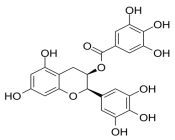
Mitochondrial Metabolism

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.

Mitochondrial Metabolism Inhibitors, Activators & Modulators

(-)-Epigallocatechin Gallate
(EGCG; Epigallocatechol Gallate) Cat. No.: HY-13653

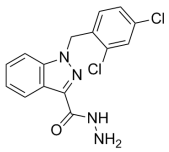
(-)-Epigallocatechin Gallate is a tea flavonoid with potent antioxidant, antiinflammatory, and anticarcinogenic properties. (-)-Epigallocatechin Gallate is reported to inhibit **EGFR** signaling and thereby exert anticancer effects.



Purity: 99.91%
Clinical Data: Phase 4
Size: 10 mM × 1 mL, 50 mg, 100 mg, 500 mg

Adjudin
(AF-2364) Cat. No.: HY-18996

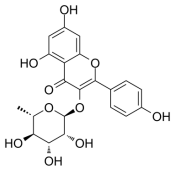
Adjudin is an extensively studied male contraceptive with a superior **mitochondria**-inhibitory effect. Adjudin is also a potent **Cl^- channel** blocker.



Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Afzelin
(Kaempferol-3-O-rhamnoside) Cat. No.: HY-N1441

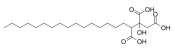
Afzelin (Kaempferol-3-O-rhamnoside) is is a flavonol glycoside found in Houttuynia cordata Thunberg and is widely used in the preparation of antibacterial and antipyretic agents, detoxicants and for the treatment of inflammation.



Purity: 99.62%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg

Agaric acid
(Agaricinic Acid) Cat. No.: HY-N4104

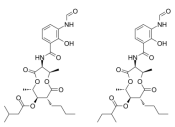
Agaric acid (Agaricinic Acid) is obtained from various plants of the fungous tribe, i.e. Polyporus officinalis and Polyporus igniarius. Agaric acid induces mitochondrial permeability transition through its interaction with the adenine nucleotide translocase.



Purity: >98%
Clinical Data:
Size: 1 mg, 5 mg

Antimycin A3
Cat. No.: HY-105755

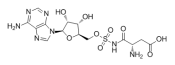
Antimycin A3, an antibiotic isolated from a number of Streptomyces species, shows antifungal activities. Antimycin A3 is a potent inhibitor of **respiration**. Antimycin A3 inhibits the electron transfer activity of **ubiquinol-cytochrome c oxidoreductase**.



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

Asp-AMS
Cat. No.: HY-112860

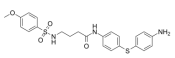
Asp-AMS, an analogue of aspartyl-adenylate, is an **aspartyl-tRNA synthetase** inhibitor and also a strong competitive inhibitor of the **mitochondrial enzyme**.



Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

BI-6C9
Cat. No.: HY-103661

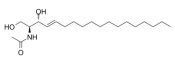
BI-6C9 is a highly specific BH3 interacting domain (**Bid**) inhibitor, which prevents mitochondrial outer membrane potential (MOMP) and mitochondrial fission, and protects the cells from mitochondrial apoptosis inducing factor (AIF) release and caspase-independent cell death in neurons.



Purity: 98.24%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

C2 Ceramide
(Ceramide 2) Cat. No.: HY-101180

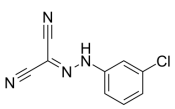
C2 Ceramide (Ceramide 2) is the main lipid of the stratum corneum and a **protein phosphatase 1 (PP1)** activator. C2 Ceramide activates **PP2A** and **ceramide-activated protein phosphatase (CAPP)**.



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

CCCP (Carbonyl cyanide 3-chlorophenylhydrazone; Carbonyl Cyanide m-Chlorophenylhydrazone)
Cat. No.: HY-100941

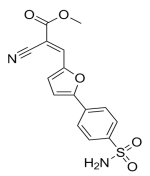
CCCP is an oxidative phosphorylation uncoupler. CCCP induces activation of PINK1 leading to Parkin Ser65 phosphorylation.



Purity: 99.83%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 50 mg

CCI-006
Cat. No.: HY-114410

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.

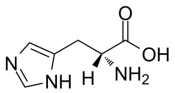


Purity: 98.79%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

D-Histidine

Cat. No.: HY-W012572

D-Histidine is an enantiomer of L-histidine (HY-N0832). L-Histidine is an essential amino acid for infants. L-Histidine is an inhibitor of **mitochondrial glutamine transport**.

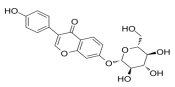


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Daidzin

(Daidzoside; NPI-031D; Daidzein 7-O-glucoside) Cat. No.: HY-N0018

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.

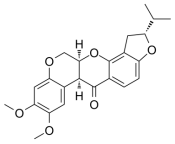


Purity: 99.59%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

Dihydrorotenone

Cat. No.: HY-N4202

Dihydrorotenone, a natural pesticide, is a potent **mitochondrial** inhibitor. Dihydrorotenone probably induces Parkinsonian syndrome. Dihydrorotenone induces human plasma cell **apoptosis** by triggering endoplasmic reticulum stress and activating p38 signaling pathway.

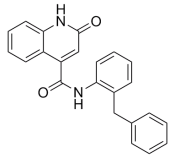


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

ER-000444793

Cat. No.: HY-100852

ER-000444793 is a potent inhibitor of mitochondrial permeability transition pore (**mPTP**) opening. ER-000444793 inhibits mPTP with an IC_{50} of 2.8μM.

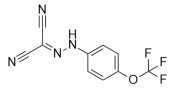


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

FCCP

(Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone) Cat. No.: HY-100410

FCCP is an uncoupler of oxidative phosphorylation in mitochondria. FCCP induces activation of PINK1 leading to Parkin Ser65 phosphorylation.

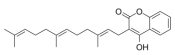


Purity: 99.39%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Ferulenol

Cat. No.: HY-129605

Ferulenol, a sesquiterpene prenylated coumarin derivative, specifically inhibits succinate ubiquinone reductase at the level of the ubiquinonecycle. Ferulenol shows good antimycobacterial activity and haemorrhagic action.

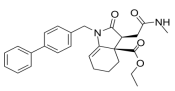


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Fumarate hydratase-IN-1

Cat. No.: HY-100004

Fumarate hydratase-IN-1 (compound 2) is a cell-permeable **fumarate hydratase** inhibitor. Fumarate hydratase-IN-1 has antiproliferative activity against several cancer cell lines with a mean IC_{50} of 2.2 μM.

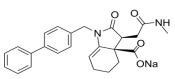


Purity: 99.63%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

Fumarate hydratase-IN-2 sodium salt

Cat. No.: HY-100005A

Fumarate hydratase-IN-2 sodium salt (compound 3) is a cell-permeable and competitive **fumarate hydratase** inhibitor (K_i=4.5 μM) with nutrient-dependent cytotoxicity .

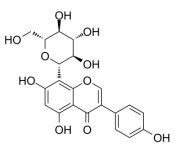


Purity: 98.05%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

Genistein 8-c-glucoside

(G8CG) Cat. No.: HY-N6882

Genistein 8-c-glucoside (G8CG) is a natural glucoside isolated from flowers of Lupinus luteus L. Genistein 8-c-glucoside induces mitochondrial membrane depolarization and induces **apoptosis**.

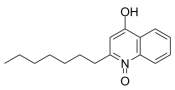


Purity: 99.40%
Clinical Data:
Size: 10 mM × 1 mL, 1 mg, 5 mg

HQNO

Cat. No.: HY-130055

HQNO, secreted by P. aeruginosa, is a potent electron transport chain inhibitor with a K_d of 64 nM for complex Ⅲ. HQNO is a potent inhibitor of **mitochondrial NDH-2** in many species.

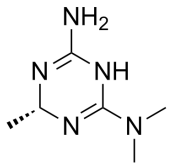


Purity: >98%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Imeglimin

(EMD 387008) Cat. No.: HY-14771

Imeglimin (EMD 387008) is an oral glucose-lowering agent. Imeglimin improves insulin sensitivity. Imeglimin also reduces reactive oxygen species (**ROS**) production, increases mitochondrial DNA and improves **mitochondrial** function.

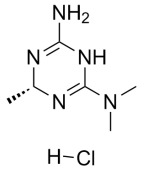


Purity: >98%
Clinical Data: Phase 2
Size: 1 mg, 5 mg

Imeglimin hydrochloride

(EMD 387008 hydrochloride) Cat. No.: HY-14771A

Imeglimin hydrochloride (EMD 387008) is an oral glucose-lowering agent. Imeglimin also reduces reactive oxygen species (**ROS**) production, increases mitochondrial DNA and improves **mitochondrial** function.

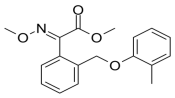


Purity: >98.0%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Kresoxim-methyl

(BAS 490 F) Cat. No.: HY-125776

Kresoxim-methyl (BAS 490 F), a Strobilurin-based fungicide, inhibits the respiration at the **complex III (cytochrome bc1 complex)**. Kresoxim-methyl binds to complex III from yeast with an apparent K_d of 0.07 μM proving a high affinity for this enzyme.

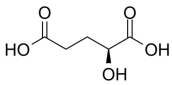


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

L-2-Hydroxyglutaric acid

((S)-2-Hydroxyglutaric acid) Cat. No.: HY-113039

L-2-Hydroxyglutaric acid is an epigenetic modifier and putative oncometabolite in renal cancer. L-2-Hydroxyglutaric acid can inhibit **histone demethylases** and hence promote histone methylation.

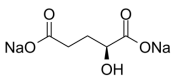


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

L-2-Hydroxyglutaric acid disodium

((S)-2-Hydroxyglutaric acid disodium) Cat. No.: HY-W015114

L-2-Hydroxyglutaric acid disodium is an epigenetic modifier and putative oncometabolite in renal cancer. L-2-Hydroxyglutaric acid disodium can inhibit **histone demethylases** and hence promote histone methylation.

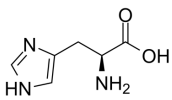


Purity: >95.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

L-Histidine

Cat. No.: HY-N0832

L-Histidine is an essential amino acid for infants. L-Histidine is an inhibitor of **mitochondrial glutamine transport**.

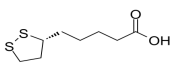


Purity: 99.94%
Clinical Data: Launched
Size: 10 mM × 1 mL, 500 mg, 1 g

Lipoic acid

((R)-(+)-α-Lipoic acid; R-(+)-Thioctic acid) Cat. No.: HY-18733

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.

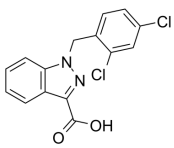


Purity: 99.59%
Clinical Data: Launched
Size: 10 mM × 1 mL, 500 mg

Lonidamine

(AF-1890; Diclondazolic Acid; DICA) Cat. No.: HY-B0486

Lonidamine (AF-1890), an 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 mitochondrial complex II.

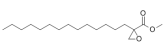


Purity: 97.08%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

McN3716

(Methyl palmoxirate; NSC359682) Cat. No.: HY-U00159

McN3716 is a carnitine palmitoyltransferase I (**CPT-1**) inhibitor.

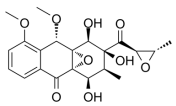


Purity: >95.0%
Clinical Data: No Development Reported
Size: 1 mg

Mensacarcin

Cat. No.: HY-122534

Mensacarcin, a highly complex polyketide, strongly inhibits cell growth universally in cancer cell lines and potently induces **apoptosis** in melanoma cells.

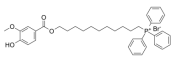


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Mito-apocynin (C11)

Cat. No.: HY-135869

Mito-apocynin (C11), an orally active **mitochondria-targeted** triphenylphosphonium (TPP)-based compound, is synthesized by conjugating the Apocynin moiety with a TPP^+ cation.

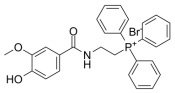


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Mito-apocynin (C2)

Cat. No.: HY-135868

Mito-apocynin (C2), an orally active **mitochondria-targeted** triphenylphosphonium (TPP)-based compound, is synthesized by conjugating the Apocynin moiety with a TPP^+ cation. Mito-apocynin (C2) exhibits antineuroinflammatory effect.

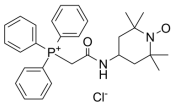


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Mito-TEMPO

Cat. No.: HY-112879

Mito-TEMPO is a mitochondria-targeted superoxide dismutase mimetic with superoxide and alkyl radical scavenging properties.



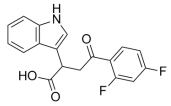
Purity: 98.05%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Mitochonic acid 5

(MA-5)

Cat. No.: HY-111536

Mitochonic acid 5 binds **mitochondria** and ameliorates renal tubular and cardiac myocyte damage. Mitochonic acid 5 modulates **mitochondrial ATP** synthesis.

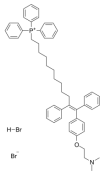


Purity: 99.37%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

MitoTam bromide, hydrobromide

Cat. No.: HY-126222

MitoTam bromide, hydrobromide is a tamoxifen derivative, an electron transport chain (**ETC**) inhibitor, spreduces mitochondrial membrane potential in senescent cells and affects mitochondrial morphology.

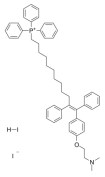


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

MitoTam iodide, hydriodide

Cat. No.: HY-126222A

MitoTam iodide, hydriodide is a tamoxifen derivative, an electron transport chain (**ETC**) inhibitor, spreduces mitochondrial membrane potential in senescent cells and affects mitochondrial morphology.



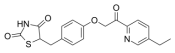
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

MSDC 0160

(Mitoglitazone; CAY10415)

Cat. No.: HY-100550

MSDC 0160 (Mitoglitazone) is a mitochondrial target of thiazolidinediones (mTOT)-modulating **insulin sensitizer** and a modulator of **mitochondrial pyruvate carrier (MPC)**. MSDC 0160 is a thiazolidinedione (TZD) with antidiabetic and neuroprotective activities.

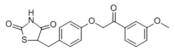


Purity: 99.40%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

MSDC-0602

Cat. No.: HY-108022

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.

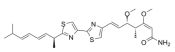


Purity: 98.54%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Myxothiazol

Cat. No.: HY-112177

Myxothiazol, an antifungal antibiotic, is a mitochondrial electron transport chain **complex III (bc1 complex)** inhibitor. Myxothiazol inhibits the growth of many yeasts and fungi at concentrations between 0.01 and 3 μg/ml.

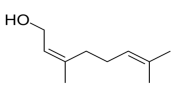


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Nerol

Cat. No.: HY-N7063

Nerol is a constituent of neroli oil. Nerol Nerol triggers mitochondrial dysfunction and induces apoptosis via elevation of Ca^{2+} and **ROS**. **Antifungal** activity.



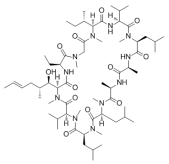
Purity: >97.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

NIM811

((Melle-4)cyclosporin; SDZ NIM811)

Cat. No.: HY-P0025

NIM811 ((Melle-4)cyclosporin; SDZ NIM811) is an orally bioavailable **mitochondrial permeability transition** and **cyclophilin** dual inhibitor, which exhibits potent in vitro activity against hepatitis C virus (HCV) .

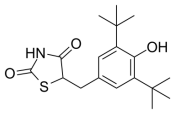


Purity: >98%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 1 mg, 5 mg

NL-1

Cat. No.: HY-135231

NL-1 is a **mitoNEET** inhibitor with antileukemic effect. NL-1 inhibits REH and REH/Ara-C cells growth with IC_{50}s of 47.35 μM and 56.26 μM, respectively. NL-1-mediated death in leukemic cells requires the activation of the **autophagic** pathway.



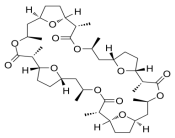
Purity: 99.11%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

Nonactin

(Ammonium ionophore I)

Cat. No.: HY-N6790

Nonactin is a naturally occurring macrotetrolide antibiotic from Streptomyces griseus. Nonactin acts as an ionophore for monovalent cations, including **K^+, and NH_4^+**. Nonactin is able to uncouple the oxidative phosphorylation of mitochondria.



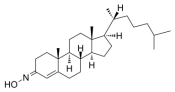
Purity: >99.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg

Olesoxime

(TRO 19622; NSC 21311)

Cat. No.: HY-14796

Olesoxime (TRO 19622) is a **mitochondrial**-targeted neuroprotective compound with mean EC_{50} value for increasing cell survival is 3.2±0.2 μM.

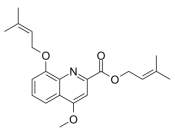


Purity: 99.70%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Ppc-1

Cat. No.: HY-117843

Ppc-1 is a **mitochondrial** uncoupler. Ppc-1 enhances **mitochondrial** oxygen consumption without adverse effects on ATP production. Ppc-1 is a cell-permeate **interleukin-2 (IL-2)** inhibitor.

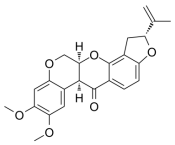


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Rotenone

Cat. No.: HY-B1756

Rotenone is an **mitochondrial electron transport chain complex I** inhibitor. Rotenone induces apoptosis through enhancing mitochondrial reactive oxygen species production.

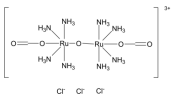


Purity: 98.12%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g

Ru360

Cat. No.: HY-122898

Ru360, an oxygen-bridged dinuclear ruthenium amine complex, is a selective **mitochondrial calcium uptake** inhibitor. Ru360 potently inhibits **Ca^{2+}** uptake into **mitochondria** with an **IC_{50}** of 0.184 nM. Ru360 binds to **mitochondria** with high affinity (K_d of 0.34 nM).

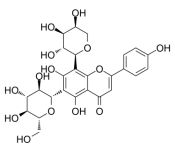


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Schaftoside

Cat. No.: HY-N0703

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.

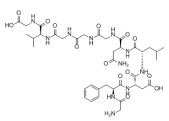


Purity: 99.67%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 20 mg

Speract

Cat. No.: HY-P0245

Speract, a sea urchin egg peptide that regulates sperm motility, also stimulates sperm mitochondrial metabolism.



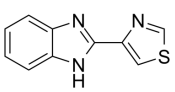
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

Thiabendazole

(2-(4-Thiazolyl)benzimidazole)

Cat. No.: HY-B0263

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.

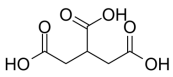


Purity: 99.84%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g

Tricarballylic acid

Cat. No.: HY-W020215

Tricarballylic acid, a conjugate acid of a tricarballylate, is a competitive inhibitor of the enzyme **aconitate hydratase** (aconitase; EC 4.2.1.3) with a K_i value of 0.52 mM.



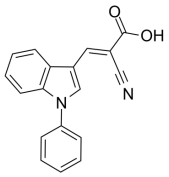
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

UK-5099

(PF-1005023)

Cat. No.: HY-15475

UK-5099 (PF-1005023) is a potent inhibitor of the mitochondrial pyruvate carrier (**MPC**). UK-5099 (PF-1005023) inhibits pyruvate-dependent O_2 consumption with an IC_{50} of 50 nM.

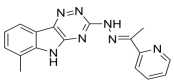


Purity: 99.77%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

VLX600

Cat. No.: HY-12406

VLX600 is an iron-chelating inhibitor of **oxidative phosphorylation (OXPHOS)**. VLX600 causes mitochondrial dysfunction and induces a strong shift to glycolysis. VLX600 displays selective cytotoxic activity against malignant cell and induces **autophagy**. Anticancer activity.



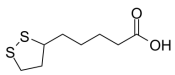
Purity: 99.35%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 250 mg

α-Lipoic Acid

(Thioctic acid; (±)-α-Lipoic acid; DL-α-Lipoic acid)

Cat. No.: HY-N0492

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. α-Lipoic Acid induces endoplasmic reticulum (ER) stress-mediated **apoptosis** in hepatoma cells.



Purity: 98.03%
Clinical Data: Launched
Size: 10 mM × 1 mL, 500 mg