
Cat. No.: HY-13313

Bioactivity: XL888 is a heat shock protein-90 (**HSP90**) inhibitor, with an **IC_{50}** of 24 nM.

Purity: 99.24%

Clinical Data: Phase 1

Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg



YZ129

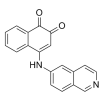
Cat. No.: HY-114413

Bioactivity: YZ129 is an inhibitor of the HSP90-calcineurin-NFAT pathway against glioblastoma, directly binding to **heat shock protein 90 (HSP90)** with an **IC_{50}** of 820 nM on NFAT nuclear translocation. YZ129-induced GBM cell-cycle arrest at the G2/M phase promotes apoptosis and inhibited tumor cell...

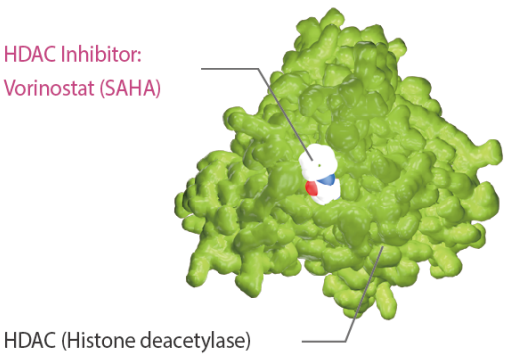
Purity: >98%

Clinical Data: No Development Reported

Size: 100 mg, 250 mg, 500 mg



Indoleamine 2,3-Dioxygenase (IDO)



Indoleamine 2, 3-dioxygenase (IDO) is an intracellular enzyme that catalyzes the transformation of L-tryptophan to N-formylkynurenine, which is the first and rate-controlling step in the kynurenine pathway.
IDO is a rate-limiting enzyme that catalyzes the degradation of tryptophan into kynurenine and is recognized to exert a tolerizing effect on T cells that require tryptophan to proliferate5. IDO also plays an important role in the activation and regulation of functionally quiescent regulatory T cells.
IDO is a heme-containing enzyme that catalyzes the oxidative cleavage of 2,3 double bond of indole ring. IDO has the ability to inhibit T-cell activation by tryptophan starvation, whereas T-cell survival and proliferation are regulated by O_2 free radicals and kynurenine derivatives. IDO plays a crucial role in autoimmunity,infections and malignancies.
Indoleamine-2,3-dioxygenase (IDO) one of the most important immunoregulator enzyme responsible for metabolism of tryptophan as part of Kynurenin pathway. Tryptophan is catabolized in the tumor tissue by the rate-limiting enzyme IDO expressed in tumor cells or antigen presenting cells.

Indoleamine 2,3-Dioxygenase (IDO) Inhibitors & Modulators

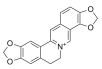
Coptisine

(Coptisin)

Cat. No.: HY-N0430

Bioactivity: Coptisine is an alkaloid from Chinese goldthread, and acts as an efficient uncompetitive **IDO** inhibitor with a K_i value of 5.8 μM and an IC_{50} value of 6.3 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

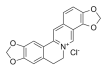


Coptisine chloride

Cat. No.: HY-N0736

Bioactivity: Coptisine chloride is an alkaloid from Chinese goldthread, and acts as an efficient uncompetitive **IDO** inhibitor with a K_i value of 5.8 μM and an IC_{50} value of 6.3 μM.

Purity: 99.29%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



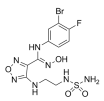
Epacadostat

(INCB 024360; IDO Inhibitor 1)

Cat. No.: HY-15689

Bioactivity: Epacadostat (INCB 024360) is a potent and selective **indoleamine 2,3-dioxigenase 1 (IDO1)** inhibitor with an IC_{50} of 71.8 nM.

Purity: 99.65%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g, 2 g



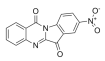
GNF-PF-3777

(8-Nitrotryptanthrin)

Cat. No.: HY-100687

Bioactivity: GNF-PF-3777 (8-Nitrotryptanthrin) is a potent human **indoleamine 2,3-dioxygenase** 2 (h **IDO2**) inhibitor which significantly reduces IDO2 activity with K_i of 0.97 μM.

Purity: 99.21%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg



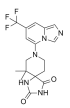
IACS-8968

(IDO/TDO Inhibitor)

Cat. No.: HY-112164

Bioactivity: IACS-8968 is a dual **IDO** and **TDO** inhibitor, with pIC_{50}**s** of 6.43 for IDO and <5 for TDO, respectively.

Purity: 98.13%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg



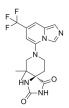
IACS-8968 R-enantiomer

(IDO/TDO Inhibitor (R-enantiomer))

Cat. No.: HY-112164A

Bioactivity: IACS-8968 (R-enantiomer) is the R-enantiomer of IACS-8968. IACS-8968 is a dual **IDO** and **TDO** inhibitor, with pIC_{50}**s** of 6.43 for IDO and <5 for TDO, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg



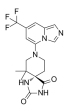
IACS-8968 S-enantiomer

(IDO/TDO Inhibitor (S-enantiomer))

Cat. No.: HY-112164B

Bioactivity: IACS-8968 (S-enantiomer) is the S-enantiomer of IACS-8968. IACS-8968 is a dual **IDO** and **TDO** inhibitor, with pIC_{50}**s** of 6.43 for IDO and <5 for TDO, respectively.

Purity: 98.43%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

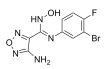


IDO-IN-1

Cat. No.: HY-79531

Bioactivity: IDO-IN-1 is a potent indoleamine 2,3-dioxygenase (**IDO**) inhibitor with an IC_{50} of 59 nM.

Purity: 98.07%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

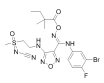


IDO-IN-11

Cat. No.: HY-111234

Bioactivity: IDO-IN-11 is an indoleamine-2,3-dioxygenase (**IDO**) inhibitor with IC_{50}s of 0.18 μM (Kinase) and 0.014 μM (Hela Cell), extracted from patent WO 2016041489 A1, compound 13.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

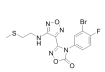


IDO-IN-12

Cat. No.: HY-115122

Bioactivity: IDO-IN-12 is an indoleamine 2,3-dioxygenase (**IDO**) inhibitor extracted from patent WO 2017181849 A1.

Purity: 99.22%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

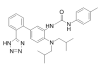


IDO-IN-2

Cat. No.: HY-100771

Bioactivity: IDO-IN-2 is an **IDO** inhibitor extracted from patent WO/2015031295 A1, compound example 1, has **IC_{50}** values of 0.068 μM in HeLa cell and 0.16 μM in HEK293 cell.

Purity: 98.54%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

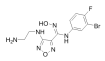


IDO-IN-3

Cat. No.: HY-16987

Bioactivity: IDO-IN-3 is a potent indoleamine 2,3-dioxygenase (**IDO**) inhibitor with an **IC_{50}** of 290 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

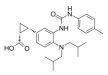


IDO-IN-4

Cat. No.: HY-18769

Bioactivity: IDO-IN-4 is an indoleamine 2,3-dioxygenase 1 (**IDO-1**) inhibitor, extracted from patent WO2014150677A1, Compound example 1 enantiomer 1.

Purity: 99.40%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

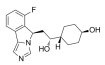


IDO-IN-5 (NLG-1489)

Cat. No.: HY-18770

Bioactivity: IDO-IN-5 (NLG-1489) is an indoleamine 2,3-dioxygenase (**IDO**) inhibitor extracted from patent WO WO2012142237A1, compound 1489, has an **IC_{50}** of 1-10 μM.

Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

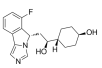


IDO-IN-6 (NLG-1486)

Cat. No.: HY-18770A

Bioactivity: IDO-IN-6 (NLG-1486) is an indoleamine 2,3-dioxygenase (**IDO**) inhibitor extracted from patent WO WO2012142237A1, Compound 1486, has an **IC_{50}** of <1 μM.

Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

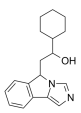


IDO-IN-7 (NLG-919 analogue; GDC-0919 analogue)

Cat. No.: HY-13983

Bioactivity: IDO-IN-7 (NLG-919 analogue) is a a potent **IDO1** inhibitor with an **IC_{50}** of 38 nM.

Purity: 99.92%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

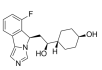


IDO-IN-8 (NLG-1487)

Cat. No.: HY-18770C

Bioactivity: IDO-IN-8 (NLG-1487) is an indoleamine 2,3-dioxygenase (**IDO**) inhibitor extracted from patent WO WO2012142237A1, compound 1487, has an **IC_{50}** of 1-10 μM.

Purity: 99.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

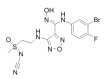


IDO-IN-9

Cat. No.: HY-110387

Bioactivity: IDO-IN-9 is an indoleamine-2,3-dioxygenase (**IDO**) inhibitor with **IC_{50}**s of 0.011 μM (Kinase) and 0.0018 μM (Hela Cell), extracted from patent WO 2016041489 A1, compound 6.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

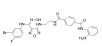


IDO1 and HDAC1 Inhibitor

Cat. No.: HY-112147

Bioactivity: IDO1 and HDAC1 Inhibitor (Compound 10) is a dual **IDO1** and **HDAC1** inhibitor with **IC_{50}**s of 69.0 nM and 66.5 nM, respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg, 100 mg

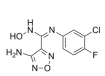


IDO5L

Cat. No.: HY-15683

Bioactivity: IDO5L is a potent indoleamine 2,3-dioxygenase (**IDO**) inhibitor with an **IC_{50}** of 67 nM.

Purity: 99.89%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

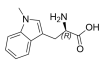


Indoximod

(NLG-8189; 1-Methyl-D-tryptophan) Cat. No.: HY-16724

Bioactivity: Indoximod (D-1MT, NLG8189) is an indoleamine 2,3-dioxygenase (**IDO**) pathway inhibitor with a K_i of 19 μM.

Purity: 98.98%
Clinical Data: Phase 3
Size: 250 mg

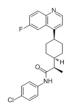


Linrodostat

(BMS-986205; ONO-7701) Cat. No.: HY-101560

Bioactivity: Linrodostat (BMS-986205; ONO-7701) is a selective **indoleamine 2,3-dioxygenase 1** (**IDO1**) inhibitor.

Purity: 99.92%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg

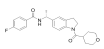


LY-3381916

Cat. No.: HY-111540

Bioactivity: LY-3381916 is a potent, selective and brain penetrated inhibitor of **IDO1** activity, binds to apo-IDO1 lacking heme rather than mature heme-bound IDO1 [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

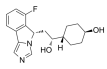


Navoximod

(GDC-0919; NLG-919) Cat. No.: HY-18770B

Bioactivity: Navoximod (GDC-0919; NLG-919) is a potent **IDO** (indoleamine-(2,3)-dioxygenase) pathway inhibitor with K_i/ EC_{50} of 7 nM/75 nM.

Purity: 99.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg

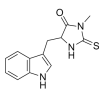


Necrostatin-1

(Nec-1) Cat. No.: HY-15760

Bioactivity: Necrostatin-1 (Nec-1) is a potent, selective and cell-permeable **necroptosis** inhibitor with an EC_{50} of 490 nM in Jurkat cells. It acts by inhibiting the death domain kinase RIP (**RIP1**) in the necroptosis pathway.

Purity: 99.20%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg

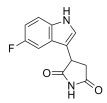


PF-06840003

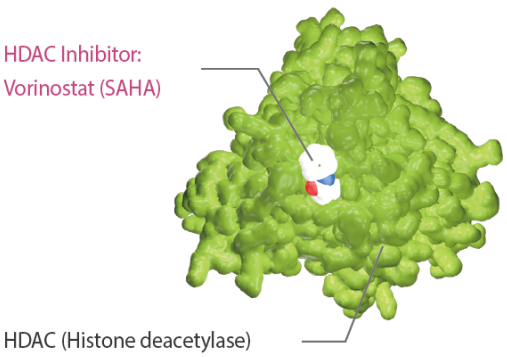
(EOS200271) Cat. No.: HY-101111

Bioactivity: PF-06840003 is a highly selective orally bioavailable **IDO-1** inhibitor.

Purity: 99.80%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg



Isocitrate Dehydrogenase (IDH)



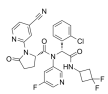
Isocitrate dehydrogenase (IDH) is an enzyme that catalyzes the oxidative decarboxylation of isocitrate, producingalpha-ketoglutarate (α-ketoglutarate) and CO_2. This is a two-step process, which involves oxidation of isocitrate (a secondary alcohol) to oxalosuccinate(a ketone), followed by the decarboxylation of the carboxyl group beta to the ketone, forming alpha-ketoglutarate. In humans, IDH exists in three isoforms: IDH3 catalyzes the third step of the citric acid cycle while converting NAD^+ to NADH in the mitochondria. The isoforms IDH1 and IDH2 catalyze the same reaction outside the context of the citric acid cycle and use $NADP^+$ as a cofactor instead of NAD^+. They localize to the cytosol as well as themitochondrion and peroxisome.

(R,S)-Ivosidenib

((R,S)-AG-120) Cat. No.: HY-18767A

Bioactivity: (R,S)-Ivosidenib is a inhibitor of Isocitrate Dehydrogenase (IDH1). Target: IDH1

Purity: 98.61%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

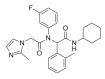


AGI-5198

(IDH-C35) Cat. No.: HY-18082

Bioactivity: AGI-5198 is a potent and selective mutant **IDH1^{R132H}** inhibitor with an **IC_{50}** of 0.07 μM.

Purity: 99.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

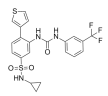


AGI-6780

Cat. No.: HY-15734

Bioactivity: AGI-6780 that potently and selectively inhibits the tumor-associated mutant **IDH2^{R140Q}** with **IC_{50}** of 23±1.7 nM. AGI-6780 is less potent against **IDH2^{WT}** with **IC_{50}** of 190±8.1 nM.

Purity: 98.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

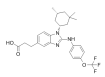


BAY-1436032

Cat. No.: HY-100020

Bioactivity: BAY-1436032 is a novel pan-mutant isocitrate dehydrogenase 1 (**IDH1**) inhibitor.

Purity: 98.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

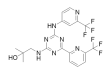


Enasidenib

(AG-221) Cat. No.: HY-18690

Bioactivity: Enasidenib is an oral, potent, reversible, selective inhibitor of the **IDH2** mutant enzymes, with **IC_{50}**s of 100 and 400 nM against IDH2 ^{R140Q} and IDH2 ^{R172K}, respectively.

Purity: 99.95%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

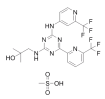


Enasidenib mesylate

(AG-221 mesylate) Cat. No.: HY-18690A

Bioactivity: Enasidenib mesylate is a first-in-class, oral, potent, reversible, selective inhibitor of the **IDH2** mutant enzymes.

Purity: 99.25%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

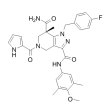


GSK864

Cat. No.: HY-19540

Bioactivity: GSK864 is an isocitrate dehydrogenase 1 (**IDH1**) mutant inhibitor; inhibits IDH1 mutants R132C, R132H, and R132G with **IC_{50}** values of 8.8, 15.2 and 16.6 nM.

Purity: 99.36%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

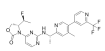


IDH-305

Cat. No.: HY-104036

Bioactivity: IDH-305 is an inhibitor of **isocitrate dehydrogenase** (**IDH**).

Purity: 98.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

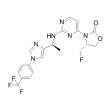


IDH1 Inhibitor 1

Cat. No.: HY-112601

Bioactivity: IDH1 Inhibitor 1 is a potent, orally bioavailable, brain-penetrant and selective mutant **IDH1** inhibitor with **IC_{50}**s of 0.021 μM, 0.045 μM, and 2.52 μM for **IDH1^{R132H}**, **IDH1^{R132C}**, and **IDH1^{WT}**, respectively [1]. Anticancer activity [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

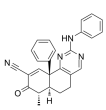


IDH1 Inhibitor 2

Cat. No.: HY-128661

Bioactivity: IDH1 Inhibitor 2 is a potent **IDH1** inhibitor via a direct covalent modification of His315, with an **IC_{50}** of 110 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg



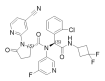
Ivosidenib

(AG-120)

Cat. No.: HY-18767

Bioactivity: Ivosidenib (AG-120) is a mutant isocitrate dehydrogenase 1 (**IDH1**) inhibitor with an **IC_{50}** of 12 nM for mouse IDH1 ^{R132H}.

Purity: 99.24%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

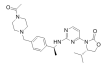


Mutant IDH1 inhibitor

Cat. No.: HY-13972

Bioactivity: Mutant IDH1 inhibitor is a potent mutant **IDH1 R132H** inhibitor with **IC_{50}** of < 72 nM.

Purity: 98.10%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

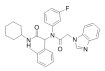


Mutant IDH1-IN-1

Cat. No.: HY-12475

Bioactivity: Mutant IDH1-IN-1 is a mutant-selective **IDH1** inhibitor with with **IC_{50}**s of 4, 42, 80 and 143 nM against mutant IDH1 R132C/R132C, IDH1 R132H/R132H, IDH1 R132H/WT and wild type IDH1, respectively.

Purity: 99.60%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

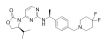


Mutant IDH1-IN-2

Cat. No.: HY-18717

Bioactivity: Mutant IDH1-IN-2 is a inhibitor of mutant Isocitrate dehydrogenase (IDH) proteins, with IC50 of in LS-MS biochemical assay, IC50 of 16.6 nM in Fluorescence biochemical assay.

Purity: 97.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

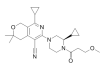


Mutant IDH1-IN-4

Cat. No.: HY-114459

Bioactivity: Mutant IDH1-IN-4 (compound 434) is an inhibitor of **mutant Isocitrate dehydrogenase 1 (IDH 1)**, with **IC_{50}** values of ≤ 0.5 μM for mutant IDH1 in R132H, HT1080 and U87R132H cells [1].

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg



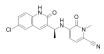
Olutasidenib

(FT-2102)

Cat. No.: HY-114226

Bioactivity: Olutasidenib is a highly potent, selective inhibitor of mutant Isocitrate dehydrogenase 1 **(IDH1)** that could be used in the treatment of acute myeloid leukemia (AML) or myelodysplastic syndrome (MDS).

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



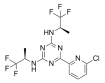
Vorasidenib

(AG-881)

Cat. No.: HY-104042

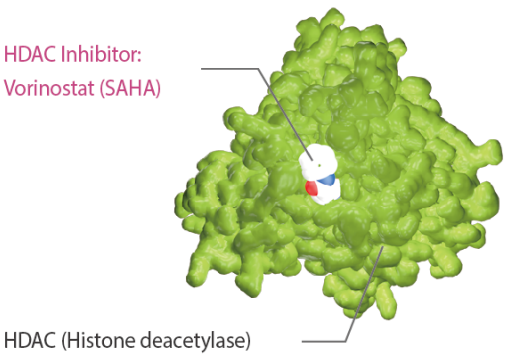
Bioactivity: Vorasidenib (AG-881) is an orally available, brain penetrant second-generation dual **mutant isocitrate dehydrogenases 1 and 2 (mIDH1/2)** inhibitor, which exhibits nanomolar inhibition of (D)-2-hydroxyglutarate (D-2-HG) with **IC_{50}** ranges of 0.04~22 nM against IDH1 R132C, IDH1 R132G, IDH1 R132H and...

Purity: 99.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 50 mg, 100 mg



Lactate Dehydrogenase

LDH



Lactate Dehydrogenase (LDH), which catalyzes the inter-conversion of pyruvate and lactate.

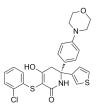
Mammalian lactate dehydrogenase (LDH) comprises three major families of conserved enzymes that catalyse the reversible interconversion of pyruvate and lactate, a key metabolic step in glycolysis and other metabolic pathways. At least five LDH tetrameric isozymes are reported in somatic mammalian tissues, comprising LDHA and LDHB subunits, whereas $LDHC_4$ is found only in mature testis and spermatozoa, where it is required for male fertility. Lactate dehydrogenase catalyzes the interconversion of pyruvate and lactate with concomitant interconversion of NADH and NAD^+. At high concentrations of lactate, the enzyme exhibits feedback inhibition, and the rate of conversion of pyruvate to lactate is decreased.

(R)-GNE-140

Cat. No.: HY-100742A

Bioactivity: (R)-GNE-140 is a potent lactate dehydrogenase A (**LDHA**) inhibitor, with **IC_{50}**s of 3 nM and 5 nM for LDHA and LDHB, respectively; (R)-GNE-140 is 18-fold more potent than S enantiomer.

Purity: 98.50%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg

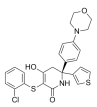


(S)-GNE-140

Cat. No.: HY-100742B

Bioactivity: (S)-GNE-140 is the less active enantiomer of GNE-140 which can inhibit **Lactate dehydrogenase A** (**LDHA**).

Purity: 97.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg



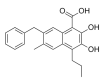
FX-11

(LDHA Inhibitor FX11)

Cat. No.: HY-16214

Bioactivity: FX-11 is a potent **LDH-A** inhibitor with an **IC_{50}** of 23.3 μM for HeLa cella **K_i** value of 8 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

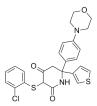


GNE-140 racemate

Cat. No.: HY-100742

Bioactivity: GNE-140 racemate is a racemate mixture of (R)-GNE-140 and (S)-GNE-140. (R)-GNE-140 is a potent **lactate dehydrogenase A (LDHA)** inhibitor.

Purity: 99.53%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg

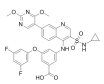


GSK2837808A

Cat. No.: HY-100681

Bioactivity: GSK2837808A is a potent and selective **lactate dehydrogenase A (LDHA)** inhibitor with **IC_{50}**s of 1.9 and 14 nM for LDHA and LDHB, respectively.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



LDH-IN-1

Cat. No.: HY-111108

Bioactivity: LDH-IN-1 is a novel pyrazole-based inhibitor of human lactate dehydrogenase **(LDH)** with **IC_{50}**s of 32 and 27 nM for LDHA and LDHB, respectively.

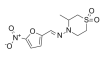
Purity: 99.84%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Nifurtimox

Cat. No.: HY-W040073

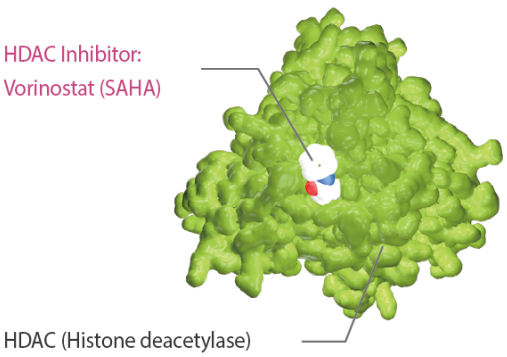
Bioactivity: Nifurtimox, an antiprotozoal agent, which is generally used for the treatment of infections with Trypanosoma cruzi, has been used in the therapy of neuroblastoma. Nifurtimox affects enzyme activity of **lactate dehydrogenase** (**LDH**).

Purity: 99.64%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg



LXR

Liver X receptor



LXRs (Liver X Receptor α and β) are nuclear receptors that act as ligand-activated transcription factors. LXR activation causes upregulation of genes involved in reverse cholesterol transport (RCT), including ABCA1 and ABCG1 transporters, in macrophage and intestine.

LXRα/β are ligand-activated transcription factors of the nuclear hormone receptor superfamily that stimulate transcription of several genes, including ABCA1 and apoE. LXRα and LXRβ respond to the same oxysterol ligands and activate transcription as obligate heterodimeric complexes with retinoid X receptors.

Synthetic LXR agonists activate both LXRα and LXRβ, cross the blood-brain barrier, and efficiently induce expression of LXR target genes including ABCA1 and apoE.

LXR Inhibitors & Modulators

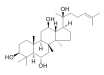
(20S)-Protopanaxatriol

(20(S)-APPT; g-PPT)

Cat. No.: HY-N0835

Bioactivity: (20S)-Protopanaxatriol is a metabolite of ginsenoside, works through the **glucocorticoid receptor (GR)** and **oestrogen receptor (ER)**, and is also a **LXRα** inhibitor.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

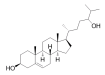


24-Hydroxycholesterol

Cat. No.: HY-N2370

Bioactivity: 24-Hydroxycholesterol is a natural sterol, which serves as a positive allosteric modulator of **N-Methyl-d-Aspartate (NMDA) receptorsR**, and a potent activator of the transcription factors **LXR**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 2 mg, 5 mg



27-Hydroxycholesterol

Cat. No.: HY-N2371

Bioactivity: 27-Hydroxycholesterol is a selective **estrogen receptor** modulator and an agonist of the **liver X receptor**.

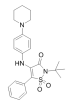
Purity: 99.38%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg

AZ876

Cat. No.: HY-18282

Bioactivity: AZ876 is a novel high-affinity LXR agonist.

Purity: 99.89%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg



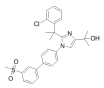
BMS-779788

(EXEL04286652; XL-652; BMS-788)

Cat. No.: HY-19919

Bioactivity: BMS-779788 is a **LXR** partial agonist with **IC_{50}** values of 68 nM for LXR α and 14 nM for LXR β.

Purity: 98.0%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

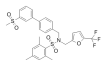


GSK2033

Cat. No.: HY-108688

Bioactivity: GSK2033 is a **LXR** antagonist with **pIC_{50}**s of 7 and 7.4 for **LXRα** or **LXRβ**, respectively.

Purity: 98.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

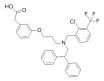


GW3965

Cat. No.: HY-10627

Bioactivity: GW3965 is a potent, selective **LXR** agonist for hLXRα and hLXRβ with **EC_{50}** of 190 and 30 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

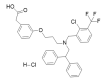


GW3965 hydrochloride

Cat. No.: HY-10627A

Bioactivity: GW3965 hydrochloride is a potent and selective **LXR** agonist with **EC_{50}**s of 190 and 30 nM for hLXRα and hLXRβ , respectively.

Purity: 99.70%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



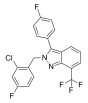
LXR-623

(WAY 252623)

Cat. No.: HY-10629

Bioactivity: LXR-623 is a brain-penetrant partial **LXRα** and full **LXRβ** agonist, with **IC_{50}**s of 24 nM and 179 nM, respectively.

Purity: 99.40%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

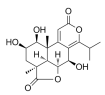


Nagilactone B

Cat. No.: HY-N3216

Bioactivity: Nagilactone B, extracted from the root bark of Podocarpus nagi, is a liver X receptor (**LXR**) agonist.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg



RGX-104

Cat. No.: HY-111498

Bioactivity: RGX-104 is a small-molecule **LXR** agonist that modulates innate immunity via transcriptional activation of the ApoE gene.

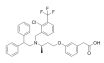
Purity: 99.81%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

RGX-104 free Acid

Cat. No.: HY-111498A

Bioactivity: RGX-104 free Acid is an orally bioavailable and potent liver-X nuclear hormone receptor **(LXR)** agonist that modulates innate immunity via transcriptional activation of the ApoE gene.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

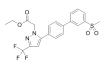


Rovazolac

Cat. No.: HY-109073

Bioactivity: Rovazolac is a **liver x receptor (LXR)** modulator extracted from patent WO2013130892A1.

Purity: 99.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

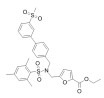


SR9238

Cat. No.: HY-101442

Bioactivity: SR9238 is a synthetic **LXR** antagonist with **IC_{50}**s of 214 nM and 43 nM for **LXRα** and **LXRβ**, respectively.

Purity: 99.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg

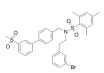


SR9243

Cat. No.: HY-16972

Bioactivity: SR9243 is a **liver-X-receptor (LXR)** inverse agonist that induces LXR-corepressor interaction.

Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 200 mg

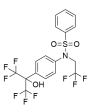


T0901317

Cat. No.: HY-10626

Bioactivity: T0901317 is a potent and selective agonist for **LXR** and **FXR**, with **EC_{50}**s of 50 nM and 5 μM, respectively.

Purity: 99.64%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg



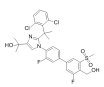
XL041

(BMS-852927)

Cat. No.: HY-101973

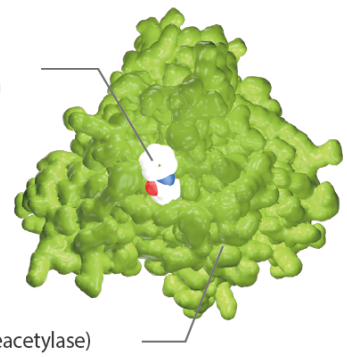
Bioactivity: XL041 (BMS-852927) is an **LXRβ**-selective agonist.

Purity: 99.11%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg



MAGL

Monoacylglycerol lipase



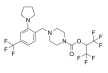
Monoacylglycerol lipase (MGL) is a 33 kDa serine hydrolase that catalyses the hydrolysis of monoacylglycerols to their corresponding fatty acids. The enzyme is found both in the brain and in peripheral tissues such as the kidney, ovary, testis, adrenal gland, adipose tissue and heart. The three-dimensional structure of MGL has been elucidated by X-ray crystallography, and the enzyme has been shown to be a dimeric molecule with amphitropic properties, that is, it can exist both in a soluble form and associated with the membrane lipid bilayers. Mutagenesis studies have demonstrated the importance of the catalytic triad of ser^{122}, asp^{239} and his^{269} that the enzyme shares with other enzymes in the α/β hydrolase superfamily. The substrate is recruited via a wide hydrophobic tunnel, where it can then interact with the catalytic triad at the end of the tunnel.
MGL inhibitors have lagged behind, but have a potential advantage over FAAH inhibitors in terms of eCB specificity of action given that the N-acylethanolamines are a class of compounds with multiple biological actions.

ABX-1431

Cat. No.: HY-117632

Bioactivity: ABX-1431 is a highly potent, selective, and orally available, CNS-penetrant monoacylglycerol lipase (**MAGL**) inhibitor with an **IC_{50}** of 14 nM.

Purity: 99.96%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

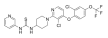


DO-264

Cat. No.: HY-114157

Bioactivity: DO-264 is a selective and in vivo-active inhibitor of Abhydrolase Domain Containing 12 (**ABHD12**), with an **IC_{50}** of 11 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

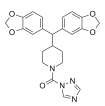


JJKK 048

Cat. No.: HY-108613

Bioactivity: JJKK 048 is an ultrapotent and highly selective inhibitor of **Monoacylglycerol lipase** (**MAGL**).

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

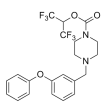


JW 642

Cat. No.: HY-12332

Bioactivity: JW 642 is a potent inhibitor of monoacylglycerol lipase (MAGL) that displays IC50 values of 7.6, 14, and 3.7 nM for inhibition of MAGL in mouse, rat, and human brain membranes, respectively.

Purity: 99.70%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

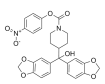


JZL 184

Cat. No.: HY-15249

Bioactivity: JZL 184 is a potent, selective and irreversible **monoacylglycerol lipase (MAGL)** inhibitor with **IC_{50}**s of 8 nM and 4 μM for inhibition of MAGL and fatty acid amide hydrolase in mouse brain membranes, respectively.

Purity: 98.20%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

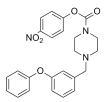


JZL195

Cat. No.: HY-15250

Bioactivity: JZL195 is a selective and efficacious dual FAAH/MAGL inhibitor with IC50 of 13 nM and 19 nM for mouse brain FAAH and MAGL respectively.

Purity: 99.75%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

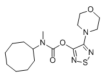


JZP-430

Cat. No.: HY-101457

Bioactivity: JZP-430 is a potent, highly selective, irreversible inhibitor of **α/β-hydrolase domain 6 (ABHD6)** with an **IC_{50}** of 44 nM, exhibits ~230-fold selectivity over fatty acid amide hydrolase (FAAH) and lysosomal acid lipase (LAL) [1].

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

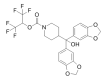


KML29

Cat. No.: HY-18977

Bioactivity: KML29 is a potent and selective MAGL inhibitor with IC50 = 5.9, 15, and 43 nM in human, mouse, and rat brain proteomes, respectively.

Purity: 99.21%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

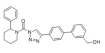


KT182

Cat. No.: HY-120177

Bioactivity: KT182 is a potent and selective inhibitor of **α/β-hydrolase domain containing 6 (ABHD6)**, with an **IC_{50}** of 0.24 nM in Neuro2A cells [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

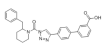


KT203

Cat. No.: HY-120215

Bioactivity: KT203 is a potent and selective inhibitor of **α/β-hydrolase domain containing 6 (ABHD6)**, with an **IC_{50}** of 0.31 nM in Neuro2A cells [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

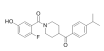


MAGL-IN-1

Cat. No.: HY-111538

Bioactivity: MAGL-IN-1 is a potent and selective **monoacylglycerol lipase (MAGL)** inhibitor with an **IC_{50}** of 80 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg, 100 mg

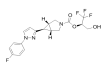


PF-06795071

Cat. No.: HY-111512

Bioactivity: PF-06795071 is a potent and selective covalent **MAGL** inhibitor with an **IC_{50}** of 3 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg, 100 mg

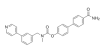


WWL70

Cat. No.: HY-100337

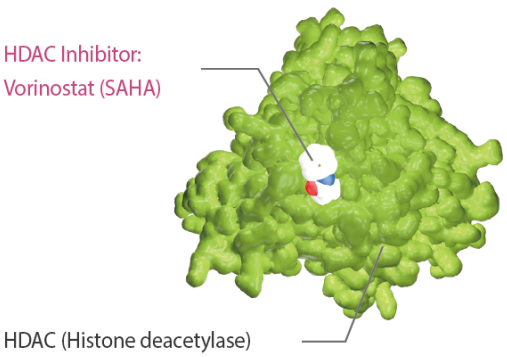
Bioactivity: WWL70 is a selective **alpha/beta hydrolase domain 6** (**ABHD6**) inhibitor with an **IC_{50}** of 70 nM.

Purity: 99.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg



MALT1

mucosa associated lymphoid tissue lymphoma translocation gene 1



MALT1 is a paracaspase, which is related to the caspase (cysteine-aspartic proteases) family of proteases but cleaves after Arg residues instead of Asp. MALT1 cleavage activity is linked to the pathogenesis of activated B cell-like diffuse large B cell lymphoma (ABC-DLBCL), a chemoresistant form of DLBCL. MALT1 is a unique paracaspase protein that transduces aberrant oncogenic signaling in ABC-DLBCL. MALT1 represents a potentially important therapeutic target for ABC-DLBCL and MALT lymphoma. MALT1 small molecule inhibitors might be useful chemical tools for studying MALT1 biology and treating MALT1-addicted tumors.

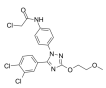
MALT1 Inhibitors & Modulators

MALT1 inhibitor MI-2

Cat. No.: HY-12276

Bioactivity: MALT1 inhibitor MI-2 is an irreversible **MALT1** protease inhibitor with an **IC_{50}** of 5.84 μM.

Purity: 99.56%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

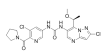


MLT-747

Cat. No.: HY-124587

Bioactivity: MLT-747 is a potent, selective, allosteric inhibitor of **MALT1**, binds MALT1 in the allosteric Trp580 pocket, with an **IC_{50}** of 14 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg, 100 mg

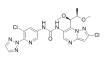


MLT-748

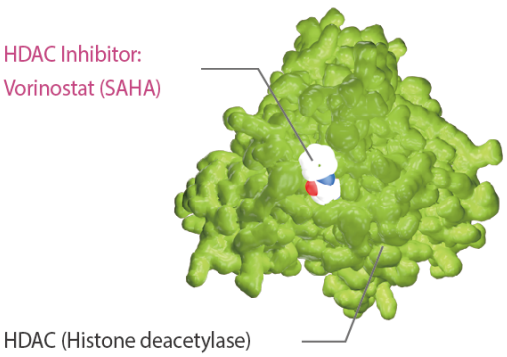
Cat. No.: HY-115466

Bioactivity: MLT-748 is a potent, selective and allosteric inhibitor of **MALT1**, binds MALT1 in the allosteric Trp580 pocket, with an **IC_{50}** of 5 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 100 mg, 250 mg



Mineralocorticoid Receptor



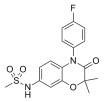
Mineralocorticoid receptor (MR) is a member of the nuclear receptor superfamily and is essential for controlling sodium transport in epithelial tissues such as the kidney and colon.

Mineralocorticoid receptor (MR) is a nuclear receptor (NR) that is critical for controlling sodium and potassium transport in epithelial cells, most notably in the kidney and colon. It also plays important roles in non-epithelial tissues, such as cardiac myocytes, blood vessels, the hippocampus and adipose tissue. The MR is capable of binding multiple classes of steroids with high affinity, including the mineralocorticoids, aldosterone and deoxycorticosterone, the glucocorticoids (GR), cortisol (in humans) or corticosterone (in rodents), and progesterone (PR). While aldosterone is considered the primary physiological MR ligand in humans, in some tissues cortisol may be the primary ligand for MR, whereas PR behaves as a predominant antagonist.

Apararenone
(MT-3995) Cat. No.: HY-109002

Bioactivity: Apararenone (MT-3995) is a novel non-steroidal **mineralocorticoid receptor** antagonists under development for the treatment of diabetic nephropathies and non-alcoholic steatohepatitis.

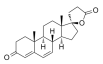
Purity: 98.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Canrenone
(Aldadiene; SC9376; SC14266) Cat. No.: HY-B1438

Bioactivity: Canrenone (Aldadiene; SC9376; SC14266) is an **aldosterone** antagonist extensively used as a diuretic agent.

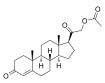
Purity: 99.16%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg



Deoxycorticosterone acetate (11-Deoxycorticosterone acetate; DOC acetate; Cortexone acetate) Cat. No.: HY-B1472

Bioactivity: Deoxycorticosterone acetate is a steroid hormone produced by the adrenal gland that possesses mineralocorticoid activity and acts as a precursor to aldosterone.

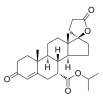
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



Dicirenone
(SC26304) Cat. No.: HY-U00200

Bioactivity: Dicirenone (SC26304) inhibits the effects of Aldosterone on urinary K^+:Na^+ ratios and the binding of [^{3}H]Aldosterone to renal cytoplasmic and nuclear receptors.

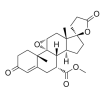
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



Eplerenone
(Epoxymexrenone) Cat. No.: HY-B0251

Bioactivity: Eplerenone is an aldosterone antagonist with an IC50 of 0.36 μM. Target: Mineralocorticoid Receptor Eplerenone is a selective mineralocorticoid receptor antagonist, which has been shown to produce sustained increases in plasma renin and serum aldosterone, consistent with inhibition of the negative...

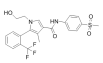
Purity: 99.62%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



Esaxerenone
(CS-3150; XL-550) Cat. No.: HY-100471

Bioactivity: Esaxerenone is a novel, highly potent and selective non-steroidal **mineralocorticoid receptor** antagonist.

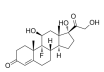
Purity: 99.65%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg



Fludrocortisone
(9α-Fludrocortisone; 9α-Fluorcortisol) Cat. No.: HY-B1203

Bioactivity: Fludrocortisone, a synthetic mineralocorticoid with anti-inflammatory activity.

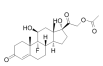
Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg



Fludrocortisone acetate
(9α-Fludrocortisone acetate; 9α-Fluorcortisol acetate) Cat. No.: HY-B1203A

Bioactivity: Fludrocortisone Acetate is a synthetic mineralocorticoid, used to control the amount of sodium and fluids in your body. It is used to treat Addison's disease by decreasing the amount of sodium that is lost (excreted) in your urinealso used to increase blood pressure.

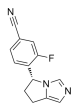
Purity: 99.45%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg



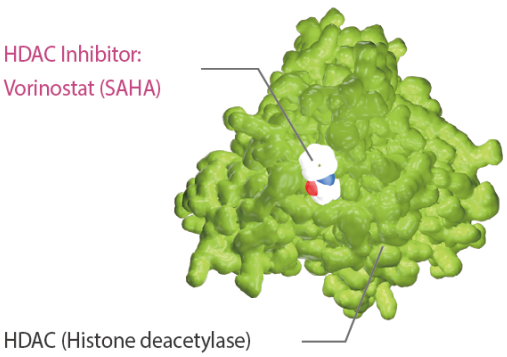
Osilodrostat
(LCI699) Cat. No.: HY-16276

Bioactivity: Osilodrostat (LCI699) is a potent inhibitor of human **11β-hydroxylase** and **aldosterone synthase** with **IC_{50}** values of 2.5 and 0.7 nM, respectively.

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Mitochondrial Metabolism



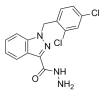
Mitochondria use multiple carbon fuels to produce ATP and metabolites, including pyruvate, which is generated from glycolysis; amino acids such as glutamine; and fatty acids. These carbon fuels feed into the TCA cycle in the mitochondrial matrix to generate the reducing equivalents NADH and FADH2, which deliver their electrons to the electron transport chain. Mitochondria are complex organelles that play an important role in many facets of cellular function, from metabolism to immune regulation and cell death. Mitochondria are actively involved in a wide variety of cellular processes and molecular interactions, such as calcium buffering, lipid flux, and intracellular signaling. It is increasingly recognized that mitochondrial dysfunction is a hallmark of many diseases such as obesity/diabetes, cancer, cardiovascular and neurodegenerative diseases. Mitochondrial metabolism is a key determinant of tumor progression by impacting on functions such as epithelial-to-mesenchymal transition. Mitochondrial metabolism and derived oncometabolites shape the epigenetic landscape to alter aggressiveness features of cancer cells. Changes in mitochondrial metabolism are relevant for the survival of tumors in response to therapy.

Adjudin

(AF-2364) Cat. No.: HY-18996

Bioactivity: Adjudin is an extensively studied male contraceptive with a superior **mitochondria**-inhibitory effect. Adjudin is also a potent **Cl^- channel** blocker.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

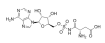


Asp-AMS

Cat. No.: HY-112860

Bioactivity: Asp-AMS, an analogue of aspartyl-adenylate, is an **aspartyl-tRNA synthetase** inhibitor and also a strong competitive inhibitor of the **mitochondrial enzyme**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

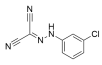


CCCP (Carbonyl cyanide 3-chlorophenylhydrazone; Carbonyl Cyanide m-Chlorophenylhydrazone)

Cat. No.: HY-100941

Bioactivity: CCCP is an oxidative phosphorylation uncoupler.

Purity: 99.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

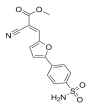


CCI-006

Cat. No.: HY-114410

Bioactivity: CCI-006 is a selective inhibitor and chemosensitizer of MLL-rearranged leukemia cells, by inhibits mitochondrial respiration resulting in insurmountable mitochondrial depolarization and a pro-apoptotic unfolded protein response (UPR) in a subset of MLL-r leukemia cells [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

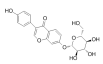


Daidzin

(Daidzoside; NPI-031D; Daidzein 7-O-glucoside) Cat. No.: HY-N0018

Bioactivity: Daidzin is an isoflavone that has anti-oxidant, anti-carcinogenic, and anti-atherosclerotic activities; directly inhibits mitochondrial aldehyde dehydrogenase 2 (IC50 = 80 nM) and is an effective anti-dipsotropic isoflavone.

Purity: 99.04%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

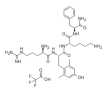


Elamipretide TFA

(MTP-131 (TFA); RX-31 (TFA); SS-31 (TFA)) Cat. No.: HY-P0125A

Bioactivity: Elamipretide TFA (MTP-131 TFA; RX-31 TFA; SS-31 TFA) is a **cardiolipin peroxidase** inhibitor and mitochondria-targeting peptide [1].

Purity: 99.81%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 mg, 5 mg, 10 mg, 25 mg

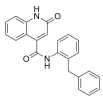


ER-000444793

Cat. No.: HY-100852

Bioactivity: ER-000444793 is a potent inhibitor of mitochondrial permeability transition pore (**mPTP**) opening. ER-000444793 inhibits mPTP with an **IC_{50}** of 2.8μM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

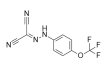


FCCP

(Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone) Cat. No.: HY-100410

Bioactivity: FCCP is an uncoupler of oxidative phosphorylation in mitochondria.

Purity: 99.39%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

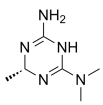


Imeglimin

(EMD 387008) Cat. No.: HY-14771

Bioactivity: Imeglimin is the first antidiabetic compound that induces an increase in **mitochondrial phospholipid** composition, contributing to improvements in hepatic mitochondrial function.

Purity: >98%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 50 mg, 100 mg

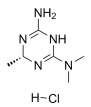


Imeglimin hydrochloride

(EMD 387008 hydrochloride) Cat. No.: HY-14771A

Bioactivity: Imeglimin hydrochloride is the first antidiabetic compound that induces an increase in **mitochondrial phospholipid** composition, contributing to improvements in hepatic mitochondrial function.

Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

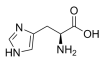


L-Hisidine

Cat. No.: HY-N0832

Bioactivity: L-Hisidine is an essential amino acid for infants. L-Hisidine is an inhibitor of **mitochondrial glutamine transport**.

Purity: 99.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g



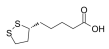
Lipoic acid

((R)-(+)-α-Lipoic acid; R-(+)-Thioctic acid)

Cat. No.: HY-18733

Bioactivity: Lipoic acid ((R)-(+)-α-Lipoic acid) is an antioxidant, which is an essential cofactor of **mitochondrial** enzyme complexes. (R)-(+)-α-Lipoic acid is more effective than racemic Lipoic acid.

Purity: 99.59%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 500 mg



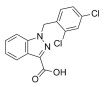
Lonidamine

(DICA; Diclondazolic Acid; AF1890)

Cat. No.: HY-B0486

Bioactivity: Lonidamine, a antitumor agent, is a **hexokinase**, **mitochondrial pyruvate carrier** (K_i 2.5 μM in isolated rat liver mitochondria) and **plasma membrane monocarboxylate transporters** inhibitor, which also inhibits mitochondr...

Purity: 95.45%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

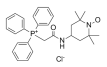


Mito-TEMPO

Cat. No.: HY-112879

Bioactivity: Mito-TEMPO is a mitochondria-targeted superoxide dismutase mimetic with superoxide and alkyl radical scavenging properties.

Purity: 98.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



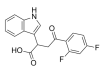
Mitochonic acid 5

(MA-5)

Cat. No.: HY-111536

Bioactivity: Mitochonic acid 5 binds **mitochondria** and ameliorates renal tubular and cardiac myocyte damage. Mitochonic acid 5 modulates **mitochondrial ATP** synthesis.

Purity: 99.31%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

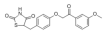


MSDC-0602

Cat. No.: HY-108022

Bioactivity: MSDC-0602, a PPARγ-sparing thiazolidinedione (TZD), interacts with the mitochondrial pyruvate carrier (MPC) and inhibits its activity and are effective for treatment of type 2 diabetes with reducing risk of PPARγ-mediated side effects [1] [2].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



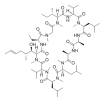
NIM811

((Melle-4)cyclosporin; SDZ NIM811)

Cat. No.: HY-P0025

Bioactivity: NIM811 ((Melle-4)cyclosporin; SDZ NIM811) is a potent and bioavailable **mitochondrial permeability transition** and **cyclophilin** dual inhibitor, which exhibits potent in vitro activity against hepatitis C virus (HCV) [1] [2].

Purity: 99.55%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg



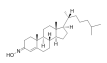
Olesoxime

(TRO 19622; NSC 21311)

Cat. No.: HY-14796

Bioactivity: Olesoxime (TRO 19622) is a **mitochondrial**-targeted neuroprotective compound with mean EC_{50} value for increasing cell survival is 3.2±0.2 μM.

Purity: 98.98%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

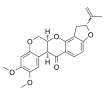


Rotenone

Cat. No.: HY-B1756

Bioactivity: Rotenone is an **mitochondrial electron transport chain complex I** inhibitor.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g, 5 g

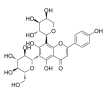


Schaftoside

Cat. No.: HY-N0703

Bioactivity: Schaftoside is a flavonoid found in a variety of Chinese herbal medicines, such as Eleusine indica. Schaftoside inhibits the expression of TLR4 and Myd88. Schaftoside also decreases Drp1 expression and phosphorylation, and reduces mitochondrial fission [1].

Purity: >98%
Clinical Data: No Development Reported
Size:

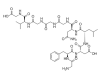


Speract

Cat. No.: HY-P0245

Bioactivity: Speract, a sea urchin egg peptide that regulates sperm motility, also stimulates sperm mitochondrial metabolism.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



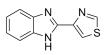
Thiabendazole

(2-(4-Thiazolyl)benzimidazole)

Cat. No.: HY-B0263

Bioactivity: Thiabendazole inhibites the mitochondrial helminth-specific enzyme, fumarate reductase, with anthelminthic property. Target: Fumarate Reductase Tiabendazole serves to block angiogenesis in both frog embryos and human cells. It has also been shown to serve as a vascular disrupting agent to reduce...

Purity: 99.84%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g, 5 g



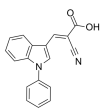
UK-5099

(PF-1005023)

Cat. No.: HY-15475

Bioactivity: UK-5099 is a potent inhibitor of the mitochondrial pyruvate carrier (**MPC**). UK-5099 inhibits pyruvate-dependent O_2 consumption with an IC_{50} of 50 nM.

Purity: 99.57%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Vatiquinone

(EPI-743)

Cat. No.: HY-16772

Bioactivity: Vatiquinone is a potent cellular oxidative stress protectant, which could be used to treat mitochondrial diseases.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

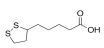
α-Lipoic Acid

((±)-α-Lipoic acid; DL-α-Lipoic acid; Thioctic acid)

Cat. No.: HY-N0492

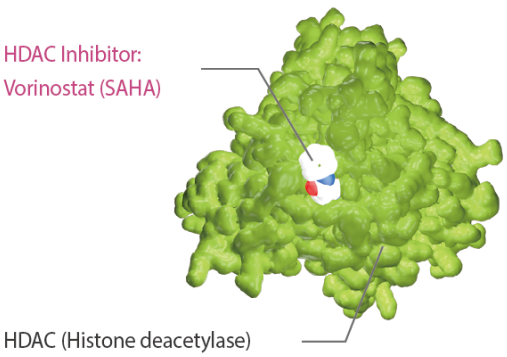
Bioactivity: α-Lipoic Acid is an antioxidant, which is an essential cofactor of **mitochondrial** enzyme complexes. α-Lipoic Acid inhibits **NF-κB**-dependent **HIV-1** LTR activation.

Purity: 98.03%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 500 mg



MMP

Matrix metalloproteinases



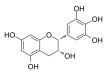
MMPs (Matrix metalloproteinases) are zinc-dependent endopeptidases. The MMPs belong to a larger family of proteases known as the metzincin superfamily. MMPs are capable of degrading all kinds of extracellular matrix proteins, but also can process a number of bioactive molecules. They are known to be involved in the cleavage of cell surface receptors, the release of apoptotic ligands and chemokine/cytokine inactivation. MMPs are also thought to play a major role on cell behaviors such as cell proliferation, migration, differentiation, angiogenesis, apoptosis, and host defense. MMP-2 and MMP-9 are thought to be important in metastasis. MMP-1 is thought to be important in rheumatoid arthritis and osteoarthritis. Recent data suggests active role of MMPs in the pathogenesis of Aortic Aneurysm. Excess MMPs degrade the structural proteins of the aortic wall. Disregulation of the balance between MMPs and TIMPs is also a characteristic of acute and chronic cardiovascular diseases.

(-)-Epigallocatechin

(EGC; Epigallocatechin; l-Epigallocatechin) Cat. No.: HY-N0225

Bioactivity: (-)-Epigallocatechin (EGCG) is the most abundant flavonoid in green tea, can bind to unfolded native polypeptides and prevent conversion to amyloid fibrils.

Purity: 99.16%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

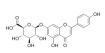


Apigenin-7-glucuronide

(Apigenin 7-O-glucuronide) Cat. No.: HY-N1454

Bioactivity: Apigenin-7-glucuronide could inhibit Matrix Metalloproteinases **(MMP)** activities, with **IC_{50}s** of 12.87, 22.39, 17.52, 0.27 μM for MMP-3, MMP-8, MMP-9, MMP-13, respectively.

Purity: 98.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

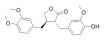


Arctigenin

((-)-Arctigenin) Cat. No.: HY-N0035

Bioactivity: Arctigenin is a lignan found in certain plants of the Asteraceae; it has shown antiviral and anticancer effects in glass; it is the aglycone of arctiin. IC50 value: Target: anticancer agent Arctiin and its aglucone, arctigenin from the fruits of Arctium lappa L. showed potent in vitro antiviral...

Purity: 99.63%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

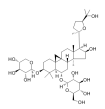


Astragaloside IV

Cat. No.: HY-N0431

Bioactivity: Astragaloside IV, an active component isolated from Astragalus membranaceus, suppresses the activation of **ERK1/2** and **JNK**, and downregulates matrix metalloproteases **(MMP)-2, (MMP)-9** in MDA-MB-231 breast cancer cells.

Purity: 99.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

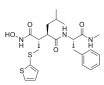


Batimastat

(BB94) Cat. No.: HY-13564

Bioactivity: Batimastat is a potent broad spectrum **MMP** inhibitor with **IC_{50}** of 3, 4, 4, 6, and 20 nM for **MMP-1**, **MMP-2**, **MMP-9**, **MMP-7** and **MMP-3**, respectively.

Purity: 95.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

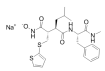


Batimastat sodium salt

(BB-94 sodium salt) Cat. No.: HY-13564A

Bioactivity: Batimastat sodium salt is a potent broad spectrum **MMP** inhibitor with **IC_{50}** of 3, 4, 4, 6, and 20 nM for **MMP-1**, **MMP-2**, **MMP-9**, **MMP-7** and **MMP-3**, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

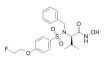


BR351

Cat. No.: HY-114396

Bioactivity: BR351 is a brain penetrant **MMP** inhibitor with **IC_{50}**s of 4, 2, 11, 50 nM for MMP2, MMP8, MMP9 and MMP13, respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

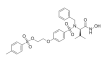


BR351 precursor

Cat. No.: HY-43586

Bioactivity: BR351 precursor is a precursor of BR351. BR351 is a brain penetrant **MMP** inhibitor with **IC_{50}**s of 4, 2, 11, 50 nM for MMP2, MMP8, MMP9 and MMP13, respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

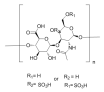


Chondroitin sulfate

(Chondroitin polysulfate) Cat. No.: HY-B2162

Bioactivity: Chondroitin sulfate, one of five classes of glycosaminoglycans, has been widely used in the treatment of osteoarthritis. Chondroitin sulfate reduces inflammation mediators and the apoptotic process and is able to reduce protein production of inflammatory cytokines, **iNOS** and **MMPs**

Purity: 95.0%
Clinical Data: Launched
Size: 250 mg, 1 g

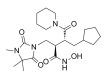


Cipemastat

(Ro 32-3555) Cat. No.: HY-19677

Bioactivity: Cipemastat is a potent, competitive inhibitor of human **collagenases** 1, 2 and 3 with **K_is** of 3.0, 4.4 and 3.4 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

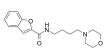


CL-82198

Cat. No.: HY-100359

Bioactivity: CL-82198 is a selective inhibitor of MMP-13. In vitro: In the presence of 10 and 20 μM of the specific MMP-13 inhibitor, CL-82198, migration of the LS174 cells was significantly reduced by 55 and 52%, respectively. . CL-82198 binds to the S1' pocket of MMP-13 leading to 89% enzyme inhibition at a...

Purity: 98.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



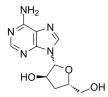
Cordycepin

(3'-Deoxyadenosine)

Cat. No.: HY-N0262

Bioactivity: Cordycepin, which is a nucleoside derivative isolated from Cordyceps, inhibits IL-1β-induced **MMP-1** and **MMP-3** expression in rheumatoid arthritis synovial fibroblasts (RASFs) in a dose-dependent manner.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 25 mg, 50 mg



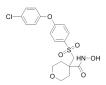
CTS-1027

(Ro 1130830; RS 130830)

Cat. No.: HY-10398

Bioactivity: CTS-1027 is a potent small molecule inhibitor of **MMPs**, with **IC_{50}**s of 0.3 nM, 0.5 nM for **MMP2**, **MMP13**, respectively, and has > 1,000 fold selectivity over MMP1.

Purity: 98.72%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



CTTHWGFTLC, CYCLIC

Cat. No.: HY-P1789

Bioactivity: CTTHWGFTLC, CYCLIC is a cyclic peptide inhibitor for **matrix metalloproteinases MMP-2** and **MMP-9** [1].

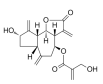
Purity: >98%
Clinical Data: No Development Reported
Size:

Cynaropicrin

Cat. No.: HY-N2350

Bioactivity: Cynaropicrin is a sesquiterpene lactone which can inhibit **tumor necrosis factor** (**TNF-α**) release with **IC_{50}**s of 8.24 and 3.18 μM for murine and human macrophage cells, respectively. Cynaropicrin also inhibits the increase of **cartilage degradation factor** (**MMP13**) and suppresses **NF-κB...**

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

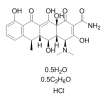


Doxycycline hyclate (Doxycycline hydrochloride hemiethanolate hemihydrate; WC2031)

Cat. No.: HY-N0565B

Bioactivity: Doxycycline hyclate is an antibiotic and broad-spectrum metalloproteinase (**MMP**) inhibitor.

Purity: 98.42%
Clinical Data: Launched
Size: 10mM x 1mL in Water,
1 g, 5 g, 10 g

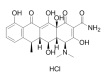


Doxycycline hydrochloride

Cat. No.: HY-N0565A

Bioactivity: Doxycycline hydrochloride is an antibiotic and broad-spectrum metalloproteinase (**MMP**) inhibitor.

Purity: >98%
Clinical Data: Launched
Size: 1 g, 5 g



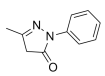
Edaravone

(MCI-186)

Cat. No.: HY-B0099

Bioactivity: Edaravone is a strong novel free radical scavenger, and inhibits **MMP**-9-related brain hemorrhage in rats treated with tissue plasminogen activator.

Purity: 99.91%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 g



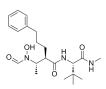
GI254023X

(GI4023; SRI028594)

Cat. No.: HY-19956

Bioactivity: GI254023X is a potent **MMP9** and **ADAM10** inhibitor with **IC_{50}**s of 2.5 and 5.3 nM, respectively.

Purity: 99.67%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg



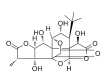
Ginkgolide C

(BN-52022; Ginkgolide-C)

Cat. No.: HY-N0785

Bioactivity: Ginkgolide C is a flavone isolated from Ginkgo biloba leaves, possessing multiple biological functions, such as decreasing platelet aggregation and ameliorating Alzheimer disease.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg



Histatin 5

Cat. No.: HY-P0273

Bioactivity: Histatin 5 inhibits the activity of the host matrix metalloproteinases MMP-2 and MMP-9 with IC_{50}s of 0.57 and 0.25 μM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 500u g, 1 mg, 5 mg, 10 mg

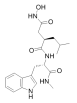
Ilomastat

(Galardin; GM6001)

Cat. No.: HY-15768

Bioactivity: Ilomastat (Galardin; GM6001) is a broad spectrum matrix metalloprotease (**MMP**) inhibitor, with K_i of 0.4 nM, 0.5 nM, 27 nM, 3.7 nM, 0.1 nM, 0.2 nM, 3.6 nM, 13.4 nM, 0.36 nM for MMP-1/2/3/7/8/9/12/14/26, respectively.

Purity: 98.23%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



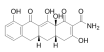
Incyclinide

(CMT-3; COL-3)

Cat. No.: HY-13648

Bioactivity: Incyclinide (CMT-3, COL-3) is a matrix metalloproteinase (**MMP**) inhibitor, thereby inducing extracellular matrix degradation, and inhibiting angiogenesis, tumor growth and invasion, and metastasis.

Purity: 98.26%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg

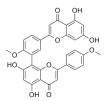


Isoginkgetin

Cat. No.: HY-N2117

Bioactivity: Isoginkgetin is a MMP-9 inhibitor, also a Pre-mRNA Splicing Inhibitor with IC 50 of 30 uM. target : MMP-9 [1], Pre-mRNA Splicing [2] IC 50: 30 u M (Pre-mRNA Splicing) In vitro: Isoginkgetin inhibits HT1080 tumor cell invasion substantially. Isoginkgetin is also quite effective in...

Purity: 99.59%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

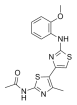


JNJ0966

Cat. No.: HY-103482

Bioactivity: JNJ0966 is a highly selective **MMP-9 zymogen** inhibitor with an **IC_{50}** of 440 nM.

Purity: 98.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

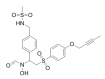


KP-457

Cat. No.: HY-110397

Bioactivity: KP-457 is a selective a disintegrin and metalloproteinase 17 (**ADAM17**) inhibitor, with higher selectivity for ADAM17 than for other MMPs and ADAM10, and IC_{50}s are 11.1 nM (ADAM17), 748 nM (ADAM10), 717 nM (MMP2), 9760 nM (MMP3), 2200 nM (MMP8), 5410 nM (MMP9), 930 nM (MMP13), 2140 nM (MMP14), and...

Purity: 98.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



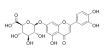
Luteolin 7-O-glucuronide

(Luteolin 7-glucuronide)

Cat. No.: HY-N1463

Bioactivity: Luteolin 7-O-glucuronide could inhibit Matrix Metalloproteinases **(MMP)** activities, with **IC_{50}s** of 17.63, 7.99, 11.42, 12.85, 0.03 μM for MMP-1, MMP-3, MMP-8, MMP-9, MMP-13, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg



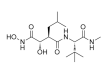
Marimastat

(BB2516; TA2516)

Cat. No.: HY-12169

Bioactivity: Marimastat is a broad spectrum inhibitor of **MMPs** with **IC_{50}** values of 3, 5, 6, 9 and 13 nM for MMP-9, MMP-1, MMP-2, MMP-14 and MMP-7, respectively.

Purity: 98.00%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg

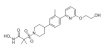


MMP3 inhibitor 1

Cat. No.: HY-114418

Bioactivity: MMP3 inhibitor 1 is a potent and highly selective **MMP-3** inhibitor with an **IC_{50}** of 1 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

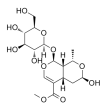


Morroniside

Cat. No.: HY-N0532

Bioactivity: Morroniside has neuroprotective effect by inhibiting neuron apoptosis and MMP2/9 expression.

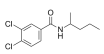
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg



NSC 405020

Cat. No.: HY-15827

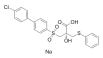
Bioactivity: NSC-405020 is a novel small molecule inhibitor of MT1-MMP that specifically targets PEX domain rather than the catalytic domain of MT1-MMP with IC50 >100 μM and does not inhibit the catalytic activity of MT1-MMP or MMP-2. IC50 value: > 100 uM [1] Target: MT1-MMP PEX inhibitor NSC-405020 directly...
Purity: 99.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



PNU-248686A

Cat. No.: HY-19422

Bioactivity: PNU-248686A is a novel matrix metalloproteinase (**MMP**) inhibitor.
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

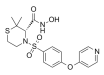


Prinomastat

(AG3340; KB-R9896)

Cat. No.: HY-12170

Bioactivity: Prinomastat is a broad spectrum **MMP** inhibitor with **IC_{50}**s of 79, 6.3 and 5.0 nM for MMP-1, MMP-3 and MMP-9, respectively.
Purity: 95.03%
Clinical Data: Phase 3
Size: 5 mg

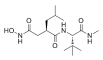


Ro 31-9790

(GI4747)

Cat. No.: HY-101703

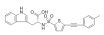
Bioactivity: Ro 31-9790 is a synthetic metalloproteinase (**MMP**) inhibitor.
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



S 3304

Cat. No.: HY-106992

Bioactivity: S 3304 is a novel **matrix metalloproteinases** (**MMP**) inhibitor specific for **MMP-2** and **MMP-9**.
Purity: 98.19%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

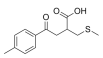


S-methyl-KE-298

(M-2)

Cat. No.: HY-101671

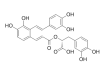
Bioactivity: S-methyl-KE-298 is an active metabolite of KE-298. KE-298 inhibits matrix metalloproteinase (MMP-1) production from rheumatoid arthritis (RA) synovial cells.
Purity: 98.0%
Clinical Data: Phase 2
Size: 1 mg, 5 mg, 10 mg, 20 mg



Salvianolic acid A

Cat. No.: HY-N0318

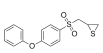
Bioactivity: Salvianolic acid A could protect the blood brain barrier through matrix metallopeptidase 9 (MMP-9) inhibition and anti-inflammation.
Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg



SB-3CT

Cat. No.: HY-12354

Bioactivity: SB-3CT is a potent and competitive inhibitor of matrix metalloproteinase (**MMP-2**) and **MMP-9**.
Purity: 99.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

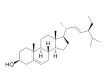


Stigmasterol

(Stigmasterin)

Cat. No.: HY-N0131

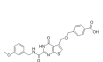
Bioactivity: Stigmasterol is a plant sterol which has been focused on the cholesterol-lowering activity and is valued as an anti-stiffness factor in the therapy of rheumatic diseases.
Purity: 98.0%
Clinical Data: No Development Reported
Size: 100 mg



T-26c

Cat. No.: HY-100518

Bioactivity: T-26c is highly potent and selective **matrix metalloproteinase-13 (MMP-13)** inhibitor with an **IC_{50}** of 6.75 pM and more than 2600-fold selectivity over the other related metalloenzymes [1].
Purity: 99.40%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

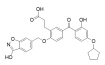


T-5224

Cat. No.: HY-12270

Bioactivity: T-5224 is a selective inhibitor of **c-Fos/activator protein (AP)-1**. It also inhibits **MMP3/13** with **IC_{50}**s of 10 nM.

Purity: 99.03%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

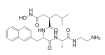


TAPI-1

Cat. No.: HY-16657

Bioactivity: TAPI-1 is a specific TACE(TNF-α-converting enzyme) inhibitor.

Purity: 99.89%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg



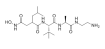
TAPI-2

(TNF Protease Inhibitor 2)

Cat. No.: HY-100211

Bioactivity: TAPI-2 is a broad-spectrum inhibitor of matrix metalloprotease (**MMP**), tumour necrosis factor α-converting enzyme (**TACE**) and a disintegrin and metalloproteinase (**ADAM**), with an **IC_{50}** of 20±10 μM for MMP.

Purity: 95.93%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg

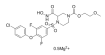


XL-784

Cat. No.: HY-19485

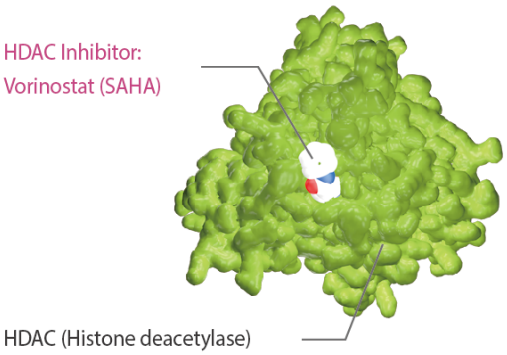
Bioactivity: XL-784 is a selective **matrix metalloproteinases (MMP)** inhibitor, with **IC_{50}s** of ~1900, 0.81, 120, 10.8, 18, 0.56 nM for MMP-1MMP-2MMP-3MMP-8MMP-9MMP-13respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



NADPH Oxidase

NOX



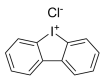
NADPH Oxidase Inhibitors & Modulators

Diphenyleneiodonium chloride
(DPI)

Cat. No.: HY-100965

Bioactivity: Diphenyleneiodonium chloride is a **NADPH oxidase** (**NOX**) inhibitor and also functions as a **TRPA1** activator with an **EC_{50}** of 1 to 3 μM.

Purity: 99.87%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

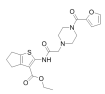


GLX351322

Cat. No.: HY-100111

Bioactivity: GLX351322 is an inhibitor of NADPH oxidase 4 (**Nox4**), and inhibits hydrogen peroxide production from NOX4-overexpressing cells with an **IC_{50}** of 5 μM.

Purity: 99.48%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

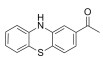


ML171
(2-Acetylphenothiazine; 2-APT)

Cat. No.: HY-12805

Bioactivity: ML171 (2-Acetylphenothiazine;2-APT) is a potent and selective NADPH oxidase 1 (**Nox1**) inhibitor that blocks Nox1-dependent ROS generation, with an **IC_{50}** of 0.25 μM in HEK293-Nox1 confirmatory assay.

Purity: 99.50%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

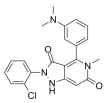


Setanaxib
(GKT137831)

Cat. No.: HY-12298

Bioactivity: Setanaxib (GKT137831) is a selective NADPH oxidase (**NOX1/4**) inhibitor with **K_i**s of 140 and 110 nM, respectively.

Purity: 99.43%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

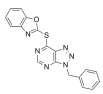


VAS2870

Cat. No.: HY-12804

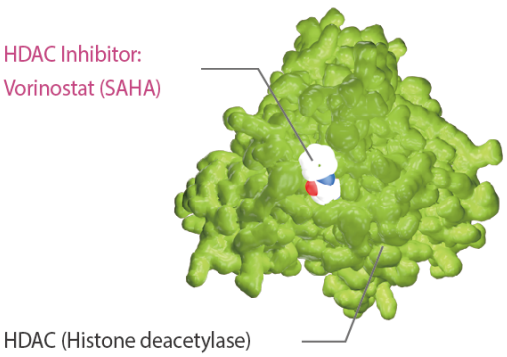
Bioactivity: VAS2870 is a **NADPH oxidase (NOX)** inhibitor.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Nampt

Nicotinamide phosphoribosyl transferase;PBEF;Visfatin;pre-B cell-enhancing factor;Pre-B cell colony enhancing factor



Nampt (Nicotinamide phosphoribosyl transferase) has been reported to be a cytokine that promotes B cell maturation and inhibits neutrophil apoptosis. NAmPRTase catalyzes the condensation of nicotinamide with 5-phosphoribosyl-1-pyrophosphate to yield nicotinamide mononucleotide, one step in the biosynthesis of nicotinamide adenine dinucleotide. The protein is an adipokine that is localized to the bloodstream and has various functions, including the promotion of vascular smooth muscle cell maturation and inhibition of neutrophil apoptosis. It also activates insulin receptor and has insulin-mimetic effects, lowering blood glucose and improving insulin sensitivity. The protein is highly expressed in visceral fat and serum levels of the protein correlate with obesity.

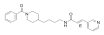
(E)-Daporinad

(FK866; APO866)

Cat. No.: HY-50876

Bioactivity: (E)-Daporinad (FK866) is an effective inhibitor of nicotinamide phosphoribosyltransferase (**NMPRTase**) with an **IC_{50}** of 0.09 nM.

Purity: 99.91%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

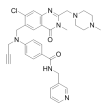


CB 300919

Cat. No.: HY-14375

Bioactivity: CB 300919 is a quinazoline-based antitumour agent with high activity in the CH1 human ovarian tumour xenograft. CB 300919 has a continuous exposure (96 h) growth inhibition **IC_{50}** value of 2 nM in human CH1 ovarian tumor xenograft [1].

Purity: 99.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



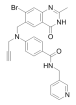
CB30865

(ZM 242421)

Cat. No.: HY-14373

Bioactivity: CB30865(ZM 242421) is a potent inhibitor of Nampt , an enzyme present in the NAD biosynthetic pathway.

Purity: 98.33%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



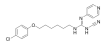
CHS-828

(GMX1778)

Cat. No.: HY-10079

Bioactivity: CHS-828 (GMX1778) is a competitive inhibitor of **nicotinamide phosphoribosyltransferase (NAMPT)**, with an **IC_{50}** less than 25 nM. CHS-828 (GMX1778) exerts a cytotoxic effect by decreasing the cellular level of NAD+ and exhibit...

Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

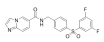


GNE-617

Cat. No.: HY-15766

Bioactivity: GNE-617 is a specific **NAMPT** inhibitor that inhibits the biochemical activity of NAMPT with an **IC_{50}** of 5 nM and exhibits efficacy in xenograft models of cancer.

Purity: 99.46%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 50 mg, 100 mg

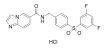


GNE-617 hydrochloride

Cat. No.: HY-15766A

Bioactivity: GNE-617 hydrochloride is a specific **NAMPT** inhibitor that inhibits the biochemical activity of NAMPT with an **IC_{50}** of 5 nM and exhibits efficacy in xenograft models of cancer.

Purity: 99.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 50 mg, 100 mg

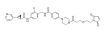


NAMPT inhibitor-linker 1

Cat. No.: HY-112615

Bioactivity: NAMPT inhibitor-linker 1 is a drug-linker conjugates for **ADC**, composed of an **NAMPT** inhibitor as a payload, and a linker. ADC-3 consists of an NAMPT inhibitor-linker 1 and an anti-c-Kit monoclonal antibody, exihibits potent activity against c-Kit expressing cell lines such as GIST-T1 and...

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



NAMPT inhibitor-linker 2

Cat. No.: HY-112616

Bioactivity: NAMPT inhibitor-linker 2 is a drug-linker conjugates for **ADC**, composed of an **NAMPT** inhibitor as a payload, and a linker. ADC-4 consists of an NAMPT inhibitor-linker 2 and an anti-c-Kit monoclonal antibody, exihibits potent activity against c-Kit expressing cell lines such as GIST-T1 and...

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

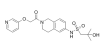
Nampt-IN-1

(LSN3154567)

Cat. No.: HY-12971

Bioactivity: Nampt-IN-1 (LSN3154567) is a potent and selective **NAMPT** inhibitor. Nampt-IN-1 inhibits purified NAMPT with an **IC_{50}** of 3.1 nM.

Purity: 99.48%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

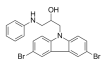


P7C3

Cat. No.: HY-15976

Bioactivity: P7C3 is a NAMPT activator.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

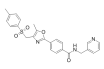


STF-118804

Cat. No.: HY-12808

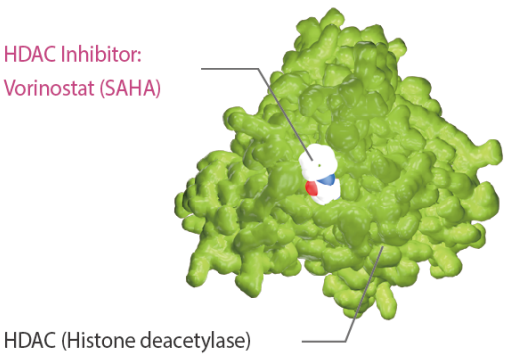
Bioactivity: STF-118804 is a highly specific NAMPT inhibitor; reduces the viability of most B-ALL cell lines with IC50 <10 nM.

Purity: 98.55%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



NEDD8-activating Enzyme

NAE



NEDD8-activating Enzyme (NAE) is an essential component of the NEDD8 conjugation pathway that controls the activity of the cullin-RING subtype of ubiquitin ligases, thereby regulating the turnover of a subset of proteins upstream of the proteasome. Substrates of cullin-RING ligases have important roles in cellular processes associated with cancer cell growth and survival pathways.

NEDD8 (neural precursor cell expressed developmentally downregulated protein 8) is the ubiquitin-like protein most homologous to ubiquitin. The covalent binding of NEDD8 to substrate proteins is called "neddylation", and includes the following steps: mature NEDD8 is activated by NEDD8-activating enzyme E1 (NAE), transferred by NEDD8-conjugating enzyme E2, and conjugated to the substrate protein by a NEDD8-E3 ligase.

NAE is a critical regulator of the neddylation pathway. Inhibition of NAE can inhibit the activity of the cullin-RING ligases (CRLs) and result in accumulation of CRL substrate proteins.

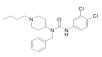
NEDD8-activating Enzyme Inhibitors & Modulators

NAcM-OPT

Cat. No.: HY-111505

Bioactivity: NAcM-OPT is an orally bioavailable cullin neddylation 1 (**DCN1**) inhibitor, which potently inhibits the DCN1-UBE2M interaction [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg, 100 mg



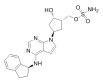
Pevonedistat

(MLN4924)

Cat. No.: HY-70062

Bioactivity: Pevonedistat (MLN4924) is a potent and selective **NEDD8-activating enzyme** (**NAE**) inhibitor with an **IC_{50}** of 4.7 nM.

Purity: 98.84%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



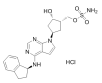
Pevonedistat hydrochloride

(MLN4924 (hydrochloride))

Cat. No.: HY-10484

Bioactivity: Pevonedistat hydrochloride (MLN4924 hydrochloride) is a potent and selective NEDD8-activating enzyme (**NAE**) inhibitor, with an **IC_{50}** of 4.7 nM.

Purity: 98.75%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

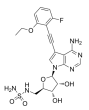


TAS4464

Cat. No.: HY-128586

Bioactivity: TAS4464 is a highly potent and selective inhibitor of **NEDD8 activating enzyme (NAE)**, with an **IC_{50}** of 0.955 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg, 100 mg

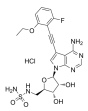


TAS4464 hydrochloride

Cat. No.: HY-128586A

Bioactivity: TAS4464 (hydrochloride) is a highly potent and selective inhibitor of **NEDD8 activating enzyme (NAE)**, with an **IC_{50}** of 0.955 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg, 100 mg

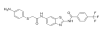


ZM223

Cat. No.: HY-101790

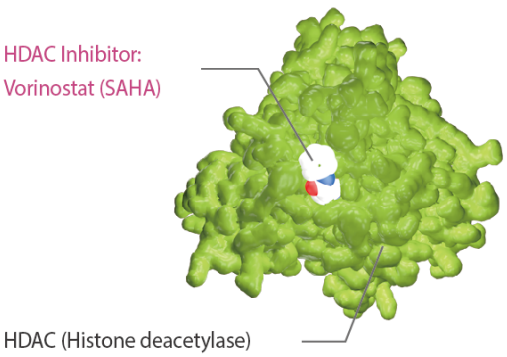
Bioactivity: ZM223 is a non-sulfamide **NEDD8 activating enzyme** (**NAE**) inhibitor that inhibits HCT116 colon cancer cells with an **IC_{50}** value of 100 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg



Neprilysin

Neutral endopeptidase;NEP;Cluster of differentiation 10;CD10



Neprilysin (NEP) is a type II membrane metalloendopeptidase composed of 750 residues with an active site containing a zinc-binding motif (HEXXH) at the extracellular carboxyl terminal domain. Neprilysin is capable of degrading the monomeric and the oligomeric forms of Aβ peptide. Neprilysin is the dominant Aβ peptide-degrading enzyme in the brain; Neprilysin becomes inactivated and down-regulated during both the early stages of Alzheimer's disease (AD) and aging.

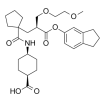
Neprilysin is a neutral endopeptidase and its inhibition increases bioavailability of natriuretic peptides, bradykinin, and substance P, resulting in natriuretic, vasodilatatory, and anti-proliferative effects.

Candoxatril

(UK 79300) Cat. No.: HY-19649

Bioactivity: Candoxatril is a neutral endopeptidase (**NEP**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

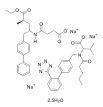


LCZ696

(Sacubitril mixture with Valsartan) Cat. No.: HY-18204A

Bioactivity: LCZ696 is a dual **angiotensin II** receptor and **neprilysin** inhibitor.

Purity: 99.99%
Clinical Data: Launched
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 50 mg

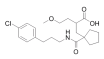


NEP-In-1

Cat. No.: HY-U00294

Bioactivity: NEP-IN-1 is a neutral endopeptidase (**NEP**) inhibitor with **IC_{50}** of 2 nM for **dNEP**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

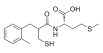


NEP-IN-2

Cat. No.: HY-U00336

Bioactivity: NEP-IN-2 is an inhibitor of **neutral endopeptidase**, used in the research of proliferation in atherosclerosis, restenosis.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

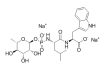


Phosphoramidon Disodium

Cat. No.: HY-N2021A

Bioactivity: Phosphoramidon disodium is a **metalloprotease** inhibitor. Phosphoramidon inhibits endothelin-converting enzyme (**ECE**), neutral endopeptidase (**NEP**), and angiotensin-converting enzyme (**ACE**) with **IC_{50}** values of 3.5, 0.034, and 78 μM, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg

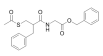


Racecadotril

(Acetorphan) Cat. No.: HY-17399

Bioactivity: Racecadotril (acetorphan), a potent enkephalinase inhibitor (IC50= 4.5 uM), protects endogenous enkephalins from degradation. IC50 value: 4.5 uM Target: Enkephalinase Racecadotril is a peripherally acting enkephalinase inhibitor with an IC50 of 4.5 uM. Unlike other medications used to treat...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
200 mg, 1 g

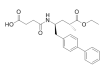


Sacubitril

(AHU-377) Cat. No.: HY-15407

Bioactivity: Sacubitril (AHU-377) is a potent **NEP** inhibitor with an **IC_{50}** of 5 nM. Sacubitril (AHU-377) is a component of the heart failure medicine LCZ696.

Purity: 99.71%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

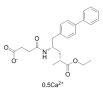


Sacubitril hemicalcium salt

(AHU-377 (hemicalcium salt)) Cat. No.: HY-15407A

Bioactivity: Sacubitril hemicalcium salt (AHU-377 hemicalcium salt) is a potent **NEP** inhibitor with an **IC_{50}** of 5 nM. Sacubitril hemicalcium salt is a component of the heart failure medicine LCZ696.

Purity: 99.64%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg, 500 mg, 1 g

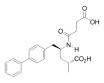


Sacubitrilat

(LBQ-657) Cat. No.: HY-17620

Bioactivity: Sacubitrilat is an active **neprilysin** (**NEP**) inhibitor.

Purity: 99.85%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
2 mg, 5 mg, 10 mg, 25 mg, 50 mg

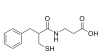


SQ28603

(SQ28,603; Squibb 28603) Cat. No.: HY-U00171

Bioactivity: SQ28603 is a potent and selective inhibitor of neutral endopeptidase 3.4.24.11 (**NEP**), an enzyme that degrades atrial natriuretic peptide (ANP).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



TD-0212

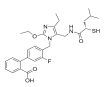
Cat. No.: HY-114412

Bioactivity: TD-0212 (compound 35) is an orally active dual pharmacology **angiotensin II type 1 receptor (AT_1)** antagonist and **neprilysin (NEP)** inhibitor, with a **pK_i** of 8.9 for AT_1 and a **pIC_{50}** of 9.2 for NEP [1].

Purity: >98%

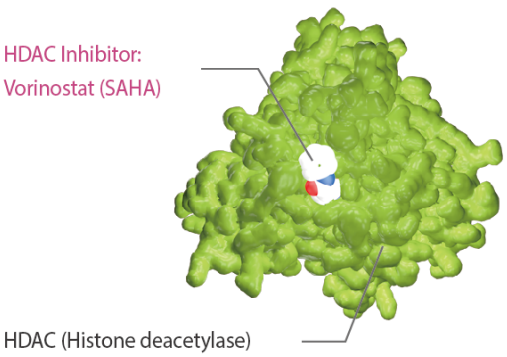
Clinical Data: No Development Reported

Size: 500 mg, 100 mg, 250 mg



PAI-1

Plasminogen activator inhibitor-1



Plasminogen activator inhibitor-1 (PAI-1) is the primary inhibitor of tissue-type plasminogen activator (tPA) and urokinase-type plasminogen activator (uPA), and functionally serves to suppress tissue and plasma fibrinolysis.

PAI-1 is a member of the serpin family of proteins and exists in multiple conformations of which a minor component, the "active" form, exhibits inhibitory effects against tPA and uPA.

PAI-1 is an endogenous inhibitor of urokinase-type plasminogen activator (uPA), and its expression is regulated by a number of intrinsic factors (e.g., cytokines and growth factors) and extrinsic factors (e.g., cellular stress).

PAI-1 seems to play a pivotal role in tumor growth and may represent a potential therapeutic target for bladder cancer.

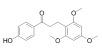
PAI-1 Inhibitors & Modulators

Loureirin B

Cat. No.: HY-N1504

Bioactivity: Loureirin B, a flavonoid extracted from **Dracaena cochinchinensis**, is an inhibitor of plasminogen activator inhibitor-1 **(PAI-1)**, with an IC_{50} of 26.10μM; Loureirin B also inhibits K_{ATP}, the phosphorylation of **ERK** and **JNK**

Purity: 99.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



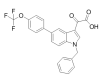
Tiplaxtinin

(PAI-039; Tiplasinin)

Cat. No.: HY-15253

Bioactivity: Tiplaxtinin is a selective and orally efficacious inhibitor of plasminogen activator inhibitor-1 (**PAI-1**) with IC_{50} of 2.7 μM.

Purity: 97.60%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

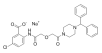


TM5275 sodium

Cat. No.: HY-100447

Bioactivity: TM5275 sodium is a plasminogen activator inhibitor (**PAI-1**) with an IC_{50} of 6.95 μM.

Purity: 99.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

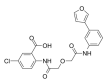


TM5441

Cat. No.: HY-101761

Bioactivity: TM5441 is a plasminogen activator inhibitor-1 (**PAI-1**); inhibits several tumor cell lines with IC_{50} values between 9.7 and 60.3 μM.

Purity: 98.34%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

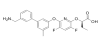


ZK824859

Cat. No.: HY-114330

Bioactivity: ZK824859 is an oral available and selective urokinase plasminogen activator (**uPA**) inhibitor with IC_{50}s of 79 nM, 1580 nM and 1330 nM for human uPA, tPA, and plasmin, respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

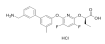


ZK824859 hydrochloride

Cat. No.: HY-114330A

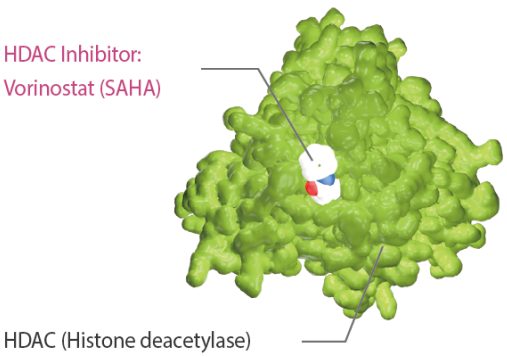
Bioactivity: ZK824859 hydrochloride is an oral available and selective urokinase plasminogen activator (**uPA**) inhibitor with IC_{50}s of 79 nM, 1580 nM and 1330 nM for human uPA, tPA, and plasmin, respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



PDHK

Pyruvate dehydrogenase kinase;PDH kinase



Pyruvate dehydrogenase (PDH) is a mitochondrial multienzyme complex that catalyzes the oxidative decarboxylation of pyruvate and is one of the major enzymes responsible for the regulation of homeostasis of carbohydrate fuels in mammals. The enzymatic activity is regulated by a phosphorylation/dephosphorylation cycle. Phosphorylation of PDH by a specific pyruvate dehydrogenase kinase (PDH kinase; PDHK; PDK) results in inactivation. Multiple alternatively spliced transcript variants have been found for this gene. PDH catalyzes the conversion of pyruvate to acetyl-coenzyme A, which enters into the Krebs cycle, providing ATP to the cell. PDH activity is under the control of pyruvate dehydrogenase kinases (PDHKs).

PDHK Inhibitors & Modulators

AZD7545

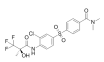
Cat. No.: HY-16082

Bioactivity: AZD7545 is a novel, selective small-molecule inhibitor of PDHK2 (PDH kinase2) with an IC50 of 36.8 nM and 6.4 nM for PDHK1 and PDHK2 respectively. IC50 Value: 36.8 nM (PDHK1); 6.4 nM (PDHK2) [1] Target: PDHK1/2 in vitro: The IC50 values for inhibition of PDHK2 and PDHK1 by AZD7545 were 6.4 ± 2.2 nM (n...

Purity: 99.84%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Dicoumarol

(Dicumarol)

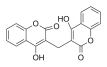
Cat. No.: HY-N0645

Bioactivity: Dicoumarol is an inhibitor of both **NAD(P)H:quinone oxidoreductase 1** (**NQO1**) and **PDK1** with **IC_{50}**s of 0.37 and 19.42 μM, respectively.

Purity: 98.70%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 100 mg



KPLH1130

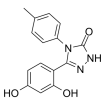
Cat. No.: HY-128578

Bioactivity: KPLH1130 is a specific pyruvate dehydrogenase kinase (**PDK**) inhibitor, blocks macrophage polarization and attenuates proinflammatory responses [1].

Purity: >98%

Clinical Data: No Development Reported

Size: 250 mg, 500 mg, 100 mg



VER-246608

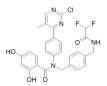
Cat. No.: HY-12492

Bioactivity: VER-246608 is a potent and ATP-competitive inhibitor of **pyruvate dehydrogenase kinase** (**PDK**) with **IC_{50}**s of 35 nM, 40 nM, 84 nM, and 91 nM for **PDK-1**, **PDK-3**, **PDK-2**, and **PDK-4**, respectively.

Purity: 99.03%

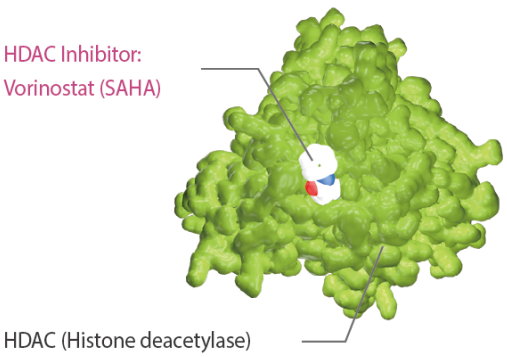
Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg



PGC-1α

PPARγ coactivator-1α



Peroxisome proliferator-activated receptor-γ coactivator-1α (PGC-1α) serves as an inducible coregulator in the control of energy homeostasis. PGC-1α is a powerful transcriptional coregulator of GLUT4 and mitochondrial genes, including components of the electron transport system. PGC-1α is expressed abundantly in tissues with high energy demand, including brown adipose tissue, heart, skeletal muscle, kidney, and brain. PGC-1α has been shown to regulate adaptive thermogenesis, mitochondrial biogenesis, glucose and fatty acid metabolism, the peripheral circadian clock, fiber-type switching in skeletal muscle, and heart development. PGC-1α, a critical booster of mitochondrial function, is an excellent candidate for preventing insulin resistance and metabolic syndromes secondary to mitochondrial dysfunction. PGC-1α has been shown to influence energy metabolism.

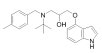
PGC-1α Inhibitors & Modulators

SR-18292

Cat. No.: HY-101491

Bioactivity: SR-18292 is a PPAR gamma coactivator-1α (**PGC-1α**) inhibitor, which increases PGC-1α acetylation, suppresses gluconeogenic gene expression and reduces glucose production in hepatocytes.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

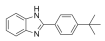


ZLN005

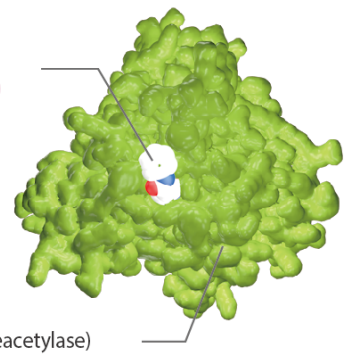
Cat. No.: HY-17538

Bioactivity: ZLN005 is a potent transcriptional regulator of **peroxisome proliferator-activated receptor-γ coactivator-1α (PGC-1α)** [1].

Purity: 99.69%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg



Phosphatase



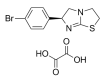
Phosphatases are enzyme that remove a phosphate group from a protein. Protein tyrosine phosphatases (PTPs) comprise a diverse family of transmembrane and cytoplasmic enzymes. PTPs play an important role in regulating the proliferative activity of cells and the integrity of cell-cell and cell-matrix contacts. Protein tyrosine phosphatase 1B (PTP1B) is a non-receptor PTP frequently associated with the endoplasmic reticulum and vesicles subjacent to the plasma membrane. PTP1B as a key negative regulator of leptin receptor pathways has been an attractive therapeutic target for the treatment of type 2 diabetes mellitus and obesity. Four major serine/threonine-specific protein phosphatase catalytic subunits are present in the cytoplasm of animal cells. Three of these enzymes, PP1, PP2A, and PP2B, are members of the same gene family, while PP2C appears to be distinct.The alkaline phosphatases comprise a heterogeneous group of enzymes that are widely distributed in mammalian cells. Acid phosphatase enzymes catalyze the hydrolysis of phosphate monoesters following the general equation.

(-)-p-Bromotetramisole oxalate (L-p-Bromotetramisole oxalate; 6-Bromolevamisole oxalate; (-)-p-Bromolevamisole oxalate)

Cat. No.: HY-19695

Bioactivity: (-)-p-Bromotetramisole Oxalate is a potent and non-specific alkaline phosphatase inhibitor.

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

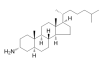


3α-Aminocholestane

Cat. No.: HY-19776

Bioactivity: 3α-Aminocholestane is a selective **SH2 domain-containing inositol-5-phosphatase 1** (**SHIP1**) inhibitor with an **IC_{50}** of ~2.5 μM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Ethanol, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

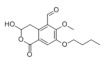


7-BIA

Cat. No.: HY-115496

Bioactivity: 7-BIA is a **receptor-type protein tyrosine phosphatase D (PTPRD)** inhibitor with an **IC_{50}** of ~1-3 μM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

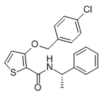


AS1949490

Cat. No.: HY-18686

Bioactivity: AS1949490 is a potent and selective **SHIP-2 (SH2 domain-containing inositol 5 phosphatase 2)** inhibitor, with an **IC_{50}** of 620 nM. AS1949490 activated glucose metabolism via up-regulation of GLUT1 gene in L6 myotubes [1] [2].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg



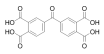
Benzophenonetetracarboxylic acid

(Benzophenone-3,3',4,4'-tetracarbonic acid)

Cat. No.: HY-100511

Bioactivity: Benzophenonetetracarboxylic acid can inprove activity and stability of alkaline phosphatases from psychrophilic and mesophilic organisms. Benzophenonetetracarboxylic acid can improve activity and stability of alkaline phosphatases from psychrophilic and mesophilic organisms by chemically modifying...

Purity: 98.66%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg

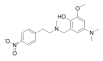


BN82002

Cat. No.: HY-112776

Bioactivity: BN82002 is a synthetic inhibitor of **CDC25** phophatases, with **IC_{50}s** of 2.4-6.3 μM for recombinant CDC25 phosphatases.

Purity: 99.65%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

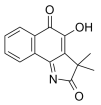


BVT948

Cat. No.: HY-100625

Bioactivity: BVT948 is a **protein tyrosine phosphatase** (**PTP**) inhibitor which can also inhibit several **cytochrome P450** (**P450**) isoforms and lysine methyltransferase **SETD8**.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg



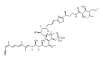
Calyculin A

((-)-Calyculin A)

Cat. No.: HY-18983

Bioactivity: Calyculin A is a potent and cell-permeable protein phosphatase 1 (**PP1**) and protein phosphatase 2A (**PP2A**) inhibitor with **IC_{50}**s of 2 nM and 0.5-1 nM.

Purity: 98.37%
Clinical Data: No Development Reported
Size: 0.5 mM * 200 uL in DMSO, 0.5 mM * 50 uL in DMSO, 0.5 mM * 20 uL in DMSO,

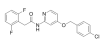


CPDA

Cat. No.: HY-18685

Bioactivity: CPDA is a novel potent SH2 domain-containing inositol phosphatase 2 (SHIP2) inhibitor.

Purity: 99.11%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

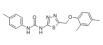


cyt-PTPε Inhibitor-1

Cat. No.: HY-112800

Bioactivity: cyt-PTPε Inhibitor-1 is a potent cytosolic protein tyrosine phosphatase epsilon (**cyt-PTPε**) inhibitor, binds to the catalytic domain of cyt-PTPε, blocks c-Src activation (dephosphorylation of c-Src), and exhibits anti-osteoclastic activity [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 100 mg, 500 mg

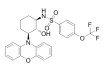


DT-061

Cat. No.: HY-112929

Bioactivity: DT-061 is an orally bioavailable activator of **protein phosphatase 2A (PP2A)** and could be applied in the therapy of KRAS-mutant and MYC-driven tumorigenesis [1].

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Enocyanin

Cat. No.: HY-114336

Bioactivity: Enocyanin is an anthocyanin extracted from grapes. Enocyanin shows inhibitory effect on the leucine aminopeptidase, acid phosphatase, γ-glutamyl transpeptidase and esterase activity [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

Enocyanin

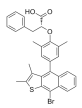
Ertiprotafib

(PTP 112)

Cat. No.: HY-19383

Bioactivity: Ertiprotafib is an inhibitor of **PTP1B, IkB kinase β (IKK-β)**, and a dual **PPARα and PPARβ** agonist, with an IC_{50} of 1.6 μM for PTP1B, 400 nM for IKK-β, an EC_{50} of ~1 μM for PPARα/PPARβ.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

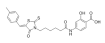


F1063-0967

Cat. No.: HY-101510

Bioactivity: F1063-0967 is a **Dual-specificity phosphatase 26** (**DUSP26**) inhibitor with an IC_{50} of 11.62 μM.

Purity: 98.28%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

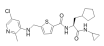


GSK 2830371

Cat. No.: HY-15832

Bioactivity: GSK 2830371 is a highly selective **Wip1 phosphatase** inhibitor with IC_{50} of 6 nM.

Purity: 98.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

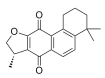


Isocryptotanshinone

Cat. No.: HY-N6651

Bioactivity: Isocryptotanshinone is a potent signal transducer and activator of transcription 3 (**STAT3**) and protein tyrosine phosphatase 1B **PTP1B** inhibitor, with an IC_{50} of 56.1 μM for PTP1B.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

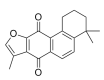


Isotanshinone IIA

Cat. No.: HY-N6650

Bioactivity: Isotanshinone IIA, an abietane-type diterpene metabolite, could non-competitively inhibit Protein Tyrosine Phosphatase 1B (**PTP1B**) activity with an IC_{50} 0f 11.4 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

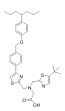


JTT 551

Cat. No.: HY-19779

Bioactivity: JTT 551 is selective a protein tyrosine phosphatase 1B (**PTP1B**) inhibitor, with K_is of 0.22 μM and 9.3 μM for PTP1B and TCPTP (T-cell protein tyrosine phosphatase), respectively; JTT 551 can be used in the research of type 2 diabetes mellitus.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

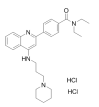


LMPTP INHIBITOR 1 dihydrochloride

Cat. No.: HY-111489B

Bioactivity: LMPTP INHIBITOR 1 (dihydrochloride) is a selective inhibitor of low molecular weight protein tyrosine phosphatase (**LMPTP**), with an IC_{50} of 0.8 μM LMPTP-A.

Purity: 99.63%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

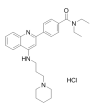


LMPTP INHIBITOR 1 hydrochloride

Cat. No.: HY-111489A

Bioactivity: LMPTP INHIBITOR 1 (hydrochloride) is a selective inhibitor of low molecular weight protein tyrosine phosphatase (**LMPTP**), with an IC_{50} of 0.8 μM LMPTP-A.

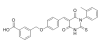
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg



LTV-1

Cat. No.: HY-18667

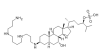
Bioactivity: LTV-1 is a highly potent, cell-permeable and reversible inhibitor of lymphoid tyrosine phosphatase (LYP) (IC50 = 508 nM). IC50 value: 508 nM Target: LYP in vitro: LTV-1 inhibits LYP in a dose-dependent manner at low- and sub-micromolar concentrations in T cells. LTV-1 enhances TCR signaling in...
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



MSI-1436

(Trodusquemine; Aminosterol-1436) Cat. No.: HY-12219

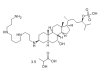
Bioactivity: MSI-1436 is a selective, non-competitive inhibitor of the enzyme **protein-tyrosine phosphatase 1B (PTB1B)**, with an **IC_{50}** of appr 1 μM, 200-fold preference over TCPTP (IC_{50}, 224 μM).
Purity: 95.0%
Clinical Data: Phase 1
Size: 1 mg, 5 mg, 10 mg, 50 mg



MSI-1436 lactate

(Trodusquemine lactate; Aminosterol-1436 lactate) Cat. No.: HY-12219A

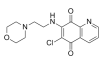
Bioactivity: MSI-1436 lactate is a selective, non-competitive inhibitor of the enzyme **protein-tyrosine phosphatase 1B** (**PTB1B**), with an **IC_{50}** of 1 μM, 200-fold preference over TCPTP (**IC_{50}** of 224 μM).
Purity: 95.0%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg



NSC 663284

(DA-3003-1) Cat. No.: HY-100034

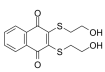
Bioactivity: NSC 663284 is a **Cdc25 dual specificity phosphatases** inhibitor with an **IC_{50}** of 0.21 μM.
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



NSC 95397

Cat. No.: HY-108543

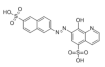
Bioactivity: NSC 95397 is an inhibitor for dual-specificity phosphatases, including mitogen-activated protein kinase phosphatase-1 (**MKP-1**). NSC 95397 suppresses proliferation and induces apoptosis in colon cancer cells through MKP-1 and ERK1/2 pathway [1].
Purity: >98%
Clinical Data: No Development Reported
Size:



NSC-87877

Cat. No.: HY-18756

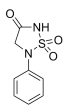
Bioactivity: NSC-87877 is a potent inhibitor of **Shp2** and **Shp1** protein tyrosine phosphatases (SH-PTP2 and SH-PTP1), with **IC_{50}** values of 0.318 μM, 0.355 μM shp2 and shp1, respectively [1]. NSC-87877 also inhibits **dual-specificity phosphatase...**
Purity: >98%
Clinical Data: No Development Reported
Size:



PTP1B-IN-1

(PTP1B inhibitor) Cat. No.: HY-10704

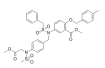
Bioactivity: PTP1B-IN-1 is a potent protein tyrosine phosphatase-1B (PTP1B) inhibitor with IC50 of 1.6 mM; 1,2,5-thiadiazolidin-3-one-1,1-dioxide scaffold for derivatives synthesis.
Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



PTP1B-IN-2

Cat. No.: HY-100462

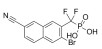
Bioactivity: PTP1B-IN-2 is a potent protein tyrosine phosphatase 1B (**PTP1B**) inhibitor with an **IC_{50}** of 50 nM.
Purity: 99.63%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg



PTP1B-IN-3

Cat. No.: HY-15133

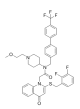
Bioactivity: PTP1B-IN-3 is a potent and selective **PTP1B** inhibitor with **IC_{50}**s of 120 nM (PTP1B) and 120 nM (TCPTP), respectively.
Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



Rilapladib

(SB 659032) Cat. No.: HY-102004

Bioactivity: Rilapladib is a selective Lipoprotein-Associated Phospholipase A2 (**Lp-PLA_2**) inhibitor with an **IC_{50}** of 230 pM.
Purity: 99.93%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

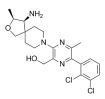


RMC-4550

Cat. No.: HY-116009

Bioactivity: RMC-4550 is a potent, selective and allosteric inhibitor of **SHP2**, with an IC_{50} of 0.583 nM.

Purity: 99.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



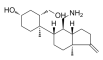
Rosiptor

(AQX-1125)

Cat. No.: HY-109011

Bioactivity: Rosiptor is an activator of SH2-containing inositol-5'-phosphatase 1 (**SHIP1**).

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

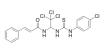


Sal003

Cat. No.: HY-15969

Bioactivity: Sal003 is a potent cell-permeable analog of the eIF2α phosphatase inhibitor Salubrinal with enhanced aqueous solubility. IC50 value: Target: eIF2α phosphatase inhibitor Sal003 has been shown to prevent dephosphorylation of eIF-2α which has been shown to regulate the late phase of long-term...

Purity: 99.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

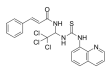


Salubrinal

Cat. No.: HY-15486

Bioactivity: Salubrinal is a cell-permeable and selective inhibitor of **eIF2α dephosphorylation**.

Purity: 99.58%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



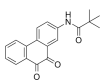
SF1670

(PTPase CD45 Inhibitor)

Cat. No.: HY-15842

Bioactivity: SF1670 is a potent and specific phosphatase and tensin homolog deleted on chromosome 10 (**PTEN**) inhibitor.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

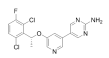


SHIP2-IN-1

Cat. No.: HY-112700

Bioactivity: SHIP2-IN-1 is a potent **SHIP2** inhibitor, inhibits SHIP2 activity, with an IC_{50} of 2 μM. SHIP2-IN-1 blocks GSK3β activation by phosphorylation at the Ser9 residue. SHIP2-IN-1 is used in the research of Alzheimer's disease [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

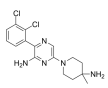


SHP099

Cat. No.: HY-100388

Bioactivity: SHP099 is a potent, selective, orally available **SHP2** inhibitor with an IC_{50} of 70 nM.

Purity: 99.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

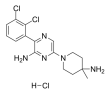


SHP099 hydrochloride

Cat. No.: HY-100388A

Bioactivity: SHP099 hydrochloride is a potent, selective and orally available **SHP2** inhibitor with an IC_{50} of 70 nM.

Purity: 99.67%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

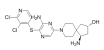


SHP2 IN-1

Cat. No.: HY-114460

Bioactivity: SHP2 IN-1 (compound 13) is an allergic inhibitor of **SHP2 (PTPN11)**, with an IC_{50} of 3 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

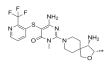


SHP394

Cat. No.: HY-114397

Bioactivity: SHP394 is an orally efficacious protein tyrosine phosphatase **SHP2** inhibitor with an IC_{50} of 23 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg



Sodium orthovanadate

(Sodium vanadate) Cat. No.: HY-D0852

Bioactivity: Sodium orthovanadate is an inhibitor of protein tyrosine phosphatases, alkaline phosphatases and a number of ATPases, most likely acting as a phosphate analogue.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 g

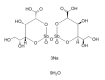
Na_3VO_4

Stibogluconate sodium

(Sodium stibogluconate) Cat. No.: HY-100595

Bioactivity: Stibogluconate sodium is a potent inhibitor of **protein tyrosine phosphatase**. Stibogluconate sodium inhibits 99% of SHP-1, SHP-2 and PTP1B activity at 10, 100, 100 μg/mL, respectively.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 500 mg, 1 g

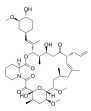


Tacrolimus

(FK506; Fujimycin; FR900506) Cat. No.: HY-13756

Bioactivity: Tacrolimus (FK506; Fujimycin) is a macrocyclic lactone with potent immunosuppressive properties. Tacrolimus binds to **FK506 binding protein (FKBP)** to form a complex and inhibits **calcineurin phosphatase**.

Purity: 98.46%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

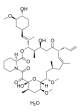


Tacrolimus monohydrate (FK506 (monohydrate); Fujimycin (monohydrate); FR900506 (monohydrate))

Cat. No.: HY-13756A

Bioactivity: Tacrolimus monohydrate (FK506 monohydrate; Fujimycin monohydrate) binds to **FK506 binding protein** (**FKBP**). This complex inhibits calcineurin phosphatase (PP2B). Tacrolimus monohydrate is a mTOR-independent **autophagy** inducer.

Purity: 98.46%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

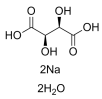


Tartaric acid disodium dihydrate (Sodium tartrate dibasic dihydrate; Sodium tartrate dihydrate)

Cat. No.: HY-D0850

Bioactivity: Tartaric acid disodium dihydrate is a Acid phosphatase inhibitor, is a sodium salt used in buffers for molecular biology and cell culture applications. Increases the rate of colchicine binding to tubulin1.

Purity: 99.0%
Clinical Data: Phase 1
Size: 10mM x 1mL in Water, 5 g



Tautomycin

Cat. No.: HY-12728

Bioactivity: Tautomycin, an antifungal antibiotic isolated from the bacterium Streptomyces verticillatus, is a potent and specific inhibitor of **protein phosphatases 1 and 2A** and induces contraction of smooth muscle under Ca^{2+}-f...

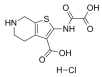
Purity: 98.0%
Clinical Data: No Development Reported
Size: 25u g

TCS 401

Cat. No.: HY-12312

Bioactivity: TCS 401 is a selective inhibitor of protein tyrosine phosphatase 1B (PTP1B).

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

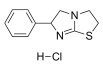


Tetramisole hydrochloride ((±)-Tetramisole hydrochloride; DL-Tetramisole hydrochloride; R-829)

Cat. No.: HY-B1194

Bioactivity: Tetramisole hydrochloride is an inhibitor of alkaline phosphatases, is a high purity antiparasitic.

Purity: 99.82%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 2 g

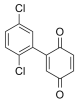


TPI-1

Cat. No.: HY-100463

Bioactivity: TPI-1, also known as Tyrosine Phosphatase Inhibitor 1, is a **SHP-1** inhibitor; inhibits recombinant SHP-1 with an IC_{50} of 40 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

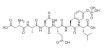


[pTyr5] EGFR 988-993

Cat. No.: HY-P1799

Bioactivity: [pTyr5] EGFR (988-993) is derived from the autophosphorylation site (Tyr992) of epidermal growth factor receptor (EGFR 988-993). [pTyr5] EGFR (988-993) is often complexed with the catalytically inactive protein-tyrosine phosphate 1B (PTP1B) [1].

Purity: >98%
Clinical Data: No Development Reported
Size:

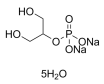


β-Glycerol phosphate disodium salt pentahydrate

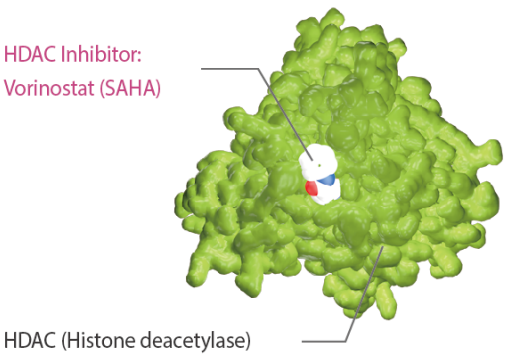
(β-Glycerophosphate disodium salt pentahydrate) **Cat. No.:** HY-D0886

Bioactivity: β-Glycerol phosphate disodium salt pentahydrate (β-Glycerophosphate disodium salt pentahydrate) is a **phosphatase** inhibitor [1].

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 g, 5 g



Phosphodiesterase (PDE)



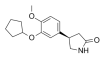
Phosphodiesterase (PDE) is any enzyme that breaks a phosphodiester bond. Usually, people speaking of phosphodiesterase are referring to cyclic nucleotide phosphodiesterases, which have great clinical significance and are described below. However, there are many other families of phosphodiesterases, including phospholipases C and D, autotaxin, sphingomyelin phosphodiesterase, DNases, RNases, and restriction endonucleases, as well as numerous less-well-characterized small-molecule phosphodiesterases. The cyclic nucleotide phosphodiesterases comprise a group of enzymes that degrade the phosphodiester bond in the second messenger molecules cAMP and cGMP. They regulate the localization, duration, and amplitude of cyclic nucleotide signaling within subcellular domains. PDEs are therefore important regulators ofsignal transduction mediated by these second messenger molecules.

(R)-(-)-Rolipram

((R)-Rolipram; (-)-Rolipram) Cat. No.: HY-16900A

Bioactivity: (R)-(-)-Rolipram is the R-enantiomer of Rolipram. Rolipram is a selective inhibitor of phosphodiesterases **PDE4** with **IC_{50}** of 3 nM, 130 nM and 240 nM for PDE4A, PDE4B, and PDE4D, respectively.

Purity: 99.85%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

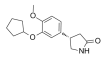


(S)-(+)-Rolipram

((+)-Rolipram; (S)-Rolipram) Cat. No.: HY-B0392

Bioactivity: (S)-(+)-Rolipram is a PDE4-inhibitor and an anti-inflammatory agent, less potent than its R enantiomer.

Purity: 99.85%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

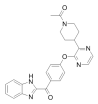


AMG 579

Cat. No.: HY-12913

Bioactivity: AMG 579 is a potent, selective, and efficacious inhibitor of **phosphodiesterase 10A (PDE10A)** with an **IC_{50}** of 0.1 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

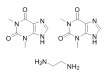


Aminophylline

Cat. No.: HY-B0140

Bioactivity: Aminophylline is a competitive nonselective phosphodiesterase inhibitor that is used to treat airway obstruction from asthma or COPD. Target: Phosphodiesterase Aminophylline is a compound of the bronchodilator theophylline with ethylenediamine in 2:1 ratio. The ethylenediamine improves solubility, and the...

Purity: 99.56%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

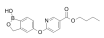


AN3199

Cat. No.: HY-19830

Bioactivity: AN3199 is a PDE4 inhibitor with IC50 of 94.5 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

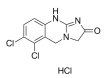


Anagrelide hydrochloride

(BL4162A) Cat. No.: HY-B0523A

Bioactivity: Anagrelide Hydrochloride(BL4162A) is a drug used for the treatment of essential thrombocytosis.

Purity: 99.75%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

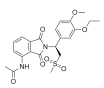


Apremilast

(CC-10004) Cat. No.: HY-12085

Bioactivity: Apremilast is an orally available inhibitor of type-4 cyclic nucleotide phosphodiesterase (**PDE-4**) with an **IC_{50}** of 74 nM.

Purity: 99.95%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

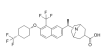


Autotaxin modulator 1

Cat. No.: HY-12812

Bioactivity: Autotaxin modulator 1 is a novel Autotaxin modulator extracted from Patent WO 2014018881 A1.

Purity: 99.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

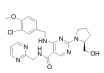


Avanafil

(TA1790) Cat. No.: HY-18252

Bioactivity: Avanafil(TA-1790) is a potent and highly selective phosphodiesterase-5(PDE-5) inhibitor(IC50=5.2 nM) for erectile dysfunction; lower selectivity against PDE1, PDE6, and PDE11.

Purity: 98.28%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg

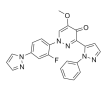


Balipodect

(TAK-063) Cat. No.: HY-12472

Bioactivity: Balipodect (TAK-063) is a highly potent, selective and orally active PDE10A inhibitor with IC $_{50}$ of 0.30 nM; >15000-fold selectivity over other PDEs.

Purity: 98.04%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

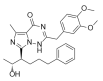


Bay 60-7550

(BAY 607550) Cat. No.: HY-14992

Bioactivity: Bay 60-7550 is a potent and selective **PDE2** inhibitor with a K_i of 3.8 nM.

Purity: 98.12%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 100 mg

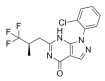


BAY 73-6691

((R)-BAY 73-6691) Cat. No.: HY-104028

Bioactivity: BAY 73-6691 is a potent, selective brain penetrant **PDE9A** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

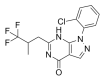


BAY 73-6691 racemate

Cat. No.: HY-104028A

Bioactivity: BAY 73-6691 racemate is a **phosphodiesterase 9** inhibitor extracted from patent WO 2017070293 A1.

Purity: 99.84%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

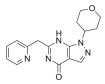


BI-409306

Cat. No.: HY-112831

Bioactivity: BI-409306 is a potent and selective **PDE9A** inhibitor, with an **IC_{50}** of 52 nM, and shows weak activity against other PDEs, such as PDE1A (**IC_{50}**, 1.4 μM), PDE1C (**IC_{50}**, 1.0 μM), PDE2A, PDE3A, PDE4B, PDE5A, PDE6AB, PDE7A, and PDE10A (**IC_{50}** all &...

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

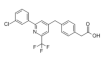


BPN14770

Cat. No.: HY-117571

Bioactivity: BPN14770 is a selective **phosphodiesterase 4D (PDE4D)** allosteric inhibitor with **IC_{50}**s of 7.8 nM and 7.4 nM for PDE4D7 and PDE4D3 (two different dimeric forms of PDE4D), respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size:

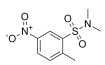


BRL-50481

Cat. No.: HY-109586

Bioactivity: BRL-50481 is a novel and selective inhibitor of **PDE7** with **IC_{50}**s of 0.15, 12.1, 62 and 490 μM for **PDE7A**, **PDE7B**, **PDE4** and **PDE3**, respectively.

Purity: 99.87%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

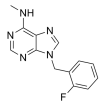


BW-A 78U

Cat. No.: HY-100118

Bioactivity: BW-A 78U is a **PDE4** inhibitor with an **IC_{50}** of 3 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg

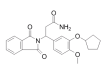


CDC801

Cat. No.: HY-U00179

Bioactivity: CDC801 is a potent and orally active phosphodiesterase 4 (**PDE4**) and tumor necrosis factor-α (**TNF-α**) inhibitor with **IC_{50}** of 1.1 μM and 2.5 μM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

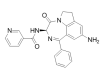


CI-1044

(PD-189659) Cat. No.: HY-100246

Bioactivity: CI-1044 is an orally active **PDE4** inhibitor with **IC_{50}**s of 0.29, 0.08, 0.56, 0.09 μM for **PDE4A5**, **PDE4B2**, **PDE4C2** and **PDE4D3**, respectively.

Purity: 98.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg

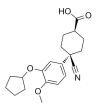


Cilomilast

(SB-207499) Cat. No.: HY-10790

Bioactivity: Cilomilast(SB 207499; Ariflo) is a potent PDE4 inhibitor with IC50 of about 110 nM, has anti-inflammatory activity and low central nervous system activity.

Purity: 98.81%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

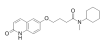


Cilostamide

(OPC3689) Cat. No.: HY-101312

Bioactivity: Cilostamide is a selective and potent **PDE3** inhibitor, with **IC_{50}**s of 27 nM and 50 nM for PDE3A and PDE3B, respectively, and has antithrombotic and anti-intimal hyperplastic activity.

Purity: 99.63%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

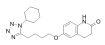


Cilostazol

(OPC 13013; OPC 21) Cat. No.: HY-17464

Bioactivity: Cilostazol(OPC 13013; OPC 21) is a potent inhibitor of PDE3A, the isoform of PDE 3 in the cardiovascular system (IC50=0.2 uM). IC50 Value: 0.2 uM [1] Target: PDE3A in vitro: Cilostazol caused a concentration-dependent increase in the cAMP level in rabbit and human platelets with similar potency. Furthermore,...

Purity: 99.34%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
50 mg, 100 mg

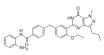


CM-675

Cat. No.: HY-114303

Bioactivity: CM-675 is a dual **phosphodiesterase 5 (PDE5)** and **class I histone deacetylases**-selective inhibitor, with **IC_{50}** values of 114 nM and 673 nM for PDE5 and HDAC1, respectively. CM-675 has potential to treat Alzheimer's disease [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

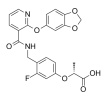


CP671305

Cat. No.: HY-101803

Bioactivity: CP671305 is a potent, orally active, selective inhibitor of **phosphodiesterase-4-D**, and possesses high activities.

Purity: 99.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 20 mg

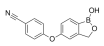


Crisaborole

(AN-2728; PF-06930164) Cat. No.: HY-10978

Bioactivity: Crisaborole (AN-2728) is a potent inhibitor of **PDE4** and **cytokine** release; inhibit PDE4 with an **IC_{50}** of 0.49 μM.

Purity: 99.97%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg

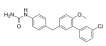


D159687

Cat. No.: HY-15444

Bioactivity: D159687 is a selective **PDE4D** inhibitor [1].

Purity: 98.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



Deltarasin

Cat. No.: HY-15747

Bioactivity: Deltarasin is an inhibitor of **KRAS-PDEδ** interaction with **K_d** of 38 nM for binding to purified PDEδ.

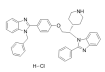
Purity: 95.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

Deltarasin hydrochloride

Cat. No.: HY-15747A

Bioactivity: Deltarasin hydrochloride is an inhibitor of **KRAS-PDEδ**interaction with **K_d** of 38 nM for binding to purified PDEδ.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

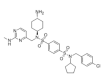


Deltasonamide 2

Cat. No.: HY-122641A

Bioactivity: Deltasonamide 2 is a **PDEδ** inhibitor with a **K_d** of ~385 pM and an **EC_{50}** of 1.24 μM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

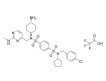


Deltasonamide 2 TFA

Cat. No.: HY-122641B

Bioactivity: Deltasonamide 2 TFA is a **PDEδ** inhibitor with a **K_d** of ~385 pM and an **EC_{50}** of 1.24 μM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



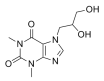
Diphylline

(Diprophylline)

Cat. No.: HY-B0128

Bioactivity: Dyphylline acts as an adenosine receptor antagonist and phosphodiesterase inhibitor, which is used in the treatment of respiratory disorders.

Purity: 99.28%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

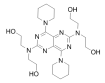


Dipyridamole

Cat. No.: HY-B0312

Bioactivity: Dipyridamole (Persantine) is a phosphodiesterase inhibitor that blocks uptake and metabolism of adenosine by erythrocytes and vascular endothelial cells.

Purity: 98.02%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

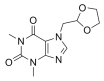


Doxofylline

Cat. No.: HY-B0004

Bioactivity: Doxofylline is an antagonist of **adenosine A1 receptor** which also inhibits **phosphodiesterase IV**.

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

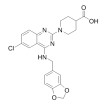


ER21355

Cat. No.: HY-101826

Bioactivity: ER21355 is an inhibitor of **phosphodiesterase 5 (PDE5)**, used for treatment of prostatic diseases.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



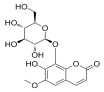
Fraxin

(Fraxoside)

Cat. No.: HY-N0579

Bioactivity: Fraxin isolated from Acer tegmentosum, F. ornus or A. hippocastanum, is a glucoside of fraxetin and reported to exert potent anti-oxidative stress action [1], anti-inflammatory and antimetastatic properties. Fraxin shows its antioxidative effect through inhibition of cyclo AMP...

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg



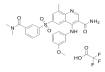
GSK 256066 Trifluoroacetate

(GSK256066 (2,2,2-trifluoroacetic acid))

Cat. No.: HY-70069

Bioactivity: GSK 256066 Trifluoroacetate is a selective PDE4B(equal affinity to isoforms A-D) inhibitor with IC $_{50}$ of 3.2 pM, >380,000-fold selectivity versus PDE1/2/3/5/6 and >2500-fold selectivity against PDE4B versus PDE7.

Purity: 98.94%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

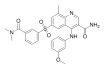


GSK256066

Cat. No.: HY-10469

Bioactivity: GSK256066 is a selective PDE4B(equal affinity to isoforms A-D) inhibitor with IC50 of 3.2 pM, >380,000-fold selectivity versus PDE1/2/3/5/6 and >2500-fold selectivity against PDE4B versus PDE7.

Purity: 98.11%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 50 mg, 100 mg

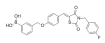


HA130

Cat. No.: HY-19329

Bioactivity: HA130 is a selective ATX (autotaxin) inhibitor with IC50 of 28 nM. IC50 value: 28 nM [2] Target: ATX in vitro: HA130 completely blocks the ability of ATX to promote TEM (transendothelial migration). HA130 at 0.3 μM completely ablates the activity of ATX on TK1 uropod formation. [1] in...

Purity: 98.90%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



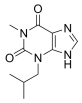
IBMX

(3-Isobutyl-1-methylxanthine; Isobutylmethylxanthine)

Cat. No.: HY-12318

Bioactivity: IBMX is a broad-spectrum phosphodiesterase (**PDE**) inhibitor, with **IC$_{50}$**s of 6.5, 26.3 and 31.7 μM for **PDE3**, **PDE4** and **PDE5**, respectively.

Purity: 99.99%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 50 mg



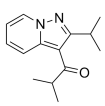
Ibudilast

(KC-404; AV-411; MN-166)

Cat. No.: HY-B0763

Bioactivity: Ibudilast(KC-404;AV-411;MN-166) is a relatively nonselective phosphodiesterase inhibitor which has been marketed for treating asthma.

Purity: 99.93%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

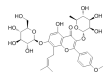


Icariin

(Iearriline) Cat. No.: HY-N0014

Bioactivity: Icariin is a flavonol glycoside. Icariin inhibits **PDE5** and **PDE4** activities with **IC_{50}**s of 432 nM and 73.50 μM, respectively. Icariin also is a **PPARα** activator.

Purity: 98.75%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg

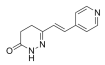


ICI 153110

Cat. No.: HY-100239

Bioactivity: ICI 153110 is an orally active **phosphodiesterase** inhibitor with both vasodilating and inotropic properties which is designed for the treatment of congestive cardiac failure.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

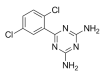


Irsogladine

(Dicloguamine) Cat. No.: HY-B0327

Bioactivity: Irsogladine is a PDE4 inhibitor and muscarinic acetylcholine receptor binder.

Purity: 95.13%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

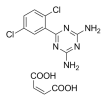


Irsogladine maleate

(Dicloguamine maleate; MN1695) Cat. No.: HY-B0327A

Bioactivity: Irsogladine is a PDE4 inhibitor and muscarinic acetylcholine receptor binder.

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 500 mg

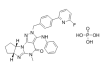


ITI214

Cat. No.: HY-12501A

Bioactivity: ITI-214 is a picomolar PDE1 inhibitor with excellent selectivity against other PDE family members and against a panel of enzymes, receptors, transporters, and ion channels, exhibits potent PDE1 inhibitory activity (Ki = 58 pM).

Purity: 99.58%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

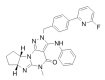


ITI214 free base

Cat. No.: HY-12501

Bioactivity: ITI-214 (free base) is a picomolar PDE1 inhibitor with excellent selectivity against other PDE family members and against a panel of enzymes, receptors, transporters, and ion channels, exhibits potent PDE1 inhibitory activity (Ki = 58 pM).

Purity: 98.0%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

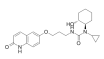


K134

(OPC33509) Cat. No.: HY-U00186

Bioactivity: K134 is a **phosphodiesterase 3** (**PDE3**) inhibitor. The **IC_{50}**s of K134 toward **PDE3A**, **PDE3B**, PDE5, PDE2 and PDE4 are 0.1, 0.28, 12.1, >300 and >300 μM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

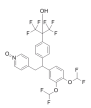


L791943

Cat. No.: HY-U00254

Bioactivity: L791943 is a potent, selective **Phosphodiesterase-4** (**PDE4**) inhibitor with an **IC_{50}** of 4.2 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

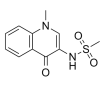


LAS-31180

Cat. No.: HY-101811

Bioactivity: LAS-31180 is an inhibitor of **phosphodiesterase 3**, with positive inotropic and vasodilator properties.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

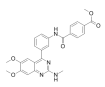


Lotamilast

(RVT-501; E6005) Cat. No.: HY-12740

Bioactivity: Lotamilast (RVT-501; E6005) is a selective phosphodiesterase 4 (**PDE4**) inhibitor with an **IC_{50}** of 2.8 nM.

Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

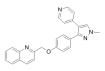


Mardepodect

(PF-2545920) Cat. No.: HY-50098

Bioactivity: PF-2545920 is a potent and selective PDE10A inhibitor with IC50 of 0.37 nM, with >1000-fold selectivity over the PDE. IC50 value: 0.37 nM [1] Target: PDE10A PDE10A subcutaneously administrated at dose of 1 mg/kg elevates striatal cGMP about 3 fold in male CD-1 mice, while PDE10A subcutaneously...

Purity: 99.89%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

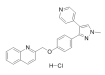


Mardepodect hydrochloride

(PF-2545920 (hydrochloride)) Cat. No.: HY-50098A

Bioactivity: Mardepodect hydrochloride (PF-2545920 hydrochloride) hydrochloride is a potent and selective PDE10A inhibitor with IC50 of 0.37 nM, with >1000-fold selectivity over the PDE.

Purity: 95.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

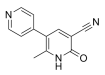


Milrinone

(Win 47203) Cat. No.: HY-14252

Bioactivity: Milrinone is a **PDE3** inhibitor, and also an inotrope and vasodilator.

Purity: 99.78%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

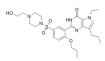


Mirodenafil

(SK3530) Cat. No.: HY-14930

Bioactivity: Mirodenafil(SK3530) is a phosphodiesterase type 5 (PDE-5) inhibitor developed for the treatment of erectile dysfunction.

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

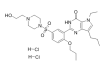


Mirodenafil dihydrochloride

(SK-3530 dihydrochloride) Cat. No.: HY-14930A

Bioactivity: Mirodenafil 2Hcl(SK3530 2Hcl) is a phosphodiesterase type 5 (PDE-5) inhibitor developed for the treatment of erectile dysfunction.

Purity: 99.79%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

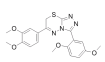


ML-030

Cat. No.: HY-103050

Bioactivity: ML-030 is a potent **PDE4** inhibitor, with IC_{50} of 6.7 nM, 12.9 nM, 48.2 nM, 37.2 nM, 452 nM and 49.2 nM for PDE4A, PDE4A1, PDE4B1, PDE4B2, PDE4C1,and PDE4D2, respectively.

Purity: 99.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

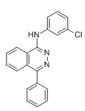


MY-5445

Cat. No.: HY-100933

Bioactivity: MY-5445 is a specific phosphodiesterase type 5 (**PDE5**) inhibitor [1].

Purity: 99.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

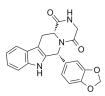


Nortadalafil

(Demethyl Tadalafil) Cat. No.: HY-90009

Bioactivity: Nortadalafil is demethyl Tadalafil, which is a PDE5 inhibitor, currently marketed in pill form for treating erectile dysfunction (ED) under the name Cialis; and under the name Adcirca for the treatment of pulmonary arterial hypertension.

Purity: 99.69%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

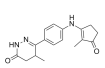


NSP-805

Cat. No.: HY-19102

Bioactivity: NSP-805 is a potent and selective inhibitor of guinea pig cardiac **phosphodiesterase 3 (PDE3)**, and a cardiotonic agent with vasodilator properties.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

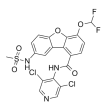


Oglemilast

(GRC 3886) Cat. No.: HY-15178

Bioactivity: Oglemilast(GRC3886) is a potent PDE4 inhibitor, under clinical studies in the treatment of allergen-induced asthma.

Purity: 96.83%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 50 mg

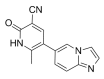


Olprinone

(Loprinone) Cat. No.: HY-14254A

Bioactivity: Olprinone(Loprinone) is a selective phosphodiesterase 3 (PDE3) inhibitor.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg

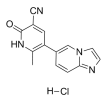


Olprinone Hydrochloride

(Loprinone (Hydrochloride)) Cat. No.: HY-14254

Bioactivity: Olprinone Hcl(Loprinone Hcl) is a selective phosphodiesterase 3 (PDE3) inhibitor.

Purity: 99.77%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 10 mg, 50 mg

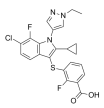


PAT-505

Cat. No.: HY-107781

Bioactivity: PAT-505 is a potent, selective, noncompetitive and orally available **autotaxin** inhibitor, with an **IC_{50}** of 2 nM in Hep3B cells, 9.7 nM in human blood and 62 nM in mouse plasma.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

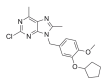


PDE IV-IN-1

Cat. No.: HY-U00352

Bioactivity: PDE IV-IN-1 is an inhibitor of **phosphodiesterase IV**, used for the research of asthma, COPD or other inflammatory diseases.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

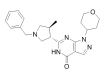


PDE-9 inhibitor

Cat. No.: HY-50865

Bioactivity: PDE-9 inhibitor is useful for neurodegenerative diseases.

Purity: 99.29%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

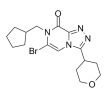


PDE1-IN-2

Cat. No.: HY-101490

Bioactivity: PDE1-IN-2 is an inhibitor of **PDE1** extracted from patent WO2016/55618 A1, example 31; has **IC_{50}** values of 6, 140 and 164 nM for PDE1C, PDE1B and PDE1A, respectvely.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

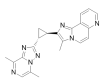


PDE10-IN-1

Cat. No.: HY-12813

Bioactivity: PDE10-IN-1 is a potent PDE10-IN-1 inhibitor extracted from Patent WO 2013192273 A1, for treating CNS and metabolic disorders.

Purity: 97.82%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

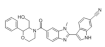


PDE12-IN-3

Cat. No.: HY-124768

Bioactivity: PDE12-IN-3 is a **phosphodiesterase 12** (**PDE12**) inhibitor with a pXC $_{50}$ of 7.68. Antiviral activity [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 100 mg, 250 mg

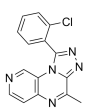


PDE2/PDE10-IN-1

Cat. No.: HY-U00427

Bioactivity: PDE2/PDE10-IN-1 is a phosphodiesterase 2 (**PDE2**) and **PDE10** inhibitor with **IC_{50}**s of 29 and 480 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

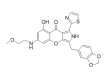


PDE5-IN-2

Cat. No.: HY-112704

Bioactivity: PDE5-IN-2 is a potent, highly selective, and orally active **PDE5** inhibitor, with an **IC_{50}** of 0.31 nM, less potently inhibits PDE2A, PDE10A, PDE4D2, and PDE6C, with **IC_{50}**s of 106, 46, 43, 1.2 nM, respectively. Anti-pulmonary arter...

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

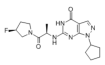


PDE9-IN-1

Cat. No.: HY-126137

Bioactivity: PDE9-IN-1 is a potent, selective, and orally bioavailable **phosphodiesterase-9A (PDE9A)** Inhibitor with an **IC_{50}** of 8.7 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

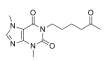


Pentoxifylline

(BL-191; PTX; Oxpentifylline) Cat. No.: HY-B0715

Bioactivity: Pentoxifylline is a competitive nonselective phosphodiesterase inhibitor. Target: PDE Pentoxifylline is a competitive nonselective phosphodiesterase inhibitor which raises intracellular cAMP, activates PKA, inhibits TNF and leukotriene synthesis, and reduces inflammation and innate...

Purity: 99.91%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g

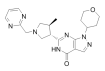


PF-04447943

Cat. No.: HY-15441

Bioactivity: PF-04447943 is a potent inhibitor of human recombinant **PDE9A** (**IC_{50}**=12 nM) with >78-fold selectivity, respectively, over other PDE family members (**IC_{50}**>1000 nM).

Purity: 99.84%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

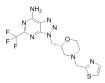


PF-04957325

Cat. No.: HY-15426

Bioactivity: PF-04957325 is a highly potent and selective **PDE8** inhibitor, with **IC_{50}**s of 0.7 nM and 0.3 nM for PDE8A and PDE8B, respectively.

Purity: 98.48%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

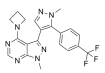


PF-05085727

Cat. No.: HY-102050

Bioactivity: PF-05085727 is a potent, selective and brain penetrant **Phosphodiesterase 2A (PDE2A)** inhibitor with an **IC_{50}** of 2 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

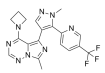


PF-05180999

Cat. No.: HY-111371

Bioactivity: PF-05180999 is a **phosphodiesterase 2A (PDE2A)** inhibitor, with an **IC_{50}** of 1.6 nM.

Purity: 99.94%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

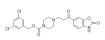


PF-8380

Cat. No.: HY-13344

Bioactivity: PF-8380 is a potent **autotaxin** inhibitor with an **IC_{50}** of 2.8 nM in isolated enzyme assay and 101 nM in human whole blood.

Purity: 98.49%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

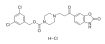


PF-8380 hydrochloride

Cat. No.: HY-13344A

Bioactivity: PF-8380 hydrochloride is a potent **autotaxin** inhibitor with an **IC_{50}** of 2.8 nM in isolated enzyme assay and 101 nM in human whole blood.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

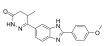


Pimobendan

(UD-CG115) Cat. No.: HY-B0204

Bioactivity: Pimobendan (UD-CG115) is a selective inhibitor of PDE3 with IC $_{50}$ of 0.32 μM.

Purity: 99.51%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

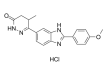


Pimobendan hydrochloride

(UD-CG115 (hydrochloride)) Cat. No.: HY-B0204A

Bioactivity: Pimobendan (hydrochloride) (UD-CG115 (hydrochloride)) is a selective inhibitor of PDE3 with IC $_{50}$ of 0.32 μM.

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg



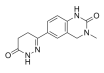
Prinoxodan

(RGW2938)

Cat. No.: HY-U00208

Bioactivity: Prinoxodan (RGW2938) is a **phosphodiesterase** inhibitor.

Purity: 95.58%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

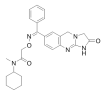


R 80123

Cat. No.: HY-100615A

Bioactivity: R 80123 is the Z-isomer of R 79595, is also a highly selective phosphodiesterase inhibitor. The fuction is similar to R 80122 (HY-100615, Revizinone). In vivo: The administration of Revizinone improved the haemodynamic profile with an increase in cardiac output, a decrease in systemic vascular resistance...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



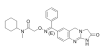
Revizinone

(R80122)

Cat. No.: HY-100615

Bioactivity: Revizinone is a novel selective phosphodiesterase (PDE) inhibitor with IC50 values on this enzyme to 0.036 microM. target: phosphodiesterase (PDE)[3]; IC 50: 0.036 microM; [3] In vivo: The administration of Revizinone improved the haemodynamic profile with an increase in cardiac output, a...

Purity: 98.10%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

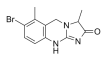


Ro-15-2041

Cat. No.: HY-101807

Bioactivity: Ro 15-2041 is a selective platelet **phosphodiesterase** inhibitor with antithrombotic properties.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

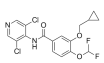


Roflumilast

Cat. No.: HY-15455

Bioactivity: Roflumilast is a selective **PDE4** inhibitor with **IC_{50}**s of 0.7, 0.9, 0.7, and 0.2 nM for **PDE4A1**, **PDEA4**, **PDEB1**, and **PDEB2**, respectively, without affecting PDE1, PDE2, PDE3 or PDE5 isoenzymes from various cells.

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

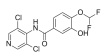


Roflumilast Impurity E

Cat. No.: HY-100640

Bioactivity: Roflumilast Impurity E is the impurity of Roflumilast. Roflumilast(Daliresp) is a drug which acts as a selective and long-acting inhibitor of the enzyme **PDE-4** with an **IC_{50}** value of 0.8 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

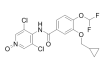


Roflumilast N-oxide

Cat. No.: HY-100639

Bioactivity: Roflumilast N-oxide is a **PDE type 4** inhibitor.

Purity: 99.69%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg



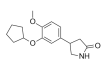
Rolipram

((R,S)-Rolipram; SB 95952; ZK 62711)

Cat. No.: HY-16900

Bioactivity: Rolipram is a selective phosphodiesterases **PDE4** inhibitor with **IC_{50}**s of 3 nM, 130 nM and 240 nM for PDE4A, PDE4B, and PDE4D, respectively.

Purity: 99.56%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



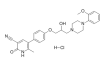
Saterinone hydrochloride

(BDF 8634 hydrochloride)

Cat. No.: HY-101644A

Bioactivity: Saterinone hydrochloride is a **phosphodiesterase III** (**PDE III**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

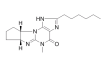


Sch59498

Cat. No.: HY-U00374

Bioactivity: Sch59498 is a potent inhibitor of **phosphodiesterase 1c (Pde1c)**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

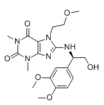


SDZ-MKS 492

(MKS 492) Cat. No.: HY-100164

Bioactivity: SDZ-MKS 492 (MKS 492) is a selective type Ⅲ isozyme inhibitor of **cyclic nucleotide phosphodiesterase**, effective in allergic bronchoconstriction and platelet activating factor (PAF) or LTB4-induced inflammatory reactions in animals [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

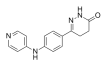


Senazodan

Cat. No.: HY-101693

Bioactivity: Senazodan is a Ca^{2+} sensitiser, and also shows inhibition effect on **PDE III**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

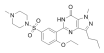


Sildenafil

(UK-92480) Cat. No.: HY-15025

Bioactivity: Sildenafil is a potent phosphodiesterase type 5 (**PDE5**) inhibitor with **IC_{50}** of 5.22 nM.

Purity: 99.89%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg

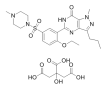


Sildenafil citrate

(UK-92480 citrate) Cat. No.: HY-15025A

Bioactivity: Sildenafil citrate is a potent phosphodiesterase type 5 (**PDE5**) inhibitor with **IC_{50}** of 5.22 nM.

Purity: 99.84%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg, 500 mg

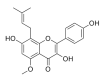


Sophoflavescenol

Cat. No.: HY-N2284

Bioactivity: Sophoflavescenol is a prenylated flavonol, which shows great inhibitory activity with **IC_{50}** of 0.013 μM against **Phosphodiesterase 5 (PDE5)**, and also inhibits RLAR, HRAR, AGE, BACE1, AChE and BChE with IC_{50}s of 0.30 μM, 0.17 μM, 17...

Purity: 98.15%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

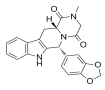


Tadalafil

(IC-351) Cat. No.: HY-90009A

Bioactivity: Tadalafil (IC-351) is a PDE5 inhibitor with an IC50 value of 1.8 nM.

Purity: 99.93%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg

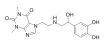


Theodrenaline

((±)-Theodrenaline) Cat. No.: HY-U00344

Bioactivity: Theodrenaline is a cardiac stimulant, also acts as an anti-hypotensive agent together with cafedrine.

Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg, 10 mg, 20 mg

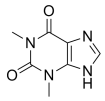


Theophylline

(1,3-Dimethylxanthine; Theo-24) Cat. No.: HY-B0809

Bioactivity: Theophylline is a nonselective **phosphodiesterase (PDE)** inhibitor, **adenosine receptor** blocker, and **histone deacetylase (HDAC)** activator.

Purity: 99.94%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g

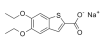


Tibenelast sodium

(LY 186655) Cat. No.: HY-101705

Bioactivity: Tibenelast sodium is a **phosphodiesterase** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

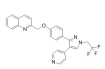


TP-10

Cat. No.: HY-14550

Bioactivity: TP-10 is a PDE10A inhibitor with IC50 of 0.8 nM.

Purity: 98.54%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

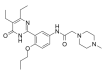


TPN171

Cat. No.: HY-128593

Bioactivity: TPN171 is a potent, selective and oral bioavailable inhibitor of **phosphodiesterase type 5 (PDE5)** with an IC_{50} of 0.62 nM, being developed for the treatment of pulmonary arterial hypertension (PAH) [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg



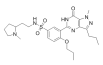
Udenafil

(DA8159)

Cat. No.: HY-18253

Bioactivity: Udenafil(DA8159) is a PDE5 inhibitor used in urology to treat erectile dysfunction.

Purity: 99.73%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

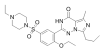


Vardenafil

Cat. No.: HY-B0442

Bioactivity: Vardenafil is a PDE5 inhibitor used for treating erectile dysfunction.

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 200 mg

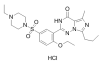


Vardenafil hydrochloride

Cat. No.: HY-B0442A

Bioactivity: Vardenafil HCl is a PDE5 inhibitor used for treating erectile dysfunction.

Purity: 98.62%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg



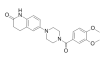
Vesnarinone

(OPC-8212)

Cat. No.: HY-15297

Bioactivity: Vesnarinone is a quinolinone derivative, and its pharmacodynamic effects include inhibition of phosphodiesterase III (PDE3) activity, increases in calcium flux and decreases in potassium flux.

Purity: 96.06%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



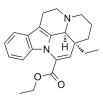
Vinpocetine

(Ethyl apovincaminate)

Cat. No.: HY-13295

Bioactivity: Vinpocetine(Cavinton; Ethyl apovincaminate) is a selective for PDE1 (IC50 = 21 μM). Also blocks voltage-gated Na+ channels. IC50 value: Target: PDE1; Na+ channel

Purity: 99.82%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg, 500 mg

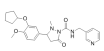


WAY127093B racemate

Cat. No.: HY-101749

Bioactivity: WAY127093B racemate is the racemate of WAY127093B. WAY127093B is a novel, orallyactive **phosphodiesterase IV** inhibitor in guinea pigs and rats.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

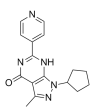


Win 58237

Cat. No.: HY-101661

Bioactivity: Win 58237 is a cyclic nucleotide **phosphodiesterase (PDE)** inhibitor, with K_i of 170 nM for PDE V, possessing vasorelaxant activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

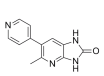


Win-62005

Cat. No.: HY-U00136

Bioactivity: Win-62005 is a cyclic AMP phosphodiesterase III (**PDE III**) inhibitor with K_is of 25 and 26 nM for rat heart and canine aorta, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

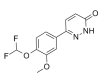


Zardaverine

Cat. No.: HY-15485

Bioactivity: Zardaverine is a newly developed dual-selective PDE3/4 inhibitor with IC50 values of 0.5 uM and 0.8 uM respectively.

Purity: 98.17%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

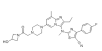


Ziritaxestat

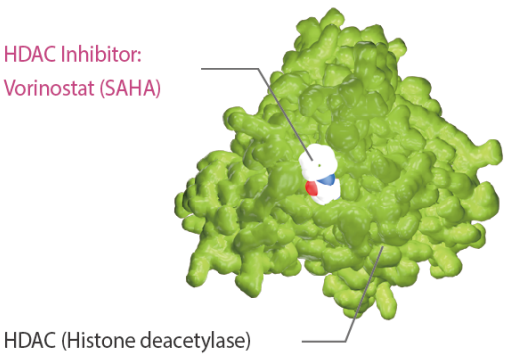
(GLPG1690) Cat. No.: HY-101772

Bioactivity: Ziritaxestat (GLPG1690) is a first-in-class **autotaxin (ATX)** inhibitor, with an $\mathbf{IC_{50}}$ of 131 nM and $\mathbf{K_i}$ of 15 nM.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Phospholipase



Phospholipase is a member of a very complex group of enzymes that break down phospholipids into fatty acids and other compounds. Phospholipases are defined by the enzymatic reaction they catalyze. The classes are phospholipase A, which has members A1 and A2; phospholipase B, which can carry out the reactions of both A1 and A2; phospholipase C; and phospholipase D.

Phospholipase A_2 (PLA_2) catalyses the hydrolysis of the sn-2 position of glycerophospholipids to yield fatty acids and lysophospholipids. Phospholipase C (PLC) converts phosphatidylinositol 4,5-bisphosphate (PIP_2) to inositol 1,4,5-trisphosphate (IP_3) and diacylglycerol (DAG). DAG and IP_3 each control diverse cellular processes and are also substrates for synthesis of other important signaling molecules. PLC is thus central to many important interlocking regulatory networks. Phospholipase D (PLD) is an essential enzyme responsible for the production of the lipid second messenger phosphatidic acid (PA), which is involved in fundamental cellular processes, including membrane trafficking, actin cytoskeleton remodeling, cell proliferation and cell survival.

1-Linoleoyl Glycerol

(1-Linoleoyl-rac-glycerol; 1-Monolinolein) Cat. No.: HY-111346

Bioactivity: 1-Linoleoyl Glycerol is a fatty acid glycerol that has been isolated from S. chinensis roots.

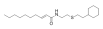
Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

2-(E-2-decenoylamino)ethyl 2-(cyclohexylethyl) sulfide

Cat. No.: HY-100287

Bioactivity: 2-(E-2-decenoylamino)ethyl 2-(cyclohexylethyl) sulfide is a compound that inhibits stress-induced ulcer and low toxicity, and can maintain the content of phospholipase A2 and prostaglandin E2 in ulcerated rats induced by water immersed restrained stress.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

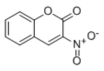


3-Nitrocoumarin

Cat. No.: HY-111919

Bioactivity: 3-Nitrocoumarin (3-NC) is a potent and selective **Phospholipase C-γ (PLC-γ)** inhibitor [1].

Purity: >98%
Clinical Data: No Development Reported
Size:

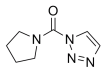


AA26-9

Cat. No.: HY-18522

Bioactivity: AA26-9 is a potent and broad spectrum **serine hydrolase** inhibitor.

Purity: 99.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

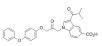


CAY10650

Cat. No.: HY-10801

Bioactivity: CAY10650 is a highly potent cytosolic phospholipase A2α (cPLA2α) inhibitor with an IC 50 value of 12 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg



D-Erythro-dihydrosphingosine

Cat. No.: HY-W019838

Bioactivity: D-Erythro-dihydrosphingosin directly inhibits cytosolic phospholipase A $_2$α (**cPLA$_2$α**) activity.

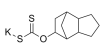
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

D609

Cat. No.: HY-70072

Bioactivity: D609 is a selective competitive inhibitor of **phosphatidyl choline-specific phospholipase C (PC-PLC)**, with **K$_i$** of 6.4 μM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

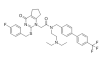


Darapladib

(SB-480848) Cat. No.: HY-10521

Bioactivity: Darapladib is a potent inhibitor of lipoprotein-associated phospholipase A2 (**Lp-PLA$_2$**) with **IC$_{50}$** of 0.25 nM.

Purity: 99.95%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

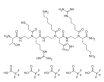


DB550

Cat. No.: HY-114190

Bioactivity: DB550 targets **PLCγ1** and disrupts the CD95-PLCγ 1 interaction to prevent Th17-driven inflammation, without affecting the CD95-FADD interaction [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 100 mg, 250 mg

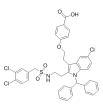


Ecopladib

(PLA 725) Cat. No.: HY-U00037

Bioactivity: Ecopladib is a sub-micromolar inhibitor of cytosolic **phospholipase A2α (cPLA2α)**, with **IC$_{50}$**s of 0.15 μM and 0.11 μM in the GLU micelle and rat whole blood assays, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

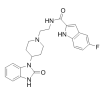


FIPI

(5-Fluoro-2-indolyl deschlorohalopemide) Cat. No.: HY-12807

Bioactivity: FIPI is a derivative of halopemide which potently inhibits both **PLD1** and **PLD2** with **IC_{50}**s of 25 nM and 20 nM, respectively.

Purity: 99.49%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

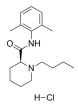


Levobupivacaine hydrochloride

((S)-(-)-Bupivacaine monohydrochloride) Cat. No.: HY-B0653A

Bioactivity: Levobupivacaine hydrochloride is a local anaesthetic compound belonging to the amino amide group; long-acting local anesthetic.

Purity: 99.85%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg, 200 mg, 500 mg

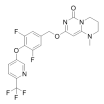


Lp-PLA2 -IN-1

Cat. No.: HY-19757

Bioactivity: inhibit Lp-PLA2 activity, processes for their preparation, to compositions containing them and to their use in the treatment of diseases associated with the activity of Lp-PLA2, for example atherosclerosis, Alzheimer's disease.

Purity: 99.38%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg

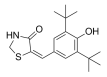


LY 178002

Cat. No.: HY-101579

Bioactivity: LY 178002 is a potent inhibitor of **5-lipoxygenase**, **phospholipase A2**, with **IC_{50}** of 0.6 μM for 5-1ipoxygenase, inhibits cellular production of LTB4 by human polymorphonuclear leukocytes, and shows relatively weak inhibition on **cyclooxygenase**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



MAFP

(Methyl Arachidonyl Fluorophosphonate) Cat. No.: HY-103334

Bioactivity: MAFP (Methyl Arachidonyl Fluorophosphonate) is an selective, active-site directed and irreversible inhibitor of **cPLA2** and **iPLA2**. MAFP is also a potent irreversible inhibitor of **anandamide amidase**.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 27 mM * 500 uL in Methyl Acetate,
27 mM * 100 uL in Methyl Acetate,

Melittin

Cat. No.: HY-P0233

Bioactivity: Melittin is a **PLA_2** activator, stimulates the activity of the low molecular weight PLA $_2$, while it does not the increase activity of the high molecular weight PLA $_2$.

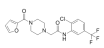
Purity: 96.73%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

ML348

(GNF-Pf-1127) Cat. No.: HY-100736

Bioactivity: ML348 is a selective and reversible **lysophospholipase 1 (LYPLA1)** inhibitor with an **IC_{50}** of 210 nM, and barely inhibits LYPLA2 [1].

Purity: 99.59%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

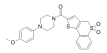


ML349

Cat. No.: HY-100737

Bioactivity: ML349 is a potent and specific **acyl protein thioesterase 2** (**APT-2**) inhibitor with a **K_i** of 120 nM. ML349 is also an inhibitor of **LYPLA2** with an **IC_{50}** of 144 nM.

Purity: 98.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg

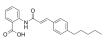


N-(p-amylcinnamoyl) Anthranilic Acid

(ACA) Cat. No.: HY-118628

Bioactivity: N-(p-amylcinnamoyl) Anthranilic Acid (ACA) is a broad spectrum **Phospholipase A_2 (PLA_2)** inhibitor and **TRP channel** blocker [1] [2]. N-(p-amylcinnamoyl) Anthranilic Acid (ACA) is also an effective reversible inhibitor of **calcium-activa...**

Purity: 98.81%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
25 mg, 50 mg, 100 mg

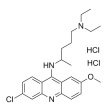


Quinacrine dihydrochloride

(Mepacrine dihydrochloride; SN-390) Cat. No.: HY-13735A

Bioactivity: Quinacrine is a fluorescent probe for the conformational transitions of the cholinergic receptor protein. Quinacrine shows activity in the low μM range with a mean IC50 of 2.30 μM In the patient AML cells. IC50 value: 2.30 μM (for AML cells) Target: in vitro: Quinacrine is a fluorescent probe for the...

Purity: 98.05%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
100 mg, 500 mg



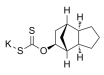
SPK-601

(LMV-601)

Cat. No.: HY-70083

Bioactivity: SPK-601(LMV-601) is a potent phosphatidylcholine-specific phospholipase C (PC-PLC) inhibitor; SPK-601 is useful antimicrobial agent.

Purity: 97.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

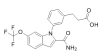


sPLA2-X Inhibitor 31

Cat. No.: HY-112605

Bioactivity: sPLA2-X Inhibitor 31 is a selective **secreted phospholipase A_2 type X** (**$sPLA_2$-X**) inhibitor with **IC<Sub>50**s of 26 nM, 310 nM, and 2230 nM for **$sPLA_2$-X**, **$sPLA_2$-IIa**, and **$sPLA_2$-V**, respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

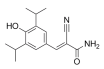


ST271

Cat. No.: HY-103097

Bioactivity: ST271 is a potent inhibitor of protein tyrosine kinase (**PTK**), inhibits **phospholipase D** activation stimulated by fMet-Leu-Phe and PAF, with **IC_{50}**s of 6.7 and 9 μM, respectively.

Purity: 98.23%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



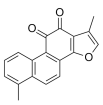
Tanshinone I

(Tanshinone A)

Cat. No.: HY-N0134

Bioactivity: Tanshinone I is an inhibitor of type IIA human recombinant **$sPLA_2$** (**IC_{50}**=11 μM) and rabbit recombinant **$cPLA_2$** (**IC_{50}**=82 μM).

Purity: 98.0%
Clinical Data: Phase 4
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

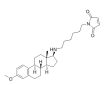


U-73122

Cat. No.: HY-13419

Bioactivity: U-73122 is an inhibitor of **phospholipase C (PLC)**, **phospholipase A2**, and **5-LO (5-lipoxygenase)**.

Purity: 98.17%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

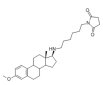


U-73343

Cat. No.: HY-108630

Bioactivity: U-73343, an inhibitor of **PLC (putative phospholipase C)**-dependent processes, is an analog of U-73122 and can be used as a negative control [1].

Purity: 99.0%
Clinical Data: No Development Reported
Size: 5 mg



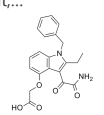
Varespladib

(LY315920)

Cat. No.: HY-13402

Bioactivity: Varespladib (LY315920) is a potent and selective human non-pancreatic secretory phospholipase A2 (sPLA) inhibitor with IC50 of 7 nM. IC50 value: 7 nM Target: sPLA2 in vitro: Varespladib exhibits the significant inhibitory effect on sPLA2 activity in serum from various species including rat,...

Purity: 98.03%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



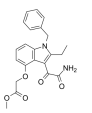
Varespladib methyl

(A-002; LY333013)

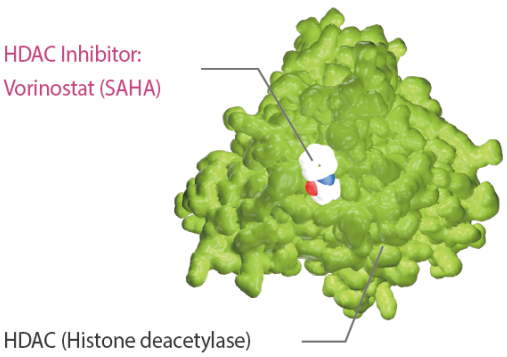
Cat. No.: HY-17448

Bioactivity: Varespladib methyl (A-002; LY333013) is a selective inhibitor of group II secretory phospholipase A2 (**PLA2**).

Purity: >98%
Clinical Data: Phase 3
Size: 1 mg



Procollagen C Proteinase



Procollagen C proteinase (PCP) and its enhancer protein (PCPE) are key to collagen fibril-assembly and extracellular matrix formation. PCP cleaves the carboxyl-propeptides of procollagens types I, II, and III and this initiates the self-assembly of collagen fibrils. PCP can also process pro-lysyl oxidase and laminin 5, and it may cleave the type V procollagen N-propeptides. Procollagen processing by PCP is stimulated by PCPE, a glycoprotein that binds to the C-propeptide of type I procollagen through its N-terminal CUB domains. PCP/BMP-1 related proteases can activate TGF-β-like growth factors. PCPs have important biological functions in addition to their role in collagen fibril assembly.

UK-383367

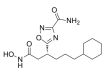
Cat. No.: HY-13102

Bioactivity: UK-383367 (UK 383367) is a potent and selective inhibitor of BMP-1 (procollagen C-proteinase) with IC50 of 44 nM; Selective for BMP-1 over MMPs 1, 2, 3, 9 and 14 (IC50 values are >10,000 nM for listed MMPs). IC50 value: 44 nM Target: procollagen C-proteinase UK-383367 (UK 383367) is useful for...

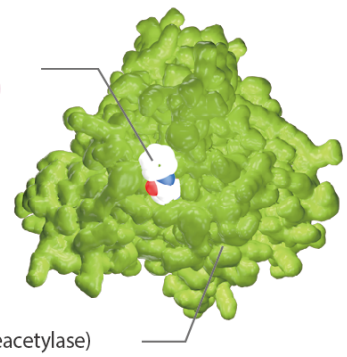
Purity: >98%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg, 25 mg



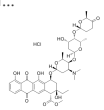
Proteasome



Proteasomes are very large protein complexes inside all eukaryotes and archaea, and in some bacteria. In eukaryotes, they are located in the nucleus and the cytoplasm. The main function of the proteasome is to degrade unneeded or damaged proteins by proteolysis, a chemical reaction that breaks peptide bonds. Enzymes that carry out such reactions are called proteases. Proteasomes are part of a major mechanism by which cells regulate the concentration of particular proteins and degrade misfolded proteins. The degradation process yields peptides of about seven to eight amino acids long, which can then be further degraded into amino acids and used in synthesizing new proteins. Proteins are tagged for degradation with a small protein called ubiquitin. The tagging reaction is catalyzed by enzymes called ubiquitin ligases. Once a protein is tagged with a single ubiquitin molecule, this is a signal to other ligases to attach additional ubiquitin molecules. The result is a polyubiquitin chain that is bound by the proteasome, allowing it to degrade the tagged protein.

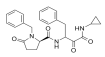
Aclacinomycin A hydrochloride
(Aclarubicin hydrochloride) Cat. No.: HY-N2306A

Bioactivity: Aclacinomycin A hydrochloride (Aclarubicin hydrochloride), a fluorescent molecule and the first described non-peptidic inhibitor showing discrete specificity for the CTRL (chymotrypsin-like) activity of the **20S proteasome** [1]. Aclacinomycin A hydrochloride is also a dual inhibitor of...
Purity: 98.08%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg



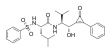
Alicapistat
(ABT-957) Cat. No.: HY-109001

Bioactivity: Alicapistat (ABT-957) is an orally active selective inhibitor of human **calpains 1** and **2** for the potential use in the treatment of Alzheimer's disease (AD).
Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg



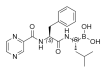
BDA-410
Cat. No.: HY-111808

Bioactivity: BDA-410 is a **cysteine protease** inhibitor with k_i values of 130 nM and 630 nM for calpain-1 and calpain-2, respevtively. BDA-410 inhibits recombinant falcipain-2B with an IC_{50} of 628 nM and exhibits anti-malarial effects [1].
Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg



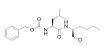
Bortezomib (PS-341; Brotezamide; DPBA; LDP 341; MG 341; Radiciol; NSC 681239)
Cat. No.: HY-10227

Bioactivity: Bortezomib (PS-341) is a potent **20S proteasome** inhibitor with a K_i of 0.6 nM.
Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



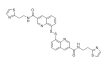
Calpeptin
Cat. No.: HY-100223

Bioactivity: Calpeptin is a potent, cell penetrating **calpain** inhibitor, with an ID_{50} of 40 nM for Calpain I in human platelets [1]. Calpeptin is also an inhibitor of **cathepsin K** [2].
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



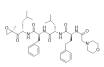
Capzimin
Cat. No.: HY-110404

Bioactivity: Capzimin is a potent and moderately specific proteasome isopeptidase **Rpn11** inhibitor.
Purity: 99.19%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg



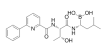
Carfilzomib
(PR-171) Cat. No.: HY-10455

Bioactivity: Carfilzomib is an irreversible **proteasome** inhibitor with an IC_{50} of 5 nM in ANBL-6 and RPMI 8226 cells.
Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



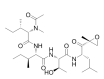
Delanzomib
(CEP-18770) Cat. No.: HY-10454

Bioactivity: Delanzomib(CEP-18770) is a novel orally-active inhibitor of the chymotrypsin-like activity of the proteasome that down-modulates the nuclear factor-kappaB (NF-kappaB) activity.
Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



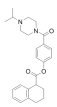
Epoxomicin
(BU-4061T) Cat. No.: HY-13821

Bioactivity: Epoxomicin is a cell-permeable and irreversible **proteasome** inhibitor, primarily the chymotrypsin-like activity.
Purity: 99.89%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100u g, 1 mg, 5 mg, 10 mg, 20 mg



FK-448 Free base
Cat. No.: HY-100193

Bioactivity: FK-448 Free base is an effective and specific inhibitor of **chymotrypsin**, with an IC_{50} of 720 nM.
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

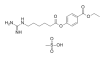


Gabexate mesylate

(FOY) Cat. No.: HY-B0385

Bioactivity: Gabexate Mesylate is a Factor X inhibitor.

Purity: 98.51%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 10 mg, 100 mg

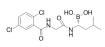


Ixazomib

(MLN2238) Cat. No.: HY-10453

Bioactivity: Ixazomib (MLN2238) is a selective, potent, and reversible **proteasome** inhibitor, which inhibits the chymotrypsin-like proteolytic (β5) site of the 20S proteasome with an IC_{50} of 3.4 nM (K_i of 0.93 nM).

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

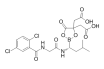


Ixazomib citrate

(MLN9708) Cat. No.: HY-10452

Bioactivity: Ixazomib citrate (MLN9708) is a reversible inhibitor of the chymotrypsin-like proteolytic β5 site of the **20S proteasome** with an IC_{50} of 3.4 nM and a K_i of 0.93 nM.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

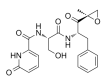


KZR-504

Cat. No.: HY-101786

Bioactivity: KZR-504 is a highly selective inhibitor of immunoproteasome low molecular mass polypeptide 2 **(LMP2)**, with IC_{50}**s** of 51 nM, 4.274 μM for LMP2 and LMP7, respectively. KZR-504 is of interest for the treatment of autoimmune disease [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

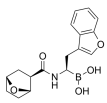


LMP7-IN-1

Cat. No.: HY-111790

Bioactivity: LMP7-IN-1 is an inhibitor of **immunoproteasome (LMP7)**, may used in the research of inflammatory and autoimmune diseases, neurodegenerative diseases, proliferative diseases and cancer [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

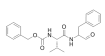


MDL-28170

(Calpain Inhibitor III) Cat. No.: HY-18236

Bioactivity: MDL-28170 (Calpain Inhibitor III) is a potent, selective and membrane-permeable cysteine protease inhibitor of **calpain** that rapidly penetrates the blood-brain barrier following systemic administration [1] [2]. MDL-28170 also block γ-secret...

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

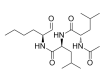


MG-101

(Calpain inhibitor I; Ac-LLnL-CHO; ALLN) Cat. No.: HY-18964

Bioactivity: MG-101 is a potent inhibitor of **cysteine proteases** which inhibits calpain I, calpain II, cathepsin B and cathepsin L with K_is of 190, 220, 150 and 500 pM, respectively.

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

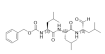


MG-132

Cat. No.: HY-13259

Bioactivity: MG-132 is a potent, reversible, and cell-permeable **20S proteasome** inhibitor which inhibits proteasomal chymotrypsin-like peptidase activity with an IC_{50} of 24.2 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

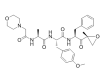


ONX-0914

(PR-957) Cat. No.: HY-13207

Bioactivity: ONX-0914 (PR-957) is a potent and selective inhibitor of **immunoproteasome subunit LMP7**.

Purity: 98.86%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

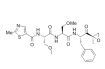


Oprozomib

(ONX 0912; PR-047) Cat. No.: HY-12113

Bioactivity: Oprozomib (ONX 0912; PR047) is an orally bioavailable inhibitor for CT-L activity of 20S proteasome β5/LMP7 with IC50 of 36 nM/82 nM. IC50 value: 36 nM/82 nM(20S proteasome β5/LMP7) [1] Target: 20S proteasome The anti-MM activity of Oprozomib is associated with activation of caspase-8,...

Purity: 99.60%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



PD 151746

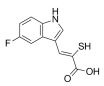
Cat. No.: HY-19749

Bioactivity: PD151746 is a calpain inhibitor, shows a 20-fold selectivity for u-calpain (Ki = 0.26 ± 0.03 μM) over m-calpain (Ki = 5.33 ± 0.77 μM). IC50 value: 0.26 ± 0.03 μM (Ki, for μ-calpain), 5.33 ± 0.77 μM (Ki, for m-calpain) [1] Target: calpain in vitro: The μ-calpain inhibitor PD 151746 decreases...

Purity: 98.24%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



PD150606

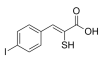
Cat. No.: HY-100529

Bioactivity: PD 150606 is a selective, cell-permeable non-peptide calpain inhibitor (Ki values for ν and m-calpains are 0.21 and 0.37 μM respectively).

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Pepstatin

(Pepstatin A)

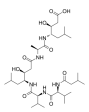
Cat. No.: HY-P0018

Bioactivity: Pepstatin is a specific **aspartic protease** inhibitor produced by actinomycetes, with **IC_{50}**s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease,...

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10 mg, 50 mg



Pepstatin Ammonium

(Pepstatin A Ammonium)

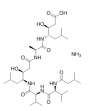
Cat. No.: HY-P0018B

Bioactivity: Pepstatin Ammonium is a specific **aspartic protease** inhibitor produced by actinomycetes, with **IC_{50}**s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease,...

Purity: 99.35%

Clinical Data: No Development Reported

Size: 10 mg, 25 mg, 50 mg



Pepstatin Trifluoroacetate

(Pepstatin A Trifluoroacetate)

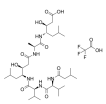
Cat. No.: HY-P0018A

Bioactivity: Pepstatin Trifluoroacetate is a specific **aspartic protease** inhibitor produced by actinomycetes, with **IC_{50}**s of 4.5 nM, 6.2 nM, 150 nM, 290 nM, 520 nM and 260 nM for hemoglobin-pepsin, hemoglobin-proctase, casein-pepsin, casein-proctase, casein-acid protease and hemoglobin-acid protease,...

Purity: 99.11%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



PI-1840

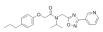
Cat. No.: HY-12286

Bioactivity: PI-1840 is a potent and selective inhibitor for chymotrypsin-like (CT-L) (IC50 value = 27 ± 0.14 nM) over trypsin-like and peptidylglutamyl peptide hydrolyzing (IC50 values >100 μM) activities of the proteasome.

Purity: 98.62%

Clinical Data: No Development Reported

Size: 10 mg, 50 mg, 100 mg



Proteasome-IN-1

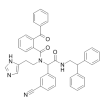
Cat. No.: HY-100172

Bioactivity: Proteasome-IN-1 is a **proteasome** inhibitor extracted from patent WO 2013142376 A1.

Purity: >98%

Clinical Data: No Development Reported

Size: 250 mg, 500 mg



RA190

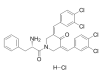
Cat. No.: HY-100739

Bioactivity: RA190, a bis-benzylidine piperidon, inhibits proteasome function by covalently binding to cysteine 88 of ubiquitin receptor **RPN13**.

Purity: 98.03%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Rpn11-IN-1

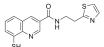
Cat. No.: HY-101286

Bioactivity: Rpn11-IN-1 is a potent and selective inhibitor of proteasome subunit **Rpn11** with an **IC_{50}** of 390 nM.

Purity: >98%

Clinical Data: No Development Reported

Size: 250 mg, 500 mg



RTS-V5

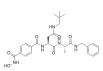
Cat. No.: HY-112908

Bioactivity: RTS-V5 is a dual **HDAC/proteasome** inhibitor with **IC_{50}**s of 6.9, 18, 15, 0.27, 0.53 μM for HDAC1, HDAC2, HDAC3, HDAC6, HDAC8, respectively.

Purity: >98%

Clinical Data: No Development Reported

Size: 250 mg, 500 mg



Tomatine

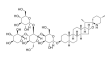
(α-Tomatine; Lycopersicin; Tomatin) **Cat. No.:** HY-N2166

Bioactivity: Tomatine is a glycoalkaloid, found in the tomato plant (Lycopersicon esculentum Mill.). Tomatine elicits neurotoxicity in RIP1 kinase and caspase-independent manner. Tomatine promotes the upregulation of nuclear apoptosis inducing factor (AIF) in neuroblastoma cells. Tomatine also...

Purity: >98%

Clinical Data: No Development Reported

Size:



Tripterin

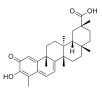
(Celastrol) **Cat. No.:** HY-13067

Bioactivity: Tripterin (Celastrol) is a **proteasome** inhibitor which potently and preferentially inhibits the chymotrypsin-like activity of a purified **20S proteasome** with $\mathbf{IC_{50}}$ of 2.5 μM.

Purity: 99.91%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



VR23

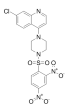
Cat. No.: HY-18741

Bioactivity: VR23 is a small molecule that potently inhibited the activities of trypsin-like proteasomes (IC50 = 1 nM), chymotrypsin-like proteasomes (IC50 = 50-100 nM), and caspase-like proteasomes (IC50 = 3 μM).

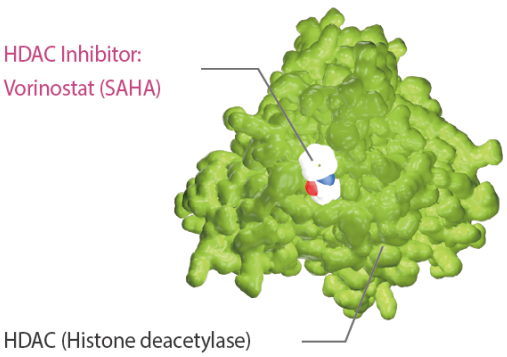
Purity: 95.51%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Pyruvate Kinase



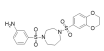
Pyruvate kinase is an enzyme that catalyzes the conversion of phosphoenolpyruvate and ADP to pyruvate and ATP in glycolysis and plays a role in regulating cell metabolism. There are four mammalian pyruvate kinase isoforms (PKM1, PKM2, PKR, PKL), and each isoform has had multiple designations over time in the literature. The M2 isoform of pyruvate kinase (PKM2) supports anabolic metabolism and is expressed both in cancer and normal tissue. The enzymatic activity of PKM2 is allosterically regulated by both intracellular signaling pathways and metabolites; PKM2 thus integrates signaling and metabolic inputs to modulate glucose metabolism according to the needs of the cell.

DASA-58

Cat. No.: HY-19330

Bioactivity: DASA-58 is a potent activator of pyruvate kinase M2 (**PKM2**) with an **AC_{90}** of 680 nM, and an **AC_{50}** of 38 nM.

Purity: 98.49%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

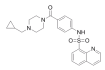


Mitapivat

Cat. No.: HY-12689

Bioactivity: Mitapivat is a **pyruvate kinase isoenzyme M2** (**PKM2**) activator [1].

Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

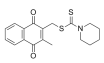


PKM2-IN-1

Cat. No.: HY-103617

Bioactivity: PKM2-IN-1 is a **pyruvate kinase M2** (**PKM2**) inhibitor with an **IC_{50}** of 2.95 μM.

Purity: 98.35%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



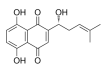
Shikonin

(C.I. 75535; Isoarnebin 4)

Cat. No.: HY-N0822

Bioactivity: Shikonin is a major component of a Chinese herbal medicine named zicao. Shikonin has shown various biological activities, including inhibition of **TNF-α**, **NF-κB**, **HIV-1**.

Purity: 99.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 25 mg, 50 mg, 100 mg



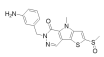
TEPP-46

(ML-265)

Cat. No.: HY-18657

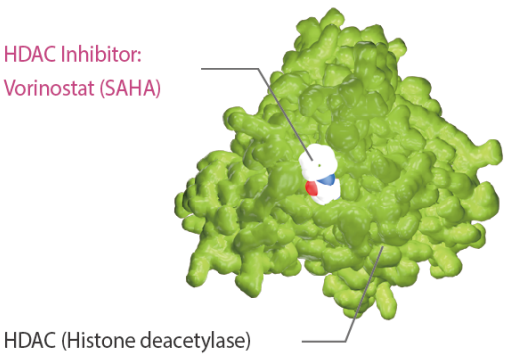
Bioactivity: TEPP-46 is a potent and selective **pyruvate kinase M2 (PKM2)** activator with an AC_{50} of 92 nM, showing little or no effect on PKM1, PKL and PKR.

Purity: 99.56%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



RAR/RXR

Retinoic acid receptors;Retinoid X receptors



The nuclear retinoic acid receptors (RARs) are transcriptional transregulators, which control the expression of specific gene subsets subsequently to ligand binding and to strictly controlled phosphorylation processes. RARs consist of three subtypes, α (NR1B1), β (NR1B2) and γ (NR1B3), encoded by separate genes. RARs function as ligand-dependent transcriptional regulators, heterodimerized with retinoid X receptors (RXRs), which also consist of three types, α NR2B1, β (NR2B2) and γ (NR2B3). RARs play critical roles in a variety of biological processes, including development, reproduction, immunity, organogenesis and homeostasis, as assessed by vitamin A-deficiency (VAD), pharmacological and genetic studies conducted in the mouse.

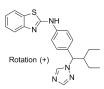
Retinoid X receptor (RXR) belongs to a family of ligand-activated transcription factors that regulate many aspects of metazoan life. A class of nuclear receptors requires RXR as heterodimerization partner for their function.

(+)-Talarozole

Cat. No.: HY-14802C

Bioactivity: (+)-Talarozole is a potent inhibitor of **retinoic acid** metabolism extracted from patent WO 1997049704 A1.

Purity: 99.28%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg

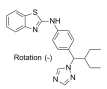


(-)-Talarozole

Cat. No.: HY-14802D

Bioactivity: (-)-Talarozole is a potent inhibitor of **retinoic acid** metabolism extracted from patent WO 1997049704 A1.

Purity: 98.02%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg

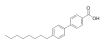


AC-55649

Cat. No.: HY-108526

Bioactivity: AC-55649 is a potent, highly isoform-selective agonist of human **RARβ2** receptor, with a **pEC_{50}** of 6.9.

Purity: 99.93%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

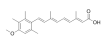


Acitretin
(Ro 10-1670)

Cat. No.: HY-B0107

Bioactivity: Acitretin(Ro 10-1670) is a second-generation, systemic retinoid that has been used in the treatment of psoriasis.

Purity: 99.56%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
100 mg, 200 mg, 500 mg

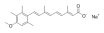


Acitretin sodium
(Ro 10-1670 sodium)

Cat. No.: HY-B0107A

Bioactivity: Acitretin sodium(Ro 10-1670) is a second-generation, systemic retinoid that has been used in the treatment of psoriasis.

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 200 mg, 500 mg

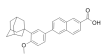


Adapalene
(CD271)

Cat. No.: HY-B0091

Bioactivity: Adapalene(CD-271; Differin), a synthetic retinoid, is a retinoic acid receptor agonist (RAR).

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
50 mg, 100 mg, 500 mg

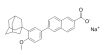


Adapalene sodium salt
(CD 271 sodium salt)

Cat. No.: HY-B0091A

Bioactivity: Adapalene sodium salt(CD 271; Differin), a synthetic retinoid, is a Retinoic acid receptor agonist (RAR).

Purity: >98%
Clinical Data: Launched
Size: 50 mg, 100 mg, 500 mg

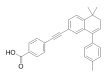


AGN 193109

Cat. No.: HY-U00449

Bioactivity: AGN 193109 is a retinoid analog, and acts as a specific and highly effective antagonist of **retinoic acid receptors (RARs)**, with **K_d**s of 2 nM, 2 nM, and 3 nM for **RARα**, **RARβ**, and **RARγ**, respectively.

Purity: 98.50%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

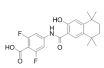


AGN 194078

Cat. No.: HY-100273

Bioactivity: AGN 194078 is a selective **RARα** agonist with a **K_d** and **EC_{50}** of 3 and 112 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

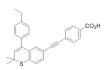


AGN 194310
(VTP-194310)

Cat. No.: HY-16681

Bioactivity: AGN 194310(VTP-194310) is a potent and selective pan-RARs agonist with Kd values of 3/2/5 nM for RARα/β/γ respectively.

Purity: 98.02%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg

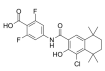


AGN 195183

Cat. No.: HY-16684

Bioactivity: AGN 195183 is a potent and selective agonist of RARα(Kd=3 nM) with improved binding selectivity relative to AGN 193836; no activity on RARβ/γ. IC50 value: 3 nM (Kd); 200 nM (EC80, RAR Trans.) Target: RARα agonist Compound 4(AGN-195183) inhibited the growth of breast cancer cell lines, and was inactive in an...

Purity: 98.40%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

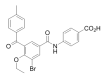


AGN 196996

Cat. No.: HY-16682

Bioactivity: AGN 196996 is a potent and selective RARα antagonist with Ki value of 2 nM; little binding affinity for RARβ(Ki=1087 nM) and RARγ(Ki=8523 nM).

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

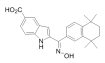


AGN 205327

Cat. No.: HY-16685

Bioactivity: AGN 205327 is a potent synthetic RARs agonist with EC50 of 3766/734/32 nM for RARα/β/γ respectively; no inhibition on RXR.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

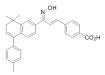


AGN 205728

Cat. No.: HY-16683

Bioactivity: AGN 205728 is a potent and selective RARγ antagonist with Ki/IC95 values of 3 nM/ 0.6 nM; no inhibiton on RARα and RARβ.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



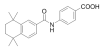
AM580

(CD336; NSC608001; Ro 40-6055)

Cat. No.: HY-10475

Bioactivity: AM580 is a selective **RARα** agonist with **IC_{50}** and **EC_{50}** of 8 nM and 0.36 nM, respectively.

Purity: 99.41%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

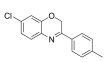


AR7

Cat. No.: HY-101106

Bioactivity: AR7 is a retinoic acid receptor α (**RARα**) antagonist.

Purity: 98.77%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



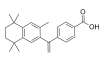
Bexarotene

(LGD1069)

Cat. No.: HY-14171

Bioactivity: Bexarotene (LGD1069) is a selective **retinoid X receptors (RXR)** agonist for the treatment of cutaneous T-cell lymphoma.

Purity: 99.81%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg



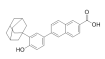
CD437

(AHPN)

Cat. No.: HY-100532

Bioactivity: CD437 is a selective **Retinoic Acid Receptor γ (RARγ)** agonist.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



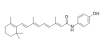
Fenretinide

(4-HPR)

Cat. No.: HY-15373

Bioactivity: Fenretinide is a synthetic retinoid deriverative, binding to the retinoic acid receptors (**RAR**) at concentrations necessary to induce cell death.

Purity: 99.41%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



Isotretinoin

(13-cis-Retinoic acid)

Cat. No.: HY-15127

Bioactivity: Isotretinoin(13-cis-Retinoic acid) is a medication used for the treatment of severe acne. It was first developed to be used as a chemotherapy medication for the treatment of brain cancer, pancreatic cancer and more. Target: RAR/RXR Isotretinoin has been the most effective and long-lasting drug...

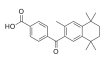
Purity: 94.86%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

LG-100064

Cat. No.: HY-104070

Bioactivity: LG-100064 is a **retinoid-X-receptor (RXR)** agonist, with **EC_{50}**s of 330 nM, 200 nM, and 260 nM for RXRα, RXRβ and RXRγ; LG-100064 can be used in the research of cancer.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

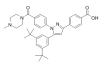


LY2955303

Cat. No.: HY-107765

Bioactivity: LY2955303 is a potent and selective **retinoic acid receptor gamma** (**RARγ**) antagonist with a **K_i** of 1.09 nM.

Purity: 98.25%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

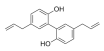


Magnolol

Cat. No.: HY-N0163

Bioactivity: Magnolol, a natural lignan isolated from the stem bark of Magnolia officinalis, is a dual agonist of both **RXRα** and **PPARγ**, with **EC_{50}** values of 10.4 μM and 17.7 μM, respectively.

Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



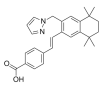
Palovarotene

(R 667; Ro 3300074)

Cat. No.: HY-14799

Bioactivity: Palovarotene is a nuclear retinoic acid receptor γ (**RAR-γ**) agonist.

Purity: 99.77%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

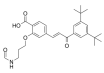


RAR ligand 1

Cat. No.: HY-111843

Bioactivity: RAR ligand 1 is a retinoic acid ligand, which targets **RAR**. RAR ligand 1 binds to **cIAP1** ligand Bestatin via a linker to form **PROTACs** [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg



Retinoic acid

(ATRA; Tretinoin; Vitamin A acid; all-trans-Retinoic acid)

Cat. No.: HY-14649

Bioactivity: Retinoic acid is a metabolite of vitamin A that plays important roles in cell growth, differentiation, and organogenesis. Retinoic acid is a natural agonist of **RAR** nuclear receptors, with **IC_{50}**s of 14 nM for RARα/β/γ. Retin...

Purity: 98.36%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 1 g, 5 g

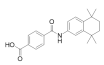
Tamibarotene

(Am 80)

Cat. No.: HY-14652

Bioactivity: Tamibarotene is a **retinoic acid receptor α/β (RARα/β)** agonist, showing high selectivity over RARγ.

Purity: 99.77%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



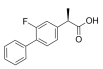
Tarenflurbil

((R)-Flurbiprofen; MPC7869)

Cat. No.: HY-10291

Bioactivity: Tarenflurbil ((R)-Flurbiprofen) is the R-enantiomer of the racemate NSAID Flurbiprofen, Tarenflurbil ((R)-Flurbiprofen) inhibits the binding of [^{3}H]9-cis-RA to **RXRα** LBD with **IC_{50}** of 75 μM.

Purity: 99.99%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 100 mg



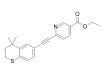
Tazarotene

(AGN 190168)

Cat. No.: HY-15388

Bioactivity: Tazarotene (AGN 190168) is a selective retinoic acid receptor (**RAR**) agonist for the treatment of plaque psoriasis and acne vulgaris.

Purity: 98.68%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



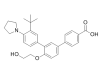
Trifarotene

(CD5789)

Cat. No.: HY-100256

Bioactivity: Trifarotene is a retinoic acid receptor (**RAR**) agonist with **K_d^{app}** of 2, 15 and 500 nM for **RARγ**, **RARβ** and **RARα**, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

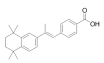


TTNPB

(Ro 13-7410; Arotinoid acid; AGN191183) Cat. No.: HY-15682

Bioactivity: TTNPB is a highly potent **RAR** agonist. Competitive binding assays using human RARs yield IC_{50}s of **α**=5.1 nM, **β**= 4.5 nM, and **γ**=9.3 nM, respectively.

Purity: 99.31%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

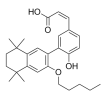


UVI 3003

Cat. No.: HY-107500

Bioactivity: UVI 3003 is a highly selective antagonist of **retinoid X receptor (RXR)**, and inhibits xenopus and human **RXRα** in Cos7 cells, with IC_{50}s of 0.22 and 0.24 μM, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

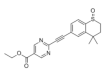


WYC-209

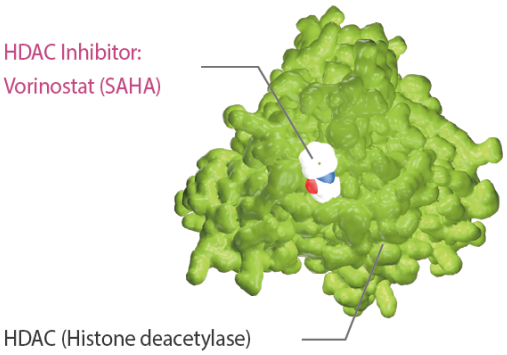
Cat. No.: HY-124136

Bioactivity: WYC-209, a synthetic retinoid, inhibits proliferation of malignant murine melanoma tumor-repopulating cells (TRCs) with an IC_{50} of 0.19μM, has long-term effects and little toxicity, and induces TRCs apoptosis primarily via the **caspase 3** pathway. The primary cellular target of WYC-209 is **retinoic...**

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Reactive Oxygen Species

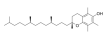


(+)-α-Tocopherol

(D-α-Tocopherol; α-Vitamin E) Cat. No.: HY-N0683

Bioactivity: (+)-α-Tocopherol is a vitamin E derivative. vitamin E is a fat-soluble antioxidant.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 1 g

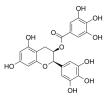


(-)-Epigallocatechin Gallate

(EGCG; Epigallocatechol Gallate) Cat. No.: HY-13653

Bioactivity: (-)-Epigallocatechin Gallate is a tea flavonoid with potent antioxidant, antiinflammatory, and anticarcinogenic properties. (-)-Epigallocatechin Gallate is reported to inhibit **EGFR** signaling and thereby exert anticancer effects.

Purity: 99.91%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

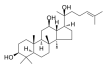


(20S)-Protopanaxadiol

(20-Epiprotopanaxadiol; 20(S)-APPD) Cat. No.: HY-N0797

Bioactivity: (20S)-Protopanaxadiol (20-Epiprotopanaxadiol) is an aglycon metabolic derivative of the protopanaxadiol-type ginseng saponin; apoptosis inducer. IC50 value: Target: apoptosis inducer (20S)-Protopanaxadiol was used to induce cytotoxicity for two human glioma cell lines, SF188 and U87MG. For the...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

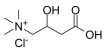


(±)-Carnitine chloride

(DL-Carnitine chloride) Cat. No.: HY-B1453

Bioactivity: (±)-Carnitine chloride exists in two isomers, known as D and L. L-carnitine plays an essential role in the β-oxidation of fatty acids and also shows antioxidant, and anti-inflammatory activities.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 g

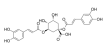


1,3-Dicaffeoylquinic acid

(1,3-O-Dicaffeoylquinic acid; 1,5-Dicaffeoylquinic acid) Cat. No.: HY-N1412

Bioactivity: 1,3-Dicaffeoylquinic acid is a caffeoylquinic acid derivative that exhibits antioxidant activity and radical scavenging activity.

Purity: 99.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

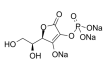


2-Phospho-L-ascorbic acid trisodium salt (L-Ascorbic acid 2-phosphate trisodium salt; ...)

Cat. No.: HY-107837

Bioactivity: 2-Phospho-L-ascorbic acid trisodium salt acts as an antioxidant and a stimulator of hepatocyte growth factor **(HGF)** production.

Purity: 99.36%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g

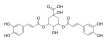


3,5-Dicaffeoylquinic acid

(3,5-CQA; Isochlorogenic acid A) Cat. No.: HY-N0056

Bioactivity: 3,5-Dicaffeoylquinic acid is a natural phenolic acid with antioxidant and anti-inflammatory activities .

Purity: 98.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

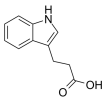


3-Indolepropionic acid

Cat. No.: HY-W015229

Bioactivity: 3-Indolepropionic acid is shown to be a powerful antioxidant and has potential in the treatment for Alzheimer's disease.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

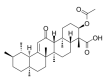


AKBA

(Acetyl-11-keto-β-boswellic acid) Cat. No.: HY-N0892

Bioactivity: Acetyl-11-Keto-β-Boswellic Acid (AKBA) is an active triterpenoid compound from the extract of Boswellia serrate; a novel Nrf2 activator. IC50 value: Target: Nrf2 activator in vitro: AKBA significantly reduced infarct volumes and apoptotic cells, and also increased neurologic scores by...

Purity: 99.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

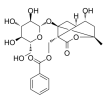


Albiflorin

Cat. No.: HY-N0037

Bioactivity: Albiflorin is a major constituent contained in peony root; possesses therapeutic potential for neurodegenerative diseases. IC50 value: Target: in vitro: Albiflorin significantly ameliorated Glu-induced reduction of cell viability, nuclear and mitochondrial apoptotic alteration,...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Allylthiourea

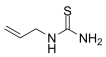
(Thiosinamine; N-Allylthiourea) Cat. No.: HY-B0543

Bioactivity: Allylthiourea is a metabolic inhibitor that selective inhibits ammonia oxidation. Target: Others Allylthiourea selectively inhibits ammonia oxidation at concentrations 8-80 μM. Allylthiourea (1 μM)inhibits ammonia oxidation by 80%. Complete inhibition is observed at an Allylthiourea...

Purity: 99.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 g



alpha-Mangostin

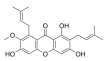
(α-Mangostin) Cat. No.: HY-N0328

Bioactivity: Alpha-mangostin is a dietary xanthone with broad biological activities, such as antioxidant, anti-allergic, antiviral, antibacterial, anti-inflammatory and anticancer effects. It is an inhibitor of mutant IDH1 (**IDH1-R132H**) with a K_i of 2.85 ...

Purity: 98.59%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg, 25 mg, 50 mg, 100 mg



Amentoflavone

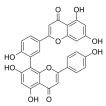
(Didemethyl-ginkgetin) Cat. No.: HY-N0662

Bioactivity: Amentoflavone is a natural biflavone compound with many biological properties, including anti-inflammatory, antioxidative, and neuroprotective effects. IC50 value: Target: In vitro: In irradiated v79 cells, Pretreatment with amentoflavone 24 hours prior to 8 Gy 60Co γ-ray irradiation...

Purity: 99.80%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Apigenin 7-glucoside

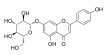
(Apigenin-7-O-β-D-glucopyranoside; Apigetrin; Cosmosiin) Cat. No.: HY-N0578

Bioactivity: Apigenin-7-glucoside exhibits significant anti-proliferative and antioxidant activity, scavengers of ROS. In vitro: exhibits significant anti-proliferative activity against B16F10 melanoma cells after 24 and 48 h of incubation. Apigenin-7-glucoside provoks an increase of subG0/G1, S and...

Purity: 99.88%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg



Ascorbyl palmitate (L-Ascorbic acid 6-hexadecanoate; 6-O-Palmitoyl-L-ascorbic acid)

Cat. No.: HY-B0987

Bioactivity: Ascorbyl palmitate is an ester formed from ascorbic acid and palmitic acid creating a fat-soluble form of vitamin C, it is also used as an antioxidant food additive.

Purity: 99.61%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg

Asiaticoside

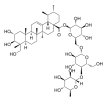
(Madecassol) Cat. No.: HY-N0439

Bioactivity: Asiaticoside, a trisaccaride triterpene from Centella asiatica, suppresses **TGF-β/Smad** signaling through inducing Smad7 and inhibiting TGF-βRI and TGF-βRII in keloid fibroblasts; Asiaticoside shows antioxidant, anti-inflammatory, and anti-ulcer properties.

Purity: 98.46%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



Astaxanthin

Cat. No.: HY-B2163

Bioactivity: Astaxanthin, a red dietary carotenoid isolated from Haematococcus pluvialis, is an inhibitor of **PPARγ** and a potent antioxidant with antiproliferative, neuroprotective and anti-inflammatory activity [1]. Astaxanthin has potential in the treatment of various diseases, such as cancers and...

Purity: 98.0%

Clinical Data: Launched

Size: 5 mg, 10 mg

BD-AcAc 2

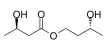
(Ketone Ester) Cat. No.: HY-15344

Bioactivity: BD-AcAc 2, added in diet, could elevated mean blood ketone bodies of 3.5 mm and lowered plasma glucose, insulin, and leptin in animals; ketone ester given orally would delay CNS-OT seizures in rats breathing hyperbaric oxygen. IC50 value: Target: a ketone ester given orally as...

Purity: 95.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 100 mg, 500 mg



Benfotiamine

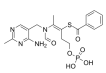
(S-Benzoylthiamine O-monophosphate) Cat. No.: HY-17374

Bioactivity: Benfotiamine is a synthetic S-acyl derivative of thiamine (vitamin B1); an antioxidant dietary supplement. IC50 value: Target: Benfotiamine, the lipid-soluble thiamine derivative used as a treatment for diabetic neuropathy, can inhibit three major pathways(the hexosamine pathway, the advanced glycation...

Purity: 99.58%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO, 1 g, 5 g



Bergenin

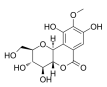
(Cuscutin) Cat. No.: HY-N0017

Bioactivity: Bergenin, a polyphenol, is a potent antinarcotic agent with antioxidant action. IC50 value: < 2.5 μM (antiplasmodial) [3] Target: In vitro: The naloxone-precipitated withdrawal symptom (jumping frequency) was significantly ameliorated (50% of control group) by administration of bergenin (20 mg/kg) in...

Purity: 99.50%

Clinical Data: No Development Reported

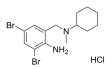
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg



Bromhexine hydrochloride

Cat. No.: HY-B0372A

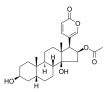
Bioactivity: Bromhexine Hydrochloride is a medication prescribed for coughs which works by dissolving hard phlegm. Target: Others Bromhexine is a mucolytic agent used in the treatment of respiratory disorders associated with viscid or excessive mucus. In addition, bromhexine has antioxidant properties....
Purity: 99.91%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g, 10 g



Bufotalin

Cat. No.: HY-N0878

Bioactivity: Bufotalin is a cardiotoxic bufanolide steroid, cardiac glycoside analogue, secreted by a number of toad species; a novel anti-osteoblastoma agent. IC50 value: Target: in vitro: bufotalin induced osteoblastoma cell death and apoptosis in dose- and time-dependent manners. Further, bufotalin induced...
Purity: 98.93%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

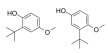


Butylhydroxyanisole

(Butylated hydroxyanisole; BHA; E320)

Cat. No.: HY-B1066

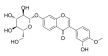
Bioactivity: Butylhydroxyanisole is an antioxidant, consisting of a mixture of two isomeric organic compounds, used as a food additive preservative
Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



Calycosin-7-O-β-D-glucoside

Cat. No.: HY-N0520

Bioactivity: Calycosin-7-O-β-D-glucoside, a melanin biosynthesis inhibitor, is isolated from the methanol extract of astragalus. IC50 value: 68 μM in inhibition of Tyrosinase Target: In vitro: Calycosin-7-O-β-d-glucoside showed a melanin biosynthesis inhibition zone in a culture plate of Streptomyces...
Purity: 98.71%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



Canthaxanthin

(E 161g; all-trans-Canthaxanthin)

Cat. No.: HY-B1960

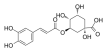
Bioactivity: Canthaxanthin is a red-orange carotenoid with various biological activities, such as antioxidant, antitumor properties.
Purity: 98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

Chlorogenic acid

(3-O-Caffeoylquinic acid; Heriguard; NSC-407296)

Cat. No.: HY-N0055

Bioactivity: Chlorogenic acid is a major phenolic compound in coffee and tea. It plays several important and therapeutic roles such as antioxidant activity, antibacterial, hepatoprotective, cardioprotective, anti-inflammatory, antipyretic, neuroprotective, anti-obesity, antiviral, anti-microbial,...
Purity: 99.29%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 500 mg

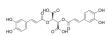


Cichoric Acid

(Cichoric acid; Dicaffeoyltartaric acid)

Cat. No.: HY-N0457

Bioactivity: Cichoric Acid, a natural product, is reported to be antioxidative.
Purity: 99.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 25 mg, 50 mg



Coenzyme Q10

(Ubiquinone-10; CoQ10)

Cat. No.: HY-N0111

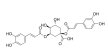
Bioactivity: Coenzyme Q10 is an essential cofactor of the electron transport chain and a potent antioxidant agent.
Purity: 98.0%
Clinical Data: No Development Reported
Size: 100 mg, 200 mg, 500 mg, 1 g, 5 g

Cynarin

(Cynarine)

Cat. No.: HY-N0359

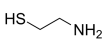
Bioactivity: Cynarin is an antichoke agent with a variety of biological activities including antioxidant, antihistamic and antiviral activities.
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg



Cysteamine (β-Mercaptoethylamine; 2-Aminoethanethiol; 2-Mercaptoethylamine)

Cat. No.: HY-77591A

Bioactivity: Cysteamine is an agent for the treatment of nephropathic cystinosis and an antioxidant. Target: Others Cysteamine has been shown to increase intracellular glutathione levels in cystinotic cells, thus restoring the altered redox state of the cells. Also increased rates of apoptosis in cystinotic...
Purity: 95.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 5 g



Cysteamine hydrochloride (β-Mercaptoethylamine Hydrochloride; 2-Aminoethanethiol Hydrochloride; ...)

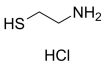
Cat. No.: HY-77591

Bioactivity: Cysteamine Hydrochloride is an agent for the treatment of nephropathic cystinosis and an antioxidant. Target: Others Cysteamine has been shown to increase intracellular glutathione levels in cystinotic cells, thus restoring the altered redox state of the cells. Also increased rates of...

Purity: 98.0%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO, 5 g



D-(+)-Glucono-1,5-lactone

(Gluconic acid lactone)

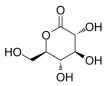
Cat. No.: HY-I0301

Bioactivity: D-(+)-Glucono-1,5-lactone is a polyhydroxy (PHA) that is capable of metal chelating, moisturizing and antioxidant activity.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 5 g



D-alpha-Hydroxyglutaric acid disodium salt

(Disodium (R)-2-hydroxyglutarate)

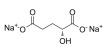
Cat. No.: HY-100542

Bioactivity: D-alpha-Hydroxyglutaric acid disodium salt is a weak competitive α-Ketoglutarate(**α-KG**)-dependent dioxygenase inhibitor with K_i of 10.87±1.85 mM. K_i for L-Hydroxyglutaric acid (L-2-HG) is 0.628±0.036 mM.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in Water, 10 mg, 25 mg, 50 mg, 100 mg



Dapsone

(4,4′-Diaminodiphenyl sulfone; DDS)

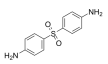
Cat. No.: HY-B0688

Bioactivity: Dapsone is a sulfone active against a wide range of bacteria but mainly employed for its actions against mycobacterium leprae. Target: Antibacterial Dapsone is an antibacterial most commonly used in combination with rifampicin and clofazimine as multidrug therapy (MDT) for the treatment of Mycobacterium...

Purity: 99.15%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO, 1 g, 5 g



Disufenton sodium

(NXY-059)

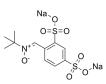
Cat. No.: HY-13244

Bioactivity: Disufenton sodium (NXY-059) is the disulfonyl derivative of the neuroprotective spin trap phenylbutynitrone(PBN), both NXY-059, its parent PBN and their hydrolysis/oxidation product MNT are very powerful scavengers of free radicals. IC50 value: Target: Neuroprotectant in vitro: Disufenton sodium is more...

Purity: 98.0%

Clinical Data: Phase 3

Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg



Ebselen

(SPI-1005; PZ-51; CCG-39161)

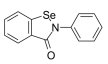
Cat. No.: HY-13750

Bioactivity: Ebselen is a small-molecule capsid Inhibitor of HIV-1 replication. Target: Ebselen is an organoselenium compound, as an inhibitor of HIV-1 capsid CTD dimerization. Ebselen inhibits early viral postentry events of the HIV-1 life cycle by impairing the incoming capsid uncoating process. [1]...

Purity: 99.58%

Clinical Data: Phase 3

Size: 5 mg, 10 mg, 50 mg, 100 mg



Echinacoside

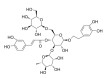
Cat. No.: HY-N0020

Bioactivity: Echinacoside is a natural polyphenolic compound, has various kinds of pharmacological activities, such as antioxidative, anti-inflammatory, neuroprotective, hepatoprotective, nitric oxide radical-scavenging and vasodilative ones. IC50 value: Target: in vitro: Echinacoside(ECH) dose dependently inhibited...

Purity: 99.52%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



Echinocystic acid

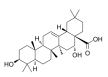
Cat. No.: HY-N0271

Bioactivity: Echinocystic acid a pentacyclic triterpene isolated from the fruits of Gleditsia sinensis Lam, has potent antioxidant, anti-inflammatory and anti-tumor properties. In vitro: Echinocystic acid (EA) inhibit the formation of osteoclast. EA inhibit RANKL-induced NF-κB activation and ERK phosphorylation...

Purity: 98.08%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Efaproxiral

(RSR13)

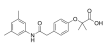
Cat. No.: HY-13619

Bioactivity: Efaproxiral is a synthetic allosteric modifier of haemoglobin (Hb), decreases Hb-oxygen (O2) binding affinity and enhances oxygenation of hypoxic tumours during radiation therapy. in vitro: Efaproxiral increases oxygen levels in hypoxic tumor tissues by binding non-covalently to the hemoglobin tetramer...

Purity: 99.94%

Clinical Data: Phase 3

Size: 10mM x 1mL in DMSO, 50 mg



Efaproxiral sodium

(RSR13 sodium)

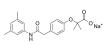
Cat. No.: HY-13619A

Bioactivity: Efaproxiral sodium is a synthetic allosteric modifier of haemoglobin (Hb), decreases Hb-oxygen (O2) binding affinity and enhances oxygenation of hypoxic tumours during radiation therapy. in vitro: Efaproxiral increases oxygen levels in hypoxic tumor tissues by binding non-covalently to the...

Purity: 98.0%

Clinical Data: Phase 3

Size: 10mM x 1mL in DMSO, 50 mg

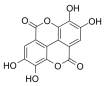


Ellagic acid

Cat. No.: HY-B0183

Bioactivity: Ellagic acid is a natural antioxidant, and acts as a potent and ATP-competitive **CK2** inhibitor, with an IC_{50} of 40 nM and a K_i of 20 nM.

Purity: 99.92%
Clinical Data: Phase 2
Size: 1 g, 5 g



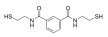
Emeramide

(BDTH2)

Cat. No.: HY-16739

Bioactivity: Emeramide is a novel lipid-soluble, thiol-redox antioxidant and heavy metal chelator.

Purity: 99.56%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

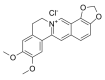


Epiberberine chloride

Cat. No.: HY-N0226A

Bioactivity: Epiberberine chloride is an alkaloid isolated from Coptis chinensis, acts as a potent **AChE** and **BChE** inhibitor, and a non-competitive **BACE1** inhibitor, with IC_{50}s of 1.07, 6.03 and 8.55 μM, respectively. Epiberberine chloride has antioxid...

Purity: 99.60%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

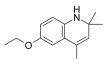


Ethoxyquin

Cat. No.: HY-B1425

Bioactivity: Ethoxyquin is an antioxidant which has been used in animal feed for many years and also an inhibitor of **heat shock protein 90** (**Hsp90**).

Purity: 98.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

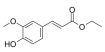


Ethyl ferulate

Cat. No.: HY-N0061

Bioactivity: Ethyl ferulate, a naturally lipophilic derivative of ferulic acid originally derived from giant fennel (F. communis), induces heme oxygenase-1 (HO-1) and protects rat neurons against oxidative stress [1]. Ethyl ferulate also protects neurons against amyloid β peptide (1-42)-induced oxidative...

Purity: 99.14%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

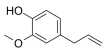


Eugenol

Cat. No.: HY-N0337

Bioactivity: Eugenol is an essential oil found in cloves with antibacterial, anthelmintic and antioxidant activity. Eugenol is shown to inhibit lipid peroxidation.

Purity: 99.86%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg



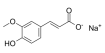
Ferulic acid sodium

(Sodium ferulate)

Cat. No.: HY-N0060A

Bioactivity: Ferulic acid (4-hydroxy-3-methoxycinnamic acid) is a phenolic compound present in several plants with claimed beneficial effects in prevention and treatment of disorders linked to oxidative stress and inflammation. IC50 value: Target: 5-HT Receptor In vitro: In the present study we have showed that...

Purity: 99.74%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g, 5 g



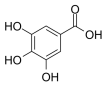
Gallic acid

(3,4,5-Trihydroxybenzoic acid)

Cat. No.: HY-N0523

Bioactivity: Gallic acid is an antioxidant which can inhibit both **COX-2**.

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

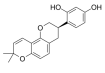


Glabridin

Cat. No.: HY-N0393

Bioactivity: Glabridin is a natural isoflavan from Glycyrrhiza glabra, binds to and activates **PPARγ**, with an EC_{50} of 6115 nM. Glabridin exhibits antioxidant, anti-bacterial, anti-nephritic, anti-diabetic, anti-fungal, antitumor, anti-inflammatory, antiosteoporotic, cardiovascular protective, neuroprotective...

Purity: 99.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg

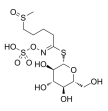


Glucoraphanin

Cat. No.: HY-N4068

Bioactivity: Glucoraphanin, a natural glucosinolate found in cruciferous vegetable, is a stable precursor of the Nrf2 inducer sulforaphane, which possesses antioxidant, anti-inflammatory, and anti-carcinogenic effects.

Purity: 99.07%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg



Glucosamine hydrochloride (D-(+)-Glucosamine hydrochloride; Chitosamine hydrochloride)

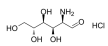
Cat. No.: HY-N0733

Bioactivity: Glucosamine (hydrochloride) is a natural product. IC50 value: Target: In vitro: Glucosamine hydrochloride exhibited dose-dependent DPPH antioxidant activity [1]. Short-term (4 h) glucosamine hydrochloride treatment inhibited HIF-1α at the protein level, decreased phosphorylation of p70S6K and S6,...

Purity: 98.0%

Clinical Data: Launched

Size: 10mM x 1mL in Water, 50 mg



Glutathione oxidized

(L-Glutathione oxidized; GSSG)

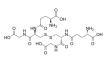
Cat. No.: HY-D0844

Bioactivity: Glutathione oxidized is produced by the oxidation of glutathione which is a major intracellular antioxidant and detoxifying agent.

Purity: 98.30%

Clinical Data: No Development Reported

Size: 10mM x 1mL in Water, 100 mg



H2DCFDA

(DCFH-DA; 2',7'-Dichlorodihydrofluorescein diacetate)

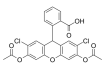
Cat. No.: HY-D0940

Bioactivity: H2DCFDA is a cell-permeable probe used to detect intracellular **reactive oxygen species (ROS)**.

Purity: 99.82%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 50 mg



Hesperidin

(Hesperetin 7-rutinoside)

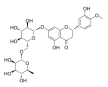
Cat. No.: HY-15337

Bioactivity: Hesperidin (HP) is a bioflavonoid that plays a role in plant defense and is abundant in citrus species, such as grapefruit, lemon and orange. Hesperidin is used effectively as a supplemental agent in complementary therapy protocols, since it possesses biological and pharmacological properties as an...

Purity: 97.00%

Clinical Data: Phase 3

Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



Hexaconazole

((-)-Hexaconazol)

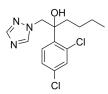
Cat. No.: HY-A0278

Bioactivity: Hexaconazole is a systemic fungicide used for the control of many fungi particularly Ascomycetes and Basidiomycetes. In vitro: Among the enzymatic antioxidants, superoxide dismutase and peroxidase are significantly up-regulated by hexaconazole. [1] Hexaconazole and its enantiomers cause the down-regulation...

Purity: 98.02%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 1 g, 5 g



Hexahydrocurcumin

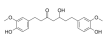
Cat. No.: HY-N0929

Bioactivity: Hexahydrocurcumin is a natural compound which posesses anticancer and anti-inflammatory activities; selective COX-2 inhibitor. IC50 value: Target: in vitro: The relative antioxidant potencies of ginger compounds decreased in similar order of 1-dehydro-[6]-gingerdione,...

Purity: 98.58%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg



HO-1-IN-1

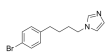
Cat. No.: HY-111798

Bioactivity: HO-1-IN-1 (Compound 2) is a heme oxygenase 1 (**HO-1**) inhibitor with an **IC_{50}** of 250 nM [1].

Purity: >98%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



HO-1-IN-1 hydrochloride

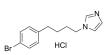
Cat. No.: HY-111798A

Bioactivity: HO-1-IN-1 hydrochloride (Compound 2) is a heme oxygenase 1 (**HO-1**) inhibitor with an **IC_{50}** of 250 nM [1].

Purity: >98%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



HTHQ

(1-O-hexyl-2,3,5-trimethylhydroquinone)

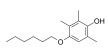
Cat. No.: HY-100768

Bioactivity: HTHQ, which is a hydroquinone monoalkyl ether, is a potent anti-oxidative agent, even at low dose levels. HTHQ is found to be a potent anti-lipid-peroxidative compound and its antioxidation activity to be extremely elevated in biological systems, such as that of liver microsomes via the generation...

Purity: 99.65%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



Isoquercitrin

(Isoquercitroside; Isoquercetin)

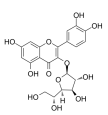
Cat. No.: HY-N0768

Bioactivity: Isoquercitrin is an effective antioxidant and an eosinophilic inflammation suppressor.

Purity: 99.97%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

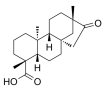


Isosteviol

((-)-Isosteviol; iso-Steviol) Cat. No.: HY-N0872

Bioactivity: Isosteviol is a derivative of stevioside, a constituent of Stevia rebaudiana, which is commonly used as a noncaloric sugar substitute in Japan and Brazil. Target: Isosteviol dose-dependently relaxed the vasopressin (10-8 M)-induced vasoconstriction in isolated aortic rings with or without...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

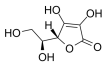


L-Ascorbic acid

(L-Ascorbate; Vitamin C) Cat. No.: HY-B0166

Bioactivity: L-Ascorbic acid is an effective reducing agent and donor antioxidant.

Purity: 99.89%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 1 g

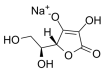


L-Ascorbic acid sodium salt ((+)-Sodium L-ascorbate; Vitamin C sodium salt; Sodium L-ascorbate)

Cat. No.: HY-B0166A

Bioactivity: L-Ascorbic acid (sodium) is a more bioavailable form of vitamin C that is an antioxidant agent.

Purity: 98.0%
Clinical Data: Phase 4
Size: 10mM x 1mL in Water, 1 g

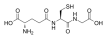


L-Glutathione reduced

(GSH; γ-L-Glutamyl-L-cysteinyl-glycine) Cat. No.: HY-D0187

Bioactivity: L-Glutathione reduced (GSH; γ-L-Glutamyl-L-cysteinyl-glycine) is an endogenous antioxidant and is capable of scavenging oxygen-derived free radicals.

Purity: 99.83%
Clinical Data: No Development Reported
Size: 1 g, 5 g

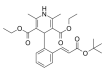


Lacidipine

Cat. No.: HY-B0347

Bioactivity: Lacidipine (Lacipil, Motens) is a L-type calcium channel blocker. Target: Calcium Channel Lacidipine, a novel third-generation dihydropyridine calcium channel blocker, has been demonstrated effective for hypertension. lacidipine protects HKCs against apoptosis induced by ATP depletion and...

Purity: 99.78%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg

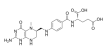


Levomefolic acid

(5-MTHF) Cat. No.: HY-14781

Bioactivity: Levomefolic acid (5-MTHF) is the natural, active form of folic acid used at the cellular level for DNA reproduction, the cysteine cycle and the regulation of homocysteine among other functions. IC50 value: Target: Folate analog Levomefolic acid has been proposed for treatment of cardiovascular disease and...

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 50 mg

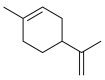


Limonene

Cat. No.: HY-N0544

Bioactivity: Limonene is a monoterpene in citrus peel oil. A popular disinfectant and food preservative. Antimicrobial activities [1]. Anti-proliferative activities [2]. Antioxidant and anti-inflammatory effect [3].

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

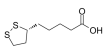


Lipoic acid

((R)-(+)-α-Lipoic acid; R-(+)-Thioctic acid) Cat. No.: HY-18733

Bioactivity: Lipoic acid ((R)-(+)-α-Lipoic acid) is an antioxidant, which is an essential cofactor of **mitochondrial** enzyme complexes. (R)-(+)-α-Lipoic acid is more effective than racemic Lipoic acid.

Purity: 99.59%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 500 mg

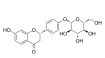


Liquiritin

Cat. No.: HY-N0376

Bioactivity: Liquiritin is a flavonoid isolated from Glycyrrhiza, acts as an antioxidant and has neuroprotective, anti-cancer and anti-inflammatory activity [1] [2].

Purity: 98.07%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

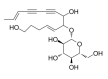


Lobetyolin

Cat. No.: HY-N0327

Bioactivity: Lobetyolin is derived from Codonopsis pilosula and has antioxidative effect.

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Luciferase

Cat. No.: HY-P1004

Bioactivity: Luciferase from Vibrio fischeri has also been used in a study to investigate the sensitivity of dark mutants of various strains of luminescent bacteria to reactive oxygen species.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

Luciferase

Lycopene

Cat. No.: HY-N0287

Bioactivity: Lycopene is naturally occurring carotenoids found in tomato, tomato products, and in other red fruits and vegetables; exhibits antioxidant effects.

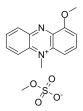
Purity: 98.0%
Clinical Data: Phase 4
Size: 5 mg, 10 mg, 25 mg, 50 mg

Methoxy-PMS

(1-Methoxy PMS; 1-Methoxyphenazine methosulfate) Cat. No.: HY-D0937

Bioactivity: 1-Methoxy PMS is stable electron-transport mediator between NAD(P)H and tetrazolium dyes. 1-Methoxy PMS can induce active oxygen formation.

Purity: 98.14%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 200 mg, 500 mg

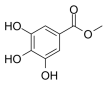


Methyl gallate

(Gallincin; NSC 363001) Cat. No.: HY-N2010

Bioactivity: Methyl gallate is a plant phenolic with antioxidant, anticancer, and anti-inflammatory activities. Methyl gallate also shows **bacterial** inhibition activity.

Purity: 99.96%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 g

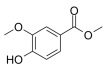


Methyl vanillate

Cat. No.: HY-75342

Bioactivity: Methyl vanillate, one of the ingredients in Hovenia dulcis Thunb, is a **Wnt/β-catenin** pathway activator [1]. A benzoate ester that is the methyl ester of vanillic acid. It has a role as an antioxidant and a plant metabolite.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g

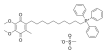


Mitoquinone mesylate (Mitoquinone methanesulfonate; MitoQ10 mesylate; MitoQ mesylate)

Cat. No.: HY-100116A

Bioactivity: Mitoquinone mesylate is a TPP-based, **mitochondrially** targeted antioxidant.

Purity: 98.0%
Clinical Data: Phase 4
Size: 5 mg, 10 mg, 25 mg, 50 mg

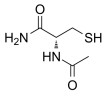


N-Acetylcysteine amide

Cat. No.: HY-110256

Bioactivity: N-Acetylcysteine amide is a cell membranes and blood brain barrier permeant thiol antioxidant and neuroprotective agent.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg

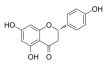


Naringenin

Cat. No.: HY-N0100

Bioactivity: Naringenin is the predominant flavanone in grapefruit; displays strong anti-inflammatory and antioxidant activities.

Purity: 98.72%
Clinical Data: Phase 1
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 1 g, 5 g

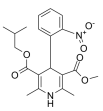


Nisoldipine

(BAY-k 5552) Cat. No.: HY-17402

Bioactivity: Nisoldipine(BAY-k 5552; Sular) is a calcium channel blocker belonging to the dihydropyridines class, specific for L-type Cav1.2 with IC50 of 10 nM. IC50 value: 10 nM Target: L-type Cav1.2 Nisoldipine is a potent blocker of L-type calcium channels. Nisoldipine binds directly to inactive calcium...

Purity: 98.22%
Clinical Data: Launched
Size: 100 mg, 500 mg, 1 g

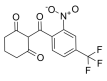


Nitisinone

(NTBC; Nitisone; SC0735) Cat. No.: HY-B0607

Bioactivity: Nitisinone(SC0735) is an inhibitor of the enzyme 4-hydroxyphenylpyruvate dioxygenase. Target: 4-Hydroxyphenylpyruvate Dioxygenase Nitisinone is a drug used to slow the effects of hereditary tyrosinemia type 1. Nitisinone reduced urinary HGA levels from an average of 4.0...

Purity: 99.57%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



OBA-09

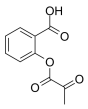
Cat. No.: HY-12840

Bioactivity: OBA-09 is a novel multimodal neuroprotectant oxopropanoyloxy benzoic acid (a salicylic acid/pyruvate ester); shows robust protective effects in the postischemic brain. IC50 value: Target: OBA-09 exhibited antioxidative effects in the postischemic brain, which was evidenced by remarkable...

Purity: 99.86%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Octahydrocurcumin

(Hexahydrobisdemethoxycurcumin)

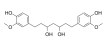
Cat. No.: HY-N0894

Bioactivity: Octahydrocurcumin is a hydrogenated derivatives of curcumin; metabolite of curcumin. IC50 value: Target: OKT3-induced PBMC proliferation was inhibited by octahydrocurcumin with IC50 of 82 uM. The investigated substances with the strongest effect on radical scavenging were tetrahydro-, hexahydro-, and...

Purity: 99.52%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Octyl gallate

(n-Octyl gallate; Stabilizer GA 8)

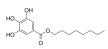
Cat. No.: HY-N2011

Bioactivity: Octyl gallate (Progallin O) is widely used as a food additive, with antimicrobial and antioxidant activity [1] [2]. Octyl gallate (Progallin O) shows selective and sensitive fluorescent property [2].

Purity: 99.96%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 1 g



Phillygenin

(Phillygenol; Epipinoresinol methyl ether; (+)-Phillygenin)

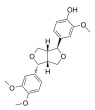
Cat. No.: HY-N0483

Bioactivity: Phillygenin is an active ingredient from Forsythia with many medicinal properties, such as antioxidant, reducing blood lipid, inhibition of low density lipoprotein oxidation. In vitro : 1) Phillygenin shows a greater inhibition on mouse B16 melanoma cells potential than vincristine. 2) phillygenin had...

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Pinocembrin

((+)-Pinocoembrin; Dihydrochrysin; Galangin flavanone)

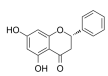
Cat. No.: HY-N0575

Bioactivity: Pinocembrin ((+)-Pinocoembrin) is a flavonoid found in propolis, acts as a competitive inhibitor of **histidine decarboxylase**, and is an effective anti-allergic agent, with antioxidant, antimicrobial and anti-inflammatory properties [1].

Purity: 99.26%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg



Piperlongumine

(Piplartine)

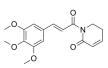
Cat. No.: HY-N2329

Bioactivity: Piperlongumine is a natural alkaloid isolated from Piper longum Linn [1], possesses ant-inflammatory, antibacterial, antiangiogenic, antioxidant, antitumor, and antidiabetic activities [2]. Piperlongumine induces ROS, ...

Purity: 99.19%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg



Procyanidin B2

(Proanthocyanidin B2)

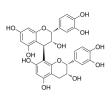
Cat. No.: HY-N0796

Bioactivity: Procyanidin B2 is a natural flavonoid, with anti-cancer, antioxidant activities.

Purity: 99.40%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg



Protocatechualdehyde

(Catechaldehyde; Protocatechuic aldehyde; Rancinamycin IV)

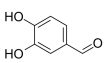
Cat. No.: HY-N0295

Bioactivity: Protocatechualdehyde (Catechaldehyde), a natural polyphenol compound isolated from the roots of radix Salviae Miltiorrhizae, is associated with a wide variety of biological activities and has been widely used in medicine as an antioxidant, anti-aging, an antibacterial and...

Purity: 99.92%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 100 mg



Protopine

(Corydinine)

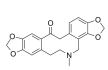
Cat. No.: HY-N0793

Bioactivity: Protopine, an isoquinoline alkaloid contained in plants in northeast Asia. IC50 Value: Target: In vitro: Protopine was found to reduce nitric oxide (NO), cyclooxygenase-2 (COX-2), and prostaglandin E(2) (PGE(2)) production by LPS-stimulated Raw 264.7 cells, without a cytotoxic effect. Pre-treatment of...

Purity: 98.04%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



Quercitrin

(Quercetin 3-rhamnoside)

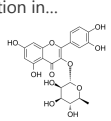
Cat. No.: HY-N0418

Bioactivity: Quercitrin is a natural compound found in Tartary buckwheat with a potential anti-inflammation effect that is used to treat heart and vascular conditions. IC50 value: Target: In vitro: There were significant increases in caspase-3 activity, loss of MMP, and increases in the apoptotic cell population in...

Purity: 99.12%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

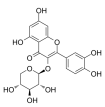


Reynoutrin

(Quercetin-3-D-xyloside; Reinutrin) Cat. No.: HY-N1354

Bioactivity: Reynoutrin (Quercetin-3-D-xyloside) is a flavonoid from Psidium cattleianum, with antioxidant and radical-scavenging activity [1].

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

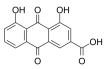


Rhein

(Rheic Acid; Rhubarb yellow; Monorhein) Cat. No.: HY-N0105

Bioactivity: Rhein is a lipophilic anthraquinone extensively found in medicinal herbs, and has many pharmacological effects, including epatoprotective, nephroprotective, anti-inflammatory, antioxidant, anticancer, and antimicrobial activities. IC50 value: Target: In vitro: Rhein (0.1 and 1...

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg

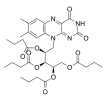


Riboflavin Tetrabutyrate

Cat. No.: HY-B2239

Bioactivity: Riboflavin tetrabutyrate is a lipophilic flavin derivative with antioxidative and lipid peroxide-removing activity.

Purity: 98.56%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg

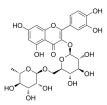


Rutin

(Rutoside; Quercetin 3-O-rutinoside) Cat. No.: HY-N0148

Bioactivity: Rutin, a naturally occurring flavonoid glycoside, has antioxidant, anti-inflammatory, anti-allergic, anti-angiogenic and antiviral properties.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g, 10 g

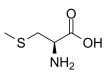


S-Methyl-L-cysteine

(L-S-Methylcysteine) Cat. No.: HY-B2188

Bioactivity: S-Methyl-L-cysteine is a natural product that acts as a substrate in the catalytic antioxidant system mediated by methionine sulfoxide reductase A (MSRA), with antioxidative, neuroprotective, and anti-obesity activities.

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 100 mg

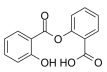


Salsalate

(Salicylsalicylic acid; Disalicylic acid) Cat. No.: HY-B1245

Bioactivity: Salsalate is a nonsteroidal anti-inflammatory drug (NSAID). Target Salsalate is a medication that belongs to the salicylate and non-steroidal anti-inflammatory drug (NSAID) classes. Relative to other NSAIDs, Salsalate has a weak inhibitory effect on the cyclooxygenase enzyme and decreases...

Purity: 99.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg

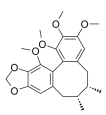


Schisandrin B

(Schizandrin-B; Wuweizisu-B; gamma-Schisandrin) Cat. No.: HY-N0089

Bioactivity: Schisandrin B(Wuweizisu-B) is a dibenzocyclooctadiene derivative isolated from Fructus Schisandrae, has been shown to produce antioxidant effect on rodent liver and heart. IC50 value: Target: in vitro: Schisandrin B exhibits anti-inflammatory activity through modulation of the...

Purity: 99.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

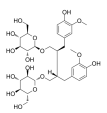


Secoisolariciresinol diglucoside

(SDG; LGM2605) Cat. No.: HY-105008

Bioactivity: Secoisolariciresinol diglucoside (SDG; LGM2605) is a non-toxic free radical scavenger and antioxidant, reduces reduces **ROS** generation. Secoisolariciresinol diglucoside enhances activatation Nrf2 signaling, inhibits **myeloperoxidase (MPO)**.

Purity: 99.95%
Clinical Data: Phase 2
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

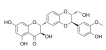


Silibinin

(Silybin; Silibinin A; Silymarin I) Cat. No.: HY-13748

Bioactivity: Silibinin, an effective anti-cancer and chemopreventive agent, has been shown to exert multiple effects on cancer cells, including inhibition of both cell proliferation and migration. IC50 value: Target: anticancer in vitro: silibinin significantly induced the expression of the non-steroidal...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

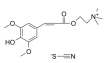


Sinapine thiocyanate

Cat. No.: HY-N0450

Bioactivity: Sinapine is an alkaloid from seeds of the cruciferous species which shows favorable biological activities such as antioxidant and radio-protective activities.

Purity: 98.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

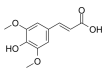


Sinapinic acid

(Sinapic acid) Cat. No.: HY-W009732

Bioactivity: Sinapinic acid (Sinapic acid) is a phenolic compound isolated from Hydnophytum formicarum Jack. Rhizome, acts as an inhibitor of **HDAC**, with an IC_{50} of 2.27 mM [1], and also inhibits **ACE-I** activity [2]. Sinapinic acid posssess pot...

Purity: 99.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

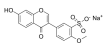


Sodium formononetin-3'-sulfonate

(Sul-F) Cat. No.: HY-13063

Bioactivity: Sodium formononetin-3'-sulfonate (Sul-F) is a water-sol. derivate of formononetin. IC50 value: Target: Research results showed that treatment with Sul-F significantly prevented the elevation of ST-segment level, decreased the contents of creatine kinase-MB, lactate dehydrogenase, alanine...

Purity: 99.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg



Squalene

(Super Squalene; trans-Squalene; AddaVax) Cat. No.: HY-N1214

Bioactivity: Squalene is an intermediate product in the synthesis of cholesterol, and shows several pharmacological properties such as hypolipidemic, hepatoprotective, cardioprotective, antioxidant, and antitoxicant activity.

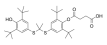
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

Succinobucol

(AGI-1067; Probucol monosuccinate) Cat. No.: HY-14937

Bioactivity: Succinobucol is a phenolic antioxidant with anti-inflammatory and antiplatelet effects.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

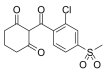


Sulcotrione

Cat. No.: HY-107368

Bioactivity: Sulcotrione is a β-triketone herbicide which can inhibit **hydroxyphenylpyruvate dioxygenase** (**HPPD**).

Purity: 99.56%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

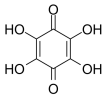


Tetrahydroxyquinone

(Tetrahydroxy-1,4-benzoquinone; Tetrahydroxybenzoquinone) Cat. No.: HY-B1106

Bioactivity: Tetrahydroxyquinone is a molecule best known as a primitive anticataract drug, is also a highly redox active molecule that can take part in a redox cycle with semiquinone radicals, leading to the formation of reactive oxygen species (ROS).

Purity: 95.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

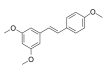


trans-Trimethoxyresveratrol (trans-trismethoxy Resveratrol; E-Resveratrol Trimethyl Ether; Tri-O-methylresveratrol)

Cat. No.: HY-N1408

Bioactivity: Trans-Trimethoxyresveratrol is a derivative of Resveratrol (RSV),and it may be a more potent anti-inflammatory, antiangiogenic and vascular-disrupting agent when compared with resveratrol. In vitro: The in vitro study of resveratrol and trans-Trimethoxyresveratrol showed rather weak cytotoxic...

Purity: 99.72%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg

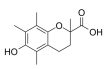


Trolox

Cat. No.: HY-101445

Bioactivity: Trolox is a vitamin E analogue and is a powerful antioxidant.

Purity: 99.53%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 500 mg, 1 g, 5 g

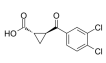


UPF-648

Cat. No.: HY-15600

Bioactivity: UPF-648 is a potent kynurenine 3-monooxygenase (KMO) inhibitor; exhibits highly active at 1 uM (81 ± 10% KMO inhibition); ineffective at blocking KAT activity. IC50 value: 1 uM(81 ± 10 % inhibition) [1] Target: KMO inhibitor in vitro: BFF 122 inhibited KAT activity almost completely at both 1 and...

Purity: 99.12%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg

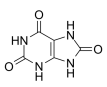


Uric acid

Cat. No.: HY-B2130

Bioactivity: Uric acid is an endogenous antioxidant that scavenges reactive oxygen species (ROS) including singlet oxygen, oxygen radicals, and peroxynitrite.

Purity: 99.0%
Clinical Data: No Development Reported
Size: 1 g

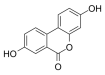


Urolithin A

Cat. No.: HY-100599

Bioactivity: Urolithin A is an intestinal metabolite of ellagic acid with antioxidant and antiproliferative effects; inhibits T24 and Caco-2 cell growth with IC_{50} values of 43.9 and 49 μM, respectively.

Purity: 98.06%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



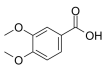
Veratric acid

(3,4-Dimethoxybenzoic acid)

Cat. No.: HY-N2007

Bioactivity: Veratric acid (3,4-Dimethoxybenzoic acid) is an orally active phenolic compound derived from vegetables and fruits, has antioxidant [1] and anti-inflammatory activities [3]. Veratric acid also acts as a protective agent agai...

Purity: 99.99%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
100 mg



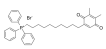
Visomitin

(SKQ1)

Cat. No.: HY-100474

Bioactivity: Visomitin is a new antioxidant with the highest mitochondrion membrane penetrating ability and potent antioxidant capability.

Purity: 98.0%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



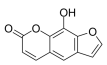
Xanthotoxol

(8-Hydroxypsoralen)

Cat. No.: HY-30152

Bioactivity: Xanthotoxol is a biologically active linear furocoumarin, shows strong pharmacological activities as anti-inflammatory, antioxidant, **5-HT** antagonistic, and neuroprotective effects.

Purity: 99.15%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg



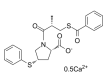
Zofenopril calcium

(SQ26991)

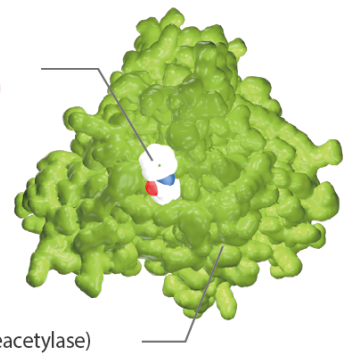
Cat. No.: HY-B0655

Bioactivity: Zofenopril Calcium (SQ26991) is an antioxidant that acts as an angiotensin-converting enzyme inhibitor. Target: ACE
Zofenopril Calcium is a pro-drug designed to undergo metabolic hydrolysis yielding the active free sulfhydryl compound zofenoprilat, which is an angiotensin converting enzyme (ACE)...

Purity: 97.91%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg



Renin



Renin is a central hormone in the control of blood pressure and various other physiological functions. Renin is a hormone and an enzyme which chops the end off angiotensinogen, a circulating plasma peptide, thus creating thedecapeptide, angiotensin I. Angiotensin I is acted on by angiotensin converting enzyme (ACE), which chops another bit off to make the octapeptide, angiotensin II. Angiotensin II acts on the adrenal cortex to stimulate the release of aldosterone and aldosterone stimulates Na^+ retention.

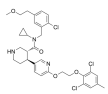
Renin is rate limiting in the production of angiotensin II (Ang II), a hormone that ultimately integrates cardiovascular and renal function in the control of blood pressure as well as salt and volume homeostasis. For instance, renin seems to be of vast importance for maintaining arterial blood pressure in the face of variations in salt intake: in mice, constant blood pressure is found during alterations in sodium intake, and this relies on controlling the activity of the renin-angiotensin system (RAS).

ACT 178882

Cat. No.: HY-U00262

Bioactivity: ACT 178882 is a new **Renin** inhibitor with an **IC_{50}** of 1.4 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Aliskiren

(CGP 60536; CGP60536B; SPP 100) Cat. No.: HY-12176

Bioactivity: Aliskiren(CGP 60536) is a direct renin inhibitor with IC50 of 1.5 nM. IC50 value: 1.5 nM [1] Target: renin in vitro: Aliskiren hemifumarate appears to bind to both the hydrophobic S1/S3-binding pocket and to a large, distinct subpocket that extends from the S3-binding site towards the hydrophobic core...

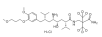
Purity: 99.57%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

Aliskiren D6 Hydrochloride

(CGP-60536 D6 Hydrochloride) Cat. No.: HY-12176AS

Bioactivity: Aliskiren D6 Hydrochloride is is deuterium labeled Aliskiren, which is a direct renin inhibitor with IC50 of 1.5 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg



Aliskiren hemifumarate (CGP 60536 (hemifumarate); CGP60536B (hemifumarate); SPP 100 (hemifumarate))

Cat. No.: HY-12177

Bioactivity: Aliskiren hemifumarate(CGP 60536 hemifumarate) is a direct renin inhibitor with IC50 of 1.5 nM. IC50 value: 1.5 nM [1] Target: renin in vitro: Aliskiren hemifumarate appears to bind to both the hydrophobic S1/S3-binding pocket and to a large, distinct subpocket that extends from the S3-binding site...

Purity: 99.47%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg

Handle region peptide, rat

Cat. No.: HY-P1572

Bioactivity: Handle region peptide, rat is a **prorenin receptor** antagonist, suppresses the progression of diabetic nephropathy and has anti-inflammatory in the eye.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

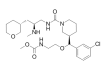
RILLKKMPSV

VTP-27999

Cat. No.: HY-50768

Bioactivity: VTP-27999 is an alkyl amine Renin inhibitor; VTP-27999 is useful for Hypertension and End-Organ Diseases.

Purity: >98%
Clinical Data: Phase 1
Size: 5 mg, 10 mg, 50 mg, 100 mg

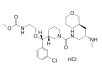


VTP-27999 Hydrochloride

Cat. No.: HY-76652

Bioactivity: VTP-27999 Hcl is an alkyl amine Renin inhibitor; VTP-27999 is useful for Hypertension and End-Organ Diseases. IC50 value: Target: Renin

Purity: 98.02%
Clinical Data: Phase 1
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 50 mg, 100 mg

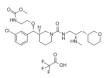


VTP-27999 TFA

Cat. No.: HY-50769

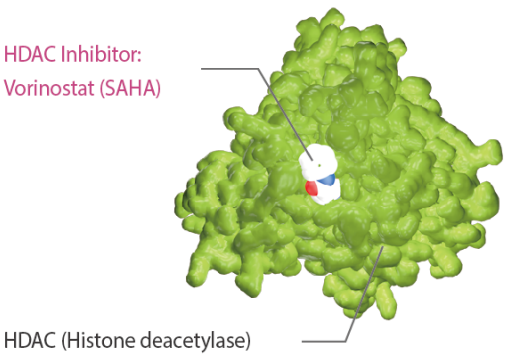
Bioactivity: VTP-27999 TFA is an alkyl amine Renin inhibitor; VTP-27999 TFA is useful for Hypertension and End-Organ Diseases.

Purity: 97.30%
Clinical Data: Phase 1
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg



ROR

RAR-related orphan receptor



The retinoic acid-related orphan receptor (ROR) subgroup of nuclear receptors consists of three members, RORα, -β and -γ (NR1F1-3 or RORA-C). RORs regulate several important physiological processes and have been implicated in a number of pathologies. RORα is critical for cerebellar development and bone formation, while RORβ regulates functions in the brain and retina. RORγ plays a key role in lymph node development and thymopoiesis. Furthermore, both RORα and RORγ are involved in regulating various metabolic pathways, inflammatory responses and immune functions, including Th17 cell differentiation.

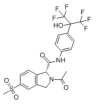
The retinoic acid receptor-related orphan receptors α and γ (RORα and RORγ), are key regulators of helper T (Th)17 cell differentiation, which is involved in the innate immune system and autoimmune disorders. RORα/γ are members of the nuclear hormone receptor superfamily, which contains a signature type II zinc finger DNA binding motif and a hydrophobic ligand binding pocket.

AZD-0284

Cat. No.: HY-120384

Bioactivity: AZD-0284 is an inverse agonist of the nuclear receptor **RORγ**. In development for the treatment of plaque psoriasis vulgaris and respiratory tract disorders [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



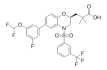
Cintirorgon

(LYC-55716)

Cat. No.: HY-104037

Bioactivity: Cintirorgon (LYC-55716) is novel oral RAR-related orphan receptor γ (**RORγ**) agonist.

Purity: 99.95%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

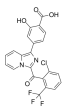


GNE-0946

Cat. No.: HY-19774

Bioactivity: GNE-0946 is a potent and selective **RORγ(RORc)** agonist with an **EC_{50}** value of 4 nM for HEK-293 cell.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

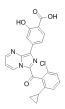


GNE-6468

Cat. No.: HY-19775

Bioactivity: GNE-6468 is a potent and selective **RORγ(RORc)** agonists with an **EC_{50}** value of 13 nM for HEK-293 cell.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

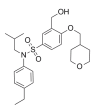


GSK2981278

Cat. No.: HY-19770

Bioactivity: GSK2981278 is a retinoid-related orphan receptor gamma (RORγ) modulator, extracted from patent WO/2015061515 A1, example 124.

Purity: 99.77%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

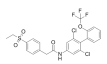


GSK805

Cat. No.: HY-12776

Bioactivity: GSK805 is a potent, orally bioavailable RORγγ Inhibitor with pIC_{50} of 8.4 and >8.2 for RORγ FRET assay and Th17 assay.

Purity: 98.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



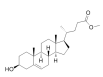
L 601920-0

(Methyl-3β-hydroxycholenate; NSC 84140)

Cat. No.: HY-100084

Bioactivity: L 601920-0 is a **ROR gamma** modulator extracted from patent US20110263046 A1, in figure 2.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

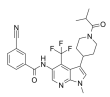


PF-06747711

Cat. No.: HY-112706

Bioactivity: PF-06747711 is a potent, selective, and orally active retinoic acid receptor-related orphan C2 (**RORC2**, also known as **RORγt**) inverse agonist, with an **IC_{50}** of 4.1 nM. Anti-skin inflammatory activity [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg

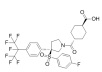


RORγt Inverse agonist 2

Cat. No.: HY-111748

Bioactivity: RORγt Inverse agonist 2 is a selective, orally active **RORγt** inverse agonist with an **EC_{50}** of 119 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 100 mg, 250 mg

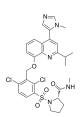


RORγt Inverse agonist 3

Cat. No.: HY-128573

Bioactivity: RORγt Inverse agonist 3 is a potent, selective and orally active **RORγ** inverse agonist, with **EC_{50}**s of 0.22 μM and 0.15 μM for hRORγ and RORγt (human IL-17 cells), respectively [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg, 100 mg

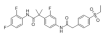


S18-000003

Cat. No.: HY-119366

Bioactivity: S18-000003 is a potent orally bioavailable retinoic acid receptor-related orphan receptor-gamma-t (**RORγt**) inhibitor with an **IC_{50}** of 29 nM. S18-000003 inhibits IL-17 production [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 100 mg, 250 mg

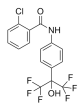


SR0987

Cat. No.: HY-101454

Bioactivity: SR0987 is a **RORγt** agonist, with an **EC_{50}** of 800 nM.

Purity: 99.56%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

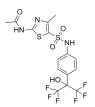


SR1001

Cat. No.: HY-13421

Bioactivity: SR1001 is a selective **ROR_{α}** and **ROR_{γ}** inverse agonist with **K_i**s 172 and 111 nM, respectively.

Purity: 99.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

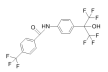


SR1078

Cat. No.: HY-14422

Bioactivity: SR1078 is an agonist of retinoic acid receptor-related orphan receptor α/γ (**RORα/RORγ**).

Purity: 99.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

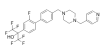


SR2211

Cat. No.: HY-16998

Bioactivity: SR2211 is a potent, selective synthetic **RORγ** modulator and functions as an inverse agonist, with a **K_i** of 105 nM and an IC_{50} of ~320 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg



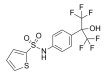
SR3335

(ML 176)

Cat. No.: HY-14413

Bioactivity: SR3335 is a selective **RORα** inverse agonist that directly binds to RORα with a **K_i** of 220 nM.

Purity: 98.02%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

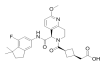


TAK-828F

Cat. No.: HY-111509

Bioactivity: TAK-828F is a potent, selective, and orally available retinoic acid receptor-related orphan receptor γt (**RORγt**) inverse agonist (binding **IC_{50}**=1.9 nM, reporter gene **IC_{50}**=6.1 nM).
TAK-828F shows excellent RORγt isoforms selectiv...

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 500 mg, 250 mg

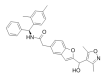


TMP778

Cat. No.: HY-102075

Bioactivity: TMP778 is a potent and selevtive **RORγt** inverse agonist, with an IC_{50} of 7 nM in FRET assay.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



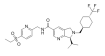
Vimirogant

(VTP-43742)

Cat. No.: HY-103637

Bioactivity: Vimirogant (VTP-43742) is a **RORγ** inhibitor extracted from patent US 9481674 B1, has a **K_i** of <100 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

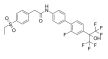


XY101

Cat. No.: HY-128604

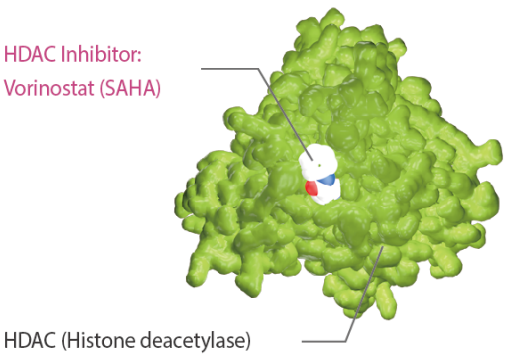
Bioactivity: XY101 is a potent, selective, metabolically stable and orally available **RORγ** inverse agonists with an **IC_{50}** of 30 nM and a **K_d** of 380 nM [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 500 mg, 250 mg



Ser/Thr Protease

Serine proteases;Serine endopeptidases;Threonine proteases



Serine proteases are enzymes that cleave peptide bonds in proteins, in which serine serves as the nucleophilic amino acidat the active site. They are found ubiquitously in both eukaryotes and prokaryotes. Serine proteases fall into two broad categories based on their structure: chymotrypsin-like or subtilisin-like. In humans, serine proteases are responsible for co-ordinating various physiological functions, including digestion, immune response, blood coagulation and reproduction. Threnonine proteases are a family of proteolytic enzymes harbouring a threonine (Thr) residue within the active site. The prototype members of this class of enzymes are the catalytic subunits of the proteasome, however the acyltransferases convergently evolved the same active site geometry andmechanism.

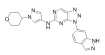
GCN2-IN-1

(A-92)

Cat. No.: HY-100877

Bioactivity: GCN2-IN-1 is a potent general control nonderepressible 2 kinase (**GCN2**) inhibitor with **IC_{50}**s of <0.3 μM in the enzyme and cell assay.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

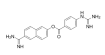


Nafamostat

Cat. No.: HY-B0190

Bioactivity: Nafamostat, a synthetic serine protease inhibitor, is an anticoagulant. Nafamostat supresses T cell auto-reactivity by decreasing granzyme activity and CTL cytolysis [1] [2] [3].

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg

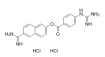


Nafamostat hydrochloride

Cat. No.: HY-B0190B

Bioactivity: Nafamostat hydrochloride, a synthetic serine protease inhibitor, is an anticoagulant. Nafamostat hydrochloride supresses T cell auto-reactivity by decreasing granzyme activity and CTL cytolysis [1] [2] [3].

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg



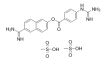
Nafamostat mesylate

(FUT-175)

Cat. No.: HY-B0190A

Bioactivity: Nafamostat mesylate, a synthetic serine protease inhibitor, is an anticoagulant. Nafamostat mesylate supresses T cell auto-reactivity by decreasing granzyme activity and CTL cytolysis [1] [2] [3].

Purity: 99.97%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

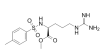


TAME

Cat. No.: HY-13255

Bioactivity: TAME is a **serine protease** inhibitor and can be also utilized as a substrate for the serine proteases trypsin, plasmin, and thrombin [1] [2] [3]. TAME is an inhibitor of **anaphase-promoting complex (APC)**, which binds to the ...

Purity: 99.11%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

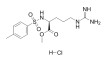


TAME hydrochloride

Cat. No.: HY-13255A

Bioactivity: TAME hydrochloride is a **serine protease** inhibitor and can be also utilized as a substrate for the serine proteases trypsin, plasmin, and thrombin [1] [2] [3]. TAME hydrochloride is an inhibitor of **anaphase-promoting complex (APC)**, which bi...

Purity: 99.10%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

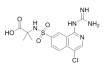


UK-371804

Cat. No.: HY-101214

Bioactivity: UK-371804 is a urokinase-type plasminogen activator (**uPA**) inhibitor with a **K_i** of 10 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



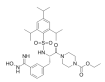
Upamostat

(WX-671)

Cat. No.: HY-16511

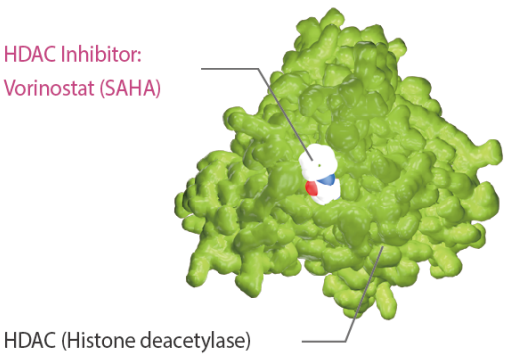
Bioactivity: Upamostat is a **serine protease** inhibitor. Upamostat is the orally available prodrug of the WX-UK1, which is a urokinase plasminogen activator (uPA) inhibitor.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg



SGK

Serum-glucocorticoid regulated kinase;Serum and glucocorticoid-regulated kinase



Serum- and glucocorticoid-inducible kinase 1 (SGK1) is a member of the Ser/Thr protein kinase family that regulates a variety of cell functions. SGK1 may regulate the cell cycle through the modulation of microtubule (MT) dynamics in tumor cells. SGK1 depolymerizes MTs through two distinct mechanisms both in vitro and in vivo. First, SGK1 directly depolymerizes MT independently of its kinase activity. Second, SGK1 depolymerizes MT through the phosphorylation of tau specifically at Ser214.

SGK1 is under regulation of several hormones, mediators and cell stressors. SGK1 is cloned as a gene up-regulated by serum and glucocorticoids in rat mammary tumor cells.

SGK1 is transcriptionally upregulated by mineralocorticoids and activated by insulin. The kinase enhances renal tubular Na^+-reabsorption and accounts for blood pressure increase following high salt diet in mice made hyperinsulinemic by dietary fructose or fat.

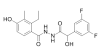
SGK Inhibitors & Modulators

EMD638683

Cat. No.: HY-15193

Bioactivity: EMD638683 is a highly selective **SGK1** inhibitor, with an IC_{50} value of 3 μM.

Purity: 99.74%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

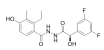


EMD638683 R-Form

Cat. No.: HY-15193A

Bioactivity: EMD638683 R-Form is the R-form of EMD638683. EMD638683 is a highly selective **SGK1** inhibitor with IC_{50} of 3 μM.

Purity: 99.68%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

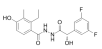


EMD638683 S-Form

Cat. No.: HY-15193B

Bioactivity: EMD638683 S-Form is the S-form of EMD638683. EMD638683 is a highly selective **SGK1** inhibitor with IC_{50} of 3 μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

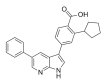


GSK 650394

Cat. No.: HY-15192

Bioactivity: GSK 650394 is a novel **SGK** inhibitor with IC_{50} of 62 nM and 103 nM for SGK1 and SGK2 in the SPA assay respectively.

Purity: 99.38%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

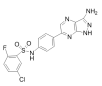


SGK1-IN-1

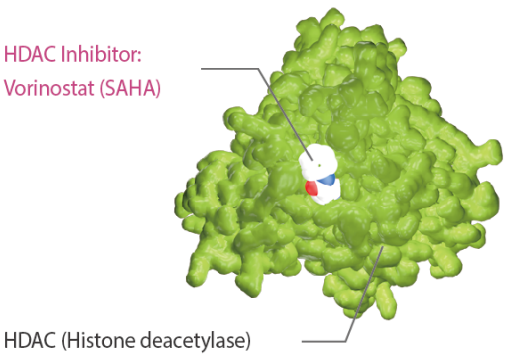
Cat. No.: HY-18607

Bioactivity: SGK1-IN-1 is a highly active and selective inhibitor of **SGK-1**, with an IC_{50} of 1 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



Stearoyl-CoA Desaturase (SCD)



Stearoyl-CoA desaturase (SCD) is an integral membrane protein of the endoplasmic reticulum (ER) that catalyzes the formation of monounsaturated fatty acids from saturated fatty acids. Recent studies suggest that SCD is a key regulator of energy metabolism and has implications in dislipidemia and obesity. It is responsible for forming a double bond in Stearoyl-CoA. This is how themonounsaturated fatty acid oleic acid is produced from the saturated fatty acid stearic acid. Stearoyl-CoA desaturase is an iron-containing enzyme that catalyzes a rate-limiting step in the synthesis of unsaturated fatty acids. The principal product of SCD is oleic acid, which is formed by desaturation of stearic acid. The ratio of stearic acid to oleic acid has been implicated in the regulation of cell growth and differentiation through effects on cell membrane fluidity and signal transduction.

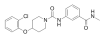
Stearoyl-CoA Desaturase (SCD) Inhibitors & Modulators

A939572

(stearoyl-CoA desaturase (SCD) inhibitor; SCD-inhibitor) Cat. No.: HY-50709

Bioactivity: A939572 is a potent, and orally bioavailable **SCD1** inhibitor with **IC_{50}** values of <4 nM and 37 nM for **mSCD1** and **hSCD1**, respectively.

Purity: 99.67%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg

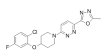


CAY10566

Cat. No.: HY-15823

Bioactivity: CAY10566 is a **stearoyl-CoA desaturase** (**SCD**) inhibitor.

Purity: 99.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg

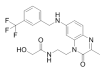


CVT-12012

Cat. No.: HY-11034

Bioactivity: CVT-12012 is a potent and orally bioavailable stearoyl-coA desaturase **(SCD)** inhibitor, with **IC_{50}s** of 38 nM, 6.1 nM for rat microsomal and human HEPG2, respectively.

Purity: 98.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

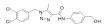


GSK1940029

(SCD inhibitor 1) Cat. No.: HY-19762

Bioactivity: GSK1940029 is a stearoyl-coa desaturase (**SCD**) extracted from patent WO/2009060053 A1, compound example 16.

Purity: 99.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

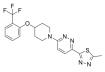


MF-438

Cat. No.: HY-15822

Bioactivity: MF-438 is a potent and orally bioavailable **stearoyl-CoA desaturase 1 (SCD1)** inhibitor with an **EC_{50}** of 2.3 nM for rSCD1 [1].

Purity: >98%
Clinical Data: No Development Reported
Size:

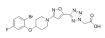


MK-8245

Cat. No.: HY-13070

Bioactivity: MK-8245 is a potent, liver-targeted **stearoyl-CoA desaturase (SCD)** inhibitor, with **IC_{50}**s of 1 nM for human SCD1 and 3 nM for both rat SCD1 and mouse SCD1, with antidiabetic and antidyslipidemic efficacy [1].

Purity: 99.82%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

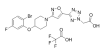


MK-8245 Trifluoroacetate

Cat. No.: HY-13077

Bioactivity: MK-8245 trifluoroacetate is a liver-targeting inhibitor of stearoyl-CoA desaturase (SCD) with IC50 of 1 nM for human SCD1 and 3 nM for both rat SCD1 and mouse SCD1, with anti-diabetic and anti-dyslipidemic efficacy.

Purity: 98.09%
Clinical Data: Phase 2
Size: 5 mg, 10 mg, 50 mg, 100 mg

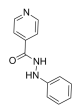


PluriSIn 1

(NSC 14613) Cat. No.: HY-15700

Bioactivity: PluriSIn 1 (NSC 14613) is an inhibitor of stearoyl-coA desaturase (**SCD**), and is a pluripotent cell-specific inhibitor.

Purity: 99.64%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

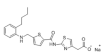


SCD1 inhibitor-1

Cat. No.: HY-112812

Bioactivity: SCD1 inhibitor-1 is a potent and liver-selective **stearoyl-CoA desaturase-1 (SCD1)** inhibitor [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg, 100 mg

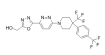


T-3764518

Cat. No.: HY-102045

Bioactivity: T-3764518 is a novel and potent stearoyl coenzyme A desaturase (**SCD**) inhibitor with an **IC_{50}** of 4.7 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

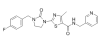


XEN723

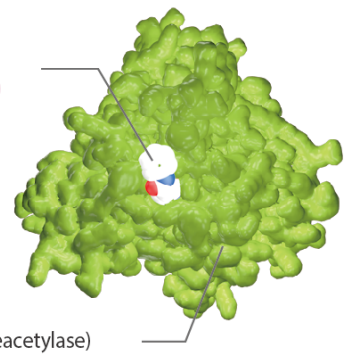
Cat. No.: HY-100249

Bioactivity: XEN723 is a novel and potent thiazolylimidazolidinone inhibitor of **Stearoyl-CoA Desaturase** (**SCD1**) with **IC_{50}**s of 45 and 524 nM in mouse and HepG2 cell, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Thrombin



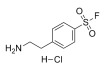
Thrombin is a serine protease that in humans is encoded by the F2 gene. Thrombin is an intriguing coagulation protease demonstrating an array of effects on endothelial cells, vascular smooth muscle cells (VSMC), monocytes, and platelets, all of which are involved in the pathophysiology of atherosclerosis. There is mounting evidence that thrombin acts as a powerful modulator of many processes like regulation of vascular tone, permeability, migration and proliferation of VSMC, recruitment of monocytes into the atherosclerotic lesions, induction of diverse pro-inflammatory markers, and all of these are related to the progression of cardiovascular disease. Recent studies in transgenic mice models indicate that the deletion of the natural thrombin inhibitor heparin cofactor II promotes an accelerated atherogenic state. The combined evidence points to thrombin as a pivotal contributor to vascular pathophysiology. Considering the clinical development of selective anticoagulants including direct thrombin inhibitors.

AEBSF hydrochloride

Cat. No.: HY-12821

Bioactivity: AEBSF hydrochloride is an irreversible inhibitor of **serine proteases**, such as chymotrypsin, kallikrein, plasmin, thrombin, and trypsin.

Purity: 99.76%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 200 mg

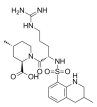


Argatroban

(MD-805; MCI-9038; Argipidine) Cat. No.: HY-B0375

Bioactivity: Argatroban (MD-805) is a direct, selective thrombin inhibitor.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

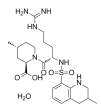


Argatroban monohydrate (MD-805 (monohydrate); MCI-9038 (monohydrate); Argipidine (monohydrate))

Cat. No.: HY-B0375A

Bioactivity: Argatroban (monohydrate) (MD-805 (monohydrate)) is a direct, selective thrombin inhibitor.

Purity: 99.95%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

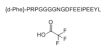


Bivalirudin TFA

Cat. No.: HY-15664

Bioactivity: Bivalirudin TFA is a synthetic 20 residue peptide which reversibly inhibits thrombin. IC50 Value: Target: thrombin in vitro: Eptifibatide (8 mg/mL) added together with a low (70 ng/mL) concentration of bivalirudin (a direct thrombin inhibitor) effectively (approximately 90%) reduced platelet...

Purity: 99.76%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

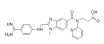


Dabigatran

(BIBR 953; BIBR 953ZW) Cat. No.: HY-10163

Bioactivity: Dabigatran(BIB-953; BIBR 953ZW) is a reversible and selective, direct thrombin inhibitor (DTI) with Ki value of 4.5 nM. IC50 Value: 4.5 nM (Ki); 10 nM(Thrombin-induced platelet aggregation) [1] Target: thrombin in vitro: Dabigatran selectively and reversibly inhibited human thrombin(Ki: 4.5...

Purity: 96.12%
Clinical Data: Phase 4
Size: 5 mg, 10 mg, 50 mg, 100 mg

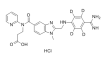


Dabigatran D4 hydrochloride

(BIBR-953 D4 hydrochloride) Cat. No.: HY-10163AS

Bioactivity: Dabigatran D4 hydrochloride is deuterium labeled Dabigatran, which is a reversible and selective, direct thrombin inhibitor (DTI) with Ki value of 4.5 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

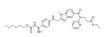


Dabigatran etexilate

(BIBR 1048) Cat. No.: HY-10274

Bioactivity: Dabigatran etexilate(BIBR-1048) is the orally active prodrug of dabigatran; Dabigatran is a reversible and selective, direct thrombin inhibitor (DTI) with Ki value of 4.5 nM.

Purity: 99.79%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

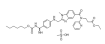


Dabigatran etexilate mesylate

(BIBR 1048MS; Dabigatran etexilate methanesulfonate) Cat. No.: HY-10274A

Bioactivity: Dabigatran etexilate mesylate (BIBR 1048MS) is the orally active prodrug of dabigatran. Dabigatran is a reversible and selective, direct thrombin inhibitor (DTI) with Ki value of 4.5 nM.

Purity: 99.60%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g

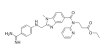


Dabigatran ethyl ester

Cat. No.: HY-17378

Bioactivity: ethyl ester of Dabigatran, which is an emerging oral anticoagulant which is a direct inhibitor of thrombin activity.

Purity: 99.26%
Clinical Data: Phase 4
Size: 5 mg, 10 mg, 50 mg, 100 mg

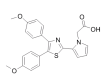


Desethyl KBT-3022

Cat. No.: HY-U00039

Bioactivity: Desethyl KBT-3022 is the main active metabolite of the new antiplatelet agent, KBT-3022.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

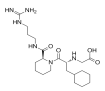


Inogatran

(H-314-27) Cat. No.: HY-19660

Bioactivity: Inogatran is a synthetic **thrombin** inhibitor, developed for the possible treatment and prophylaxis of arterial and venous thrombotic diseases.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

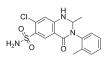


Metolazone

(SR-720-22) Cat. No.: HY-B0209

Bioactivity: Metolazone(Zaroxolyn) is primarily used to treat congestive heart failure and high blood pressure. Target: Others Metolazone is a thiazide-like diuretic marketed under the brand names Zytanix from Zydus Cadila, Zaroxolyn, and Mykrox. It is primarily used to treat congestive heart failure and...

Purity: 99.32%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

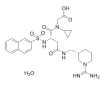


Napsagatran hydrate

(Ro 46-6240 hydrate; Ro 46-6240/010 hydrate) Cat. No.: HY-15759A

Bioactivity: Napsagatran hydrate is a novel and specific **thrombin** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

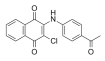


NQ301

Cat. No.: HY-101054

Bioactivity: NQ301 is an antithrombotic agent; inhibits collagen-challenged rabbit platelet aggregation with an IC_{50} of 10 mg/mL.

Purity: 98.74%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

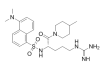


OM-189

Cat. No.: HY-100245

Bioactivity: OM-189 is a selective synthetic **thrombin** inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

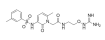


RWJ-445167

(3DP-10017) Cat. No.: HY-19373

Bioactivity: RWJ-445167 is a dual inhibitor of **thrombin** and **factor Xa** with K_i of 4.0 nM and 230 nM, respectively, exhibiting potent antithrombotic activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Sfllrnpndkyepf

Cat. No.: HY-P1000

Bioactivity: SFLLRNPNDKYEPF is a synthetic **thrombin** receptor agonist peptide.

Purity: 98.22%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 mg, 5 mg, 10 mg

SFLLRNPNDKYEPF

Thrombin

Cat. No.: HY-114164

Bioactivity: Thrombin is a trypsin-like allosteric serine protease that has a fundamental role in the clotting cascade (150 U/mg).

Purity:
Clinical Data: No Development Reported
Size: 500u g

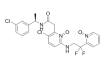
Thrombin

Thrombin inhibitor 1

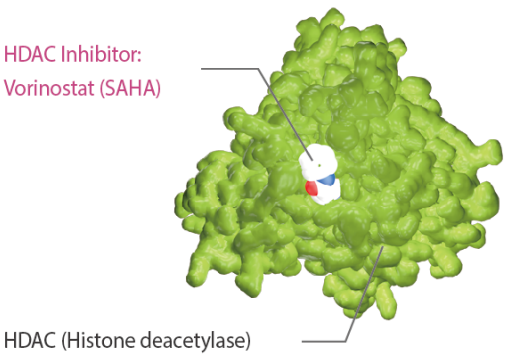
Cat. No.: HY-U00370

Bioactivity: Thrombin inhibitor 1 is a potent **thrombin** inhibitor (K_i=0.66 nM, 2xaPTT=0.43 μM).

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Tryptophan Hydroxylase



Thrombin is a serine protease that in humans is encoded by the F2 gene. Thrombin is an intriguing coagulation protease demonstrating an array of effects on endothelial cells, vascular smooth muscle cells (VSMC), monocytes, and platelets, all of which are involved in the pathophysiology of atherosclerosis. There is mounting evidence that thrombin acts as a powerful modulator of many processes like regulation of vascular tone, permeability, migration and proliferation of VSMC, recruitment of monocytes into the atherosclerotic lesions, induction of diverse pro-inflammatory markers, and all of these are related to the progression of cardiovascular disease. Recent studies in transgenic mice models indicate that the deletion of the natural thrombin inhibitor heparin cofactor II promotes an accelerated atherogenic state. The combined evidence points to thrombin as a pivotal contributor to vascular pathophysiology.

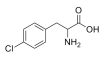
Tryptophan Hydroxylase Inhibitors & Modulators

Fenclonine
(4-Chloro-DL-phenylalanine; PCPA; CP-10188)

Cat. No.: HY-B1368

Bioactivity: Fenclonine is a pharmaceutical intermediate.

Purity: 99.10%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 g

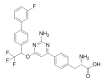


LP-533401

Cat. No.: HY-15849

Bioactivity: LP-533401 is a **Tryptophan hydroxylase 1** inhibitor that regulates serotonin production in the gut.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg

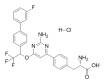


LP-533401 hydrochloride

Cat. No.: HY-15849A

Bioactivity: LP-533401 hydrochloride is a **tryptophan hydroxylase 1** inhibitor that regulates serotonin production in the gut.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

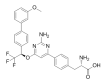


LX-1031

Cat. No.: HY-13041

Bioactivity: LX-1031 is a potent, orally available **tryptophan 5-hydroxylase (TPH)** inhibitor that reduces serotonin (5-HT) synthesis peripherally.

Purity: 99.55%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

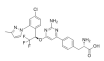


Telotristat
(LP-778902)

Cat. No.: HY-13055B

Bioactivity: Telotristat (LP-778902) is a potent **tryptophan hydroxylase** inhibitor with an in vivo **IC_{50}** of 0.028 μM.

Purity: 99.46%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg

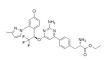


Telotristat ethyl
(LX1606)

Cat. No.: HY-13055A

Bioactivity: Telotristat ethyl (LX1606) is a novel, orally-delivered inhibitor of **tryptophan hydroxylase** that reduces serotonin production.

Purity: 99.68%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

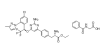


Telotristat etiprate
(LX1606 (Hippurate))

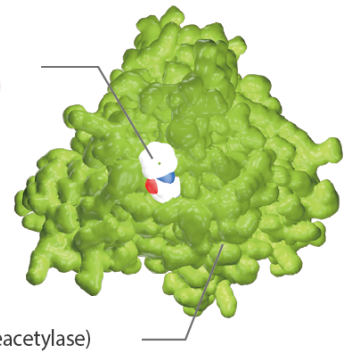
Cat. No.: HY-13055

Bioactivity: Telotristat etiprate (LX1606 Hippurate) is a novel, orally-delivered inhibitor of **tryptophan hydroxylase** that reduces serotonin production.

Purity: 99.87%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



Tyrosinase



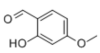
Tyrosinase is an oxidase that is the rate-limiting enzyme for controlling the production of melanin. The enzyme is mainly involved in two distinct reactions of melanin synthesis. Tyrosinase is a copper-containing enzyme present in plant and animal tissues that catalyzes the production of melanin and other pigments from tyrosine by oxidation, as in the blackening of a peeled or sliced potato exposed to air. It is found inside melanosomes which are synthesised in the skin melanocytes. In humans, the tyrosinase enzyme is encoded by the TYR gene. Tyrosinase is one of the key enzymes in mammalian melanin synthesis.

2-Hydroxy-4-methoxybenzaldehyde

Cat. No.: HY-N0445

Bioactivity: 2-Hydroxy-4-methoxybenzaldehyde, a chemical compound and an isomer of Vanillin, could be used to synthesis Urolithin M7 [1]. 2-hydroxy-4-methoxybenzaldehyde is a potent **tyrosinase** inhibitor from three East African medicinal plants, Mondia whitei, Rhus vulgaris Meikle, and Sclerocarya caffra Sond...

Purity: 99.90%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



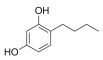
4-Butylresorcinol

(Butylresorcinol)

Cat. No.: HY-107369

Bioactivity: 4-Butylresorcinol is a phenol derivative which can inhibit **tyrosinase** with IC_{50} of 11.27 μM.

Purity: 99.32%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg



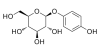
Arbutin

(p-Arbutin; β-Arbutin)

Cat. No.: HY-N0192

Bioactivity: Arbutin(β-Arbutin) is a glycoside; a glycosylated hydroquinone extracted from the bearberry plant in the genus Arctostaphylos; inhibits tyrosinase and thus prevents the formation of melanin. IC50 value: Target: tyrosinase

Purity: 98.0%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 g, 10 g

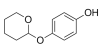


Deoxyarbutin

Cat. No.: HY-B1461

Bioactivity: Deoxyarbutin is a new effective lighten ingredient, can effectively inhibit tyrosinase activity and melanin synthesis to get significant and lasting lightening effect.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

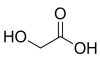


Glycolic acid

Cat. No.: HY-W015967

Bioactivity: Glycolic Acid is an inhibitor of **tyrosinase**, suppressing melanin formation and lead to a lightening of skin colour.

Purity: 97.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 g



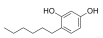
Hexylresorcinol

(4-Hexylresorcinol)

Cat. No.: HY-B0986

Bioactivity: Hexylresorcinol is an organic compound with local anaesthetic, antiseptic and anthelmintic properties, is a potent inhibitor of mushroom tyrosinase, causing 90% loss of activity at 100 μM.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g

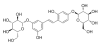


Mulberroside A

Cat. No.: HY-N0619

Bioactivity: Mulberroside A, the major active anti-tyrosinase compound in the root bark extract of Morus alba L. (Moraceae), is widely employed as an active ingredient in whitening cosmetics. IC50 value: 1.29 μmol/L (inhibition of the monophenolase activity); KI value: 0.385 μmol/L (the inhibition constant of the...

Purity: 99.53%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



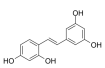
Oxyresveratrol

(trans-Oxyresveratrol)

Cat. No.: HY-N1430

Bioactivity: Oxyresveratrol is neuroprotective and inhibits the apoptotic cell death in transient cerebral ischemia. It effectively scavenges H2O2, NO (IC50 = 45.3 μM), and the artificial free radical 2,2-diphenyl-l-picrylhydrazyl (IC50 = 28.9 μM) In vitro: 1)oxyresveratrol exhibited more than 50% inhibition at...

Purity: 99.91%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg, 1 g



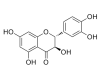
Taxifolin

((+)-Dihydroquercetin; (+)-Taxifolin)

Cat. No.: HY-N0136

Bioactivity: Taxifolin ((+)-Dihydroquercetin) exhibits important anti-**tyrosinase** activity. Taxifolin exhibits significant inhibitory activity against **collagenase** with an IC_{50} value of 193.3 μM.

Purity: 99.82%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

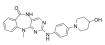


XMD16-5

Cat. No.: HY-101243

Bioactivity: XMD16-5 is a potent **TNK2** inhibitor with IC_{50} values of 16 and 77 nM for the D163E and R806Q mutations, respectively.

Purity: 98.01%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

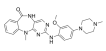


XMD8-87

(ACK1-B19) Cat. No.: HY-15811

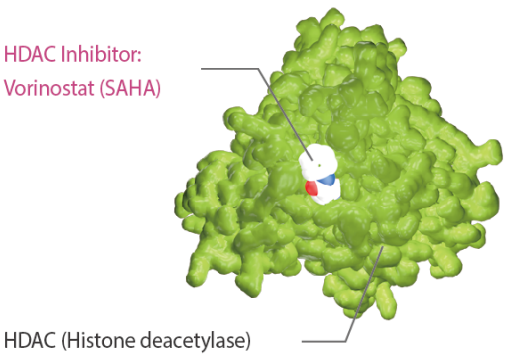
Bioactivity: XMD8-87 is a potent **TNK2** inhibitor with IC_{50} values of 38 and 113 nM for the D163E and R806Q mutations, respectively.

Purity: 98.29%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Xanthine Oxidase

XO



Xanthine oxidase (XO) is an important enzyme catalyzing the hydroxylation of hypoxanthine to xanthine and xanthine to uric acid which is excreted by kidneys. Xanthine oxidase belongs to the molybdenum-protein family containing one molybdenum, one of the flavin adenine dinucleotides (FAD), and two iron-sulfur (2Fe-2S) centers of the ferredoxin type in each of its two independent subunits. The enzyme contains two separated substrate-binding sites. XO catalysed the oxidation of hypoxanthine to xanthine and subsequently to uric acid.

Xanthine oxidase inhibitors (XOIs) are typically used in the treatment of nephropathy and renal stone diseases linked to hyperuricemia.

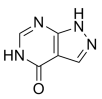
Xanthine Oxidase Inhibitors & Modulators

Allopurinol

Cat. No.: HY-B0219

Bioactivity: Allopurinol (Zyloprim) is a xanthine oxidase inhibitor with an IC50 of 7.82±0.12 μM.

Purity: 99.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 g, 10 g

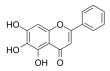


Baicalein

(5,6,7-Trihydroxyflavone) Cat. No.: HY-N0196

Bioactivity: Baicalein (5,6,7-Trihydroxyflavone) is a **xanthine oxidase** inhibitor with an **IC_{50}** value of 3.12 mM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

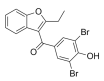


Benzbromarone

Cat. No.: HY-B1135

Bioactivity: Benzbromarone is a highly effective and well tolerated non-competitive inhibitor of xanthine oxidase, used as an uricosuric agent, used in the treatment of gout.

Purity: 99.17%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg

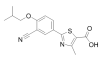


Febuxostat

(TEI 6720; TMX 67) Cat. No.: HY-14268

Bioactivity: Febuxostat(TEI 6720;TMX 67) is selective xanthine oxidase inhibitor with Ki of 0.6 nM. IC50 value: 0.6 nM (Ki) [1]
Target: xanthine oxidase in vitro: Febuxostat displays potent mixed-type inhibition of the activity of purified bovine milk xanthine oxidase, with Ki and Ki' values of 0.6 nM and 3.1 nM...

Purity: 99.94%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

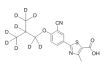


Febuxostat D9

Cat. No.: HY-14268S

Bioactivity: Febuxostat D9 is deuterium labeled Febuxostat, which is a selective xanthine oxidase inhibitor with Ki of 0.6 nM.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

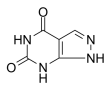


Oxypurinol

(Oxipurinol) Cat. No.: HY-19657

Bioactivity: Oxipurinol (Oxipurinol), the major active metabolite of Allopurinol, is an inhibitor of **xanthine oxidase**. Oxipurinol can be used to regulate blood urate levels and treat gout [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 50 mg



Phytic acid (myo-Inositol, hexakis(dihydrogen phosphate); Inositol hexaphosphate)

Cat. No.: HY-N0814

Bioactivity: Phytic acid is a major phosphorus storage compound of most seeds and cereal grains.

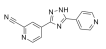
Purity:
Clinical Data: Phase 3
Size: 10mM x 1mL in Water, 250 mg

Topiroxostat

(FYX-051) Cat. No.: HY-14874

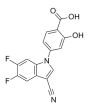
Bioactivity: Topiroxostat(FYX-051) is a novel and potent xanthine oxidoreductase (XOR) inhibitor with IC50 value of 5.3 nM.

Purity: 98.54%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg



Xanthine oxidase-IN-1

(4-(3-Cyano-5,6-difluoroindol-1-yl)-2-hydroxybenzoic acid) Cat. No.: HY-U00288

Bioactivity: Xanthine oxidase-IN-1 is a **xanthine oxidase** inhibitor extracted from patent WO2008126898A1, page 68, compound example 3, with an **IC_{50}** of 6.5 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg