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Inhibitors, Screening Libraries, Proteins

# Mitophagy

## Mitochondrial Autophagy

Mitophagy is the selective degradation of mitochondria by autophagy.

Mitochondria are essential organelles that regulate cellular energy homeostasis and cell death. The removal of damaged mitochondria through autophagy, a process called mitophagy, is thus critical for maintaining proper cellular functions. Indeed, mitophagy has been recently proposed to play critical roles in terminal differentiation of red blood cells, paternal mitochondrial degradation, neurodegenerative diseases, and ischemia or drug-induced tissue injury.

Autophagy and mitophagy are important cellular processes that are responsible for breaking down cellular contents, preserving energy and safeguarding against accumulation of damaged and aggregated biomolecules.

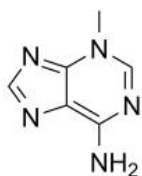
## Mitophagy Inhibitors, Activators & Modulators

### 3-Methyladenine

(3-MA)

Cat. No.: HY-19312

3-Methyladenine (3-MA) is a **PI3K** inhibitor. 3-Methyladenine is a widely used inhibitor of **autophagy** via its inhibitory effect on class III PI3K.

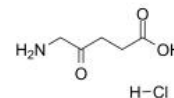


**Purity:** 99.83%  
**Clinical Data:** No Development Reported  
**Size:** 50 mg, 100 mg, 200 mg, 500 mg

### 5-Aminolevulinic acid hydrochloride (5-ALA hydrochloride; ̈́-Aminolevulinic acid hydrochloride; ...)

Cat. No.: HY-N0305

5-Aminolevulinic acid hydrochloride (5-ALA hydrochloride) is an intermediate in heme biosynthesis in the body and the universal precursor of tetrapyrroles.

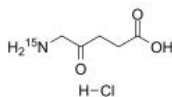


**Purity:** ≥97.0%  
**Clinical Data:** Launched  
**Size:** 10 mM × 1 mL, 100 mg, 1 g, 5 g, 10 g

### 5-Aminolevulinic acid-15N hydrochloride (5-ALA-15N hydrochloride; ...)

Cat. No.: HY-N0305S

5-Aminolevulinic acid-15N (5-ALA-15N) hydrochloride is the 15N-labeled 5-Aminolevulinic acid (hydrochloride). 5-Aminolevulinic acid hydrochloride (5-ALA hydrochloride) is an intermediate in heme biosynthesis in the body and the universal precursor of tetrapyrroles.

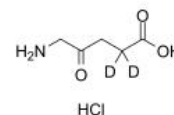


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### 5-Aminolevulinic acid-d2 hydrochloride (5-ALA-d2 hydrochloride; ...)

Cat. No.: HY-N0305S1

5-Aminolevulinic acid-d2 (hydrochloride) is deuterium labeled 5-Aminolevulinic acid (hydrochloride).

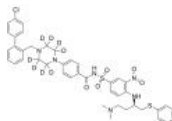


**Purity:** >98%  
**Clinical Data:**  
**Size:** 1 mg, 5 mg

### ABT 737-d8

Cat. No.: HY-50907S

ABT 737-d8 is the deuterium labeled ABT-737. ABT-737, a BH3 mimetic, is a potent **Bcl-2**, **Bcl-x<sub>L</sub>** and **Bcl-w** inhibitor with **EC<sub>50</sub>s** of 30.3 nM, 78.7 nM, and 197.8 nM, respectively.

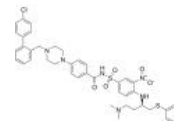


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 10 mg

### ABT-737

Cat. No.: HY-50907

ABT-737, a BH3 mimetic, is a potent **Bcl-2**, **Bcl-x<sub>L</sub>** and **Bcl-w** inhibitor with **EC<sub>50</sub>s** of 30.3 nM, 78.7 nM, and 197.8 nM, respectively. ABT-737 induces the disruption of the **BCL-2/BAX** complex and **BAK**-dependent but **BIM**-independent activation of the intrinsic **apoptotic** pathway.



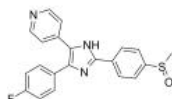
**Purity:** 99.72%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

### Adezmapimod

(SB 203580; RWJ 64809)

Cat. No.: HY-10256

Adezmapimod (SB 203580) is a selective and ATP-competitive **p38 MAPK** inhibitor with **IC<sub>50</sub>s** of 50 nM and 500 nM for **SAPK2a/p38** and **SAPK2b/p38̢2**, respectively. Adezmapimod inhibits **LCK**, **GSK3̢** and **PKB̢** with **IC<sub>50</sub>s** of 100-500-fold higher than that for **SAPK2a/p38**.



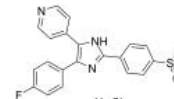
**Purity:** 99.92%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg

### Adezmapimod hydrochloride

(SB 203580 hydrochloride; RWJ 64809 hydrochloride)

Cat. No.: HY-10256A

Adezmapimod (SB 203580) hydrochloride is a selective and ATP-competitive **p38 MAPK** inhibitor with **IC<sub>50</sub>s** of 50 nM and 500 nM for **SAPK2a/p38** and **SAPK2b/p38̢2**, respectively.



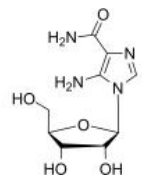
**Purity:** 99.71%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg

### AICAR

(Acadesine; AICA Riboside)

Cat. No.: HY-13417

AICAR (Acadesine) is an adenosine analog and a **AMPK** activator. AICAR regulates the glucose and lipid metabolism, and inhibits proinflammatory cytokines and **iNOS** production. AICAR is also an **autophagy**, **YAP** and **mitophagy** inhibitor.



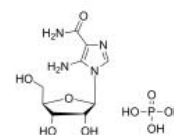
**Purity:** 99.92%  
**Clinical Data:** Phase 3  
**Size:** 50 mg, 100 mg, 200 mg, 500 mg

### AICAR phosphate

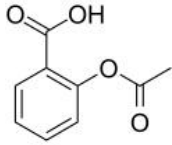
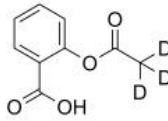
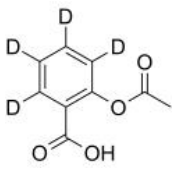
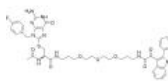
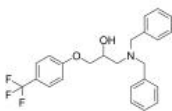
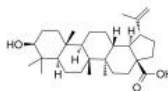
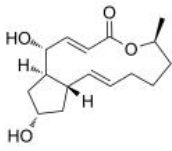
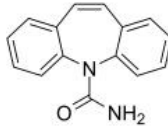
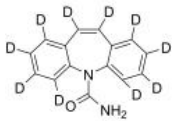
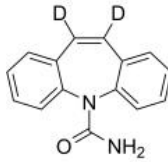
(Acadesine phosphate; AICA Riboside phosphate)

Cat. No.: HY-13417A

AICAR phosphate (Acadesine phosphate) is an adenosine analog and a **AMPK** activator. AICAR phosphate regulates the glucose and lipid metabolism, and inhibits proinflammatory cytokines and **iNOS** production. AICAR phosphate is also an **autophagy**, **YAP** and **mitophagy** inhibitor.

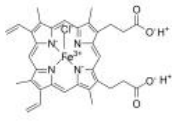
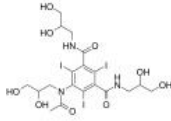
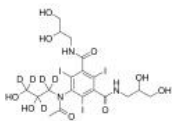
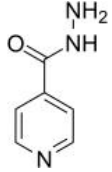
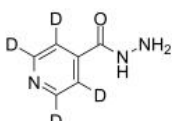
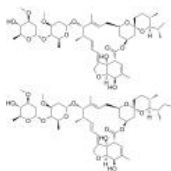
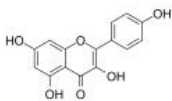
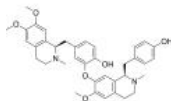
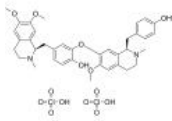
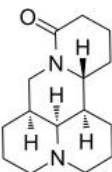


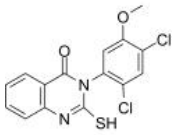
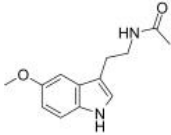
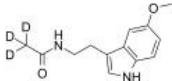
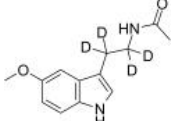
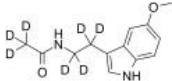
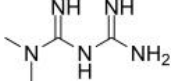
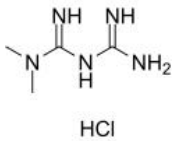
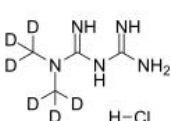
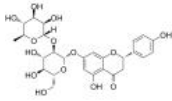
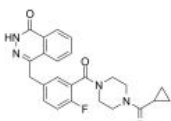
**Purity:** 99.49%  
**Clinical Data:** Phase 3  
**Size:** 10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg

<p><b>Aspirin</b> (Acetylsalicylic Acid; ASA)</p> <p>Aspirin is a non-selective and irreversible inhibitor of COX-1 and COX-2 with <math>IC_{50}</math>s of 5 and 210 <math>\mu</math>g/mL.</p> <p><b>Purity:</b> 99.92% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM <math>\times</math> 1 mL, 500 mg, 1 g, 5 g</p>	<p><b>Cat. No.:</b> HY-14654</p> 	<p><b>Aspirin-d3</b> (Acetylsalicylic Acid-d3; ASA-d3)</p> <p>Aspirin-d3 (Acetylsalicylic Acid-d3) is the deuterium labeled Aspirin. Aspirin is a non-selective and irreversible inhibitor of COX-1 and COX-2 with <math>IC_{50}</math>s of 5 and 210 <math>\mu</math>g/mL.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg, 10 mg</p>	<p><b>Cat. No.:</b> HY-14654S</p> 
<p><b>Aspirin-d4</b> (Acetylsalicylic Acid-d4; ASA-d4)</p> <p>Aspirin-d4 (Acetylsalicylic Acid-d4) is the deuterium labeled Aspirin. Aspirin is a non-selective and irreversible inhibitor of COX-1 and COX-2 with <math>IC_{50}</math>s of 5 and 210 <math>\mu</math>g/mL.</p> <p><b>Purity:</b> 98.85% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>	<p><b>Cat. No.:</b> HY-14654S1</p> 	<p><b>AUTAC4</b></p> <p>AUTAC4 is a mitochondria-targeting autophagy-targeting chimera (AUTAC). AUTAC4 downregulates cytosolic proteins and promotes targeted mitochondrial turnover via <b>mitophagy</b>.</p> <p><b>Purity:</b> 99.12% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 5 mg</p>	<p><b>Cat. No.:</b> HY-134640</p> 
<p><b>BC1618</b></p> <p>BC1618, an orally active Fbxo48 inhibitory compound, stimulates Ampk-dependent signaling (via preventing activated pAmpk<math>\alpha</math> from Fbxo48-mediated degradation). BC1618 promotes mitochondrial fission, facilitates autophagy and improves hepatic insulin sensitivity.</p> <p><b>Purity:</b> 99.83% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM <math>\times</math> 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p>	<p><b>Cat. No.:</b> HY-134656</p> 	<p><b>Betulinic acid</b> (Lupatic acid; Betulic acid)</p> <p>Betulinic acid is a natural pentacyclic triterpenoid, acts as a eukaryotic <b>topoisomerase I</b> inhibitor, with an <math>IC_{50}</math> of 5 <math>\mu</math>M, and possesses anti-HIV, anti-malarial, anti-inflammatory and anti-tumor properties.</p> <p><b>Purity:</b> <math>\geq</math>98.0% <b>Clinical Data:</b> Phase 2 <b>Size:</b> 10 mM <math>\times</math> 1 mL, 100 mg, 200 mg, 500 mg</p>	<p><b>Cat. No.:</b> HY-10529</p> 
<p><b>Brefeldin A</b> (BFA; Cyanein; Decumbin)</p> <p>Brefeldin A (BFA) is a lactone antibiotic and a specific inhibitor of <b>protein trafficking</b>. Brefeldin A blocks the transport of secreted and membrane proteins from endoplasmic reticulum to Golgi apparatus. Brefeldin A is also an <b>autophagy</b> and <b>mitophagy</b> inhibitor.</p> <p><b>Purity:</b> 99.87% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM <math>\times</math> 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p>	<p><b>Cat. No.:</b> HY-16592</p> 	<p><b>Carbamazepine</b> (CBZ; NSC 169864)</p> <p>Carbamazepine, a sodium channel blocker, is an anticonvulsant drug.</p> <p><b>Purity:</b> 99.90% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM <math>\times</math> 1 mL, 100 mg, 500 mg</p>	<p><b>Cat. No.:</b> HY-B0246</p> 
<p><b>Carbamazepine-d10</b> (CBZ-d10; NSC 169864-d10)</p> <p>Carbamazepine-D10 (CBZ-d10) is the deuterium labeled Carbamazepine. Carbamazepine (CBZ), a sodium channel blocker, is an anticonvulsant agent.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 2.5 mg, 1 mg</p>	<p><b>Cat. No.:</b> HY-B0246S</p> 	<p><b>Carbamazepine-d2</b> (CBZ-d2; NSC 169864-d2)</p> <p>Carbamazepine-d2 (CBZ-d2) is the deuterium labeled Carbamazepine. Carbamazepine, a sodium channel blocker, is an anticonvulsant drug.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 10 mg</p>	<p><b>Cat. No.:</b> HY-B0246S1</p> 

<p><b>Clioquinol</b> (Iodochlorhydroxyquin)</p> <p>Clioquinol (Iodochlorhydroxyquin) is a topical antifungal agent with anticancer activity. Clioquinol acts as an oral antimicrobial agent for the research of diarrhea and skin infections. Antibiotic.</p> <p><b>Purity:</b> 98.63% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 500 mg, 1 g, 5 g</p>	<p><b>Curcumin</b> (Diferuloylmethane; Natural Yellow 3; Turmeric yellow)</p> <p>Curcumin (Diferuloylmethane), a natural phenolic compound, is a <b>p300/CREB-binding protein-specific</b> inhibitor of acetyltransferase, represses the acetylation of histone/nonhistone proteins and histone acetyltransferase-dependent chromatin transcription.</p> <p><b>Purity:</b> ≥96.0% <b>Clinical Data:</b> Phase 4 <b>Size:</b> 10 mM × 1 mL, 100 mg, 500 mg</p>
<p><b>Curcumin-d6</b> (Diferuloylmethane-d6; Natural Yellow 3-d6; Turmeric yellow-d6)</p> <p>Curcumin D6 (Diferuloylmethane D6) is a deuterium labeled Curcumin (Turmeric yellow). Curcumin (Turmeric yellow) is a natural phenolic compound with diverse pharmacologic effects including anti-inflammatory, antioxidant, antiproliferative and antiangiogenic activities.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg, 10 mg</p>	<p><b>D-Glutamine</b></p> <p>D-Glutamine is a cell-permeable D type stereoisomer of Glutamine.</p> <p><b>Purity:</b> ≥98.0% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 50 mg, 100 mg</p>
<p><b>Deferoxamine mesylate</b> (Desferrioxamine B mesylate; DFOM)</p> <p>Deferoxamine mesylate is an iron chelator that binds free iron in a stable complex, preventing it from engaging in chemical reactions.</p> <p><b>Purity:</b> 99.86% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 100 mg, 500 mg</p>	<p><b>Dexamethasone</b> (Hexadecadrol; Prednisolone F)</p> <p>Dexamethasone (Hexadecadrol) is a <b>glucocorticoid receptor</b> agonist. Dexamethasone also significantly decreases CD11b, CD18, and CD62L expression on neutrophils, and CD11b and CD18 expression on monocytes.</p> <p><b>Purity:</b> 99.86% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 500 mg, 1 g, 5 g</p>
<p><b>Dexamethasone acetate</b> (Dexamethasone 21-acetate; Hexadecadrol acetate)</p> <p>Dexamethasone acetate (Dexamethasone 21-acetate) is a <b>glucocorticoid receptor</b> agonist. Dexamethasone acetate has the potential for ophthalmic infections treatment.</p> <p><b>Purity:</b> 98.24% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 500 mg, 1 g, 5 g</p>	<p><b>Dexamethasone-4,6<math>\alpha</math>,21,21-d4</b></p> <p>Dexamethasone-4,6<math>\alpha</math>,21,21-d4 is the deuterium labeled Dexamethasone-4,6<math>\alpha</math>,21,21. Dexamethasone (Hexadecadrol) is a glucocorticoid receptor agonist.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>
<p><b>Dexamethasone-d4</b> (Hexadecadrol-d4; Prednisolone F-d4)</p> <p>Dexamethasone-d4 is deuterium labeled Dexamethasone. Dexamethasone (Hexadecadrol) is a glucocorticoid receptor agonist. Dexamethasone also significantly decreases CD11b, CD18, and CD62L expression on neutrophils, and CD11b and CD18 expression on monocytes.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>	<p><b>Dexamethasone-d5</b> (Hexadecadrol-d5; Prednisolone F-d5)</p> <p>Dexamethasone-d5 (Hexadecadrol-d5) is the deuterium labeled Dexamethasone. Dexamethasone (Hexadecadrol) is a <b>glucocorticoid receptor</b> agonist.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 10 mg</p>

<p><b>Dexamethasone-d5-1</b> (Hexadecadrol-d5-1; Prednisolone F-d5-1)</p>	<p><b>Doxazosin mesylate</b> (UK 33274 mesylate)</p>
<p>Dexamethasone-d5-1 is deuterium labeled Dexamethasone. Dexamethasone (Hexadecadrol) is a glucocorticoid receptor agonist. Dexamethasone also significantly decreases CD11b, CD18, and CD62L expression on neutrophils, and CD11b and CD18 expression on monocytes.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>	<p>Doxazosin mesylate (UK 33274) is a quinazoline-derivative that selectively antagonizes postsynaptic <math>\alpha 1</math>-adrenergic receptors.</p> <p><b>Purity:</b> 99.72% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM <math>\times</math> 1 mL, 500 mg, 1 g</p>
<p><b>Doxorubicin</b> (Hydroxydaunorubicin)</p>	<p><b>Doxorubicin hydrochloride</b> (Hydroxydaunorubicin hydrochloride)</p>
<p>Doxorubicin (Hydroxydaunorubicin), a cytotoxic anthracycline antibiotic, is an anti-cancer chemotherapy agent. Doxorubicin inhibits <b>topoisomerase II</b> with an <math>IC_{50}</math> of 2.67 <math>\mu</math>M, thus stopping DNA replication.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> Launched <b>Size:</b> 5 mg, 10 mg, 25 mg</p>	<p>Doxorubicin (Hydroxydaunorubicin) hydrochloride, a cytotoxic anthracycline antibiotic, is an anti-cancer chemotherapy agent. Doxorubicin hydrochloride is a potent human <b>DNA topoisomerase I</b> and <b>topoisomerase II</b> inhibitor with <math>IC_{50}</math>s of 0.8 <math>\mu</math>M and 2.67 <math>\mu</math>M, respectively.</p> <p><b>Purity:</b> 99.47% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM <math>\times</math> 1 mL, 50 mg, 100 mg, 200 mg, 500 mg, 1 g</p>
<p><b>Esmolol hydrochloride</b></p>	<p><b>Esmolol-d7 hydrochloride</b></p>
<p>Esmolol hydrochloride is a beta adrenergic receptor blocker.</p> <p><b>Purity:</b> 99.34% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM <math>\times</math> 1 mL, 10 mg, 50 mg, 100 mg</p>	<p>Esmolol-d7 hydrochloride is the deuterium labeled Esmolol hydrochloride. Esmolol hydrochloride is a beta adrenergic receptor blocker.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> <b>Size:</b> 1 mg, 10 mg</p>
<p><b>Etoposide</b> (VP-16; VP-16-213)</p>	<p><b>Etoposide-13C,d3</b> (VP-16-13C,d3; VP-16-213-13C,d3)</p>
<p>Etoposide (VP-16; VP-16-213) is an anti-cancer chemotherapy agent. Etoposide inhibits <b>topoisomerase II</b>, thus stopping DNA replication. Etoposide induces cell cycle arrest, <b>apoptosis</b> and <b>autophagy</b>.</p> <p><b>Purity:</b> 99.94% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM <math>\times</math> 1 mL, 100 mg, 200 mg, 500 mg</p>	<p>Etoposide-13C,d3 is the 13C- and deuterium labeled. Etoposide (VP-16; VP-16-213) is an anti-cancer chemotherapy agent. Etoposide inhibits topoisomerase II, thus stopping DNA replication. Etoposide induces cell cycle arrest, apoptosis and autophagy.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>
<p><b>Ginsenoside Rb1</b> (Gypenoside III)</p>	<p><b>GSK2578215A</b></p>
<p>Ginsenoside Rb1, a main constituent of the root of Panax ginseng, inhibits <math>Na^+</math>, <math>K^+</math>-ATPase activity with an <math>IC_{50}</math> of <math>6.3 \pm 1.0</math> <math>\mu</math>M. Ginsenoside also inhibits <b>IRAK-1</b> activation and phosphorylation of <b>NF-<math>\kappa</math>B p65</b>.</p> <p><b>Purity:</b> 98.75% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM <math>\times</math> 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p>	<p>GSK2578215A is a potent and highly selective <b>LRRK2</b> inhibitor, which exhibits <math>IC_{50}</math>s of around 10 nM against both wild-type LRRK2 and the G2019S mutant.</p> <p><b>Purity:</b> 99.79% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM <math>\times</math> 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p>

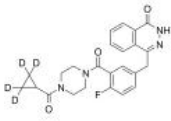
<p><b>Hemin</b> (Hemin chloride)</p> <p>Hemin is an iron-containing porphyrin. Hemin is an <b>Heme oxygenase (HO)-1</b> inducer.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 500 mg, 1 g, 5 g</p>	<p><b>Cat. No.:</b> HY-19424</p>  <p><b>Purity:</b> 99.20% <b>Clinical Data:</b> Phase 4 <b>Size:</b> 10 mM × 1 mL, 100 mg, 500 mg</p>	<p><b>Cat. No.:</b> HY-B0594</p> 
<p><b>Iohexol-d5</b></p> <p>Iohexol-d5 is deuterium labeled Iohexol. Iohexol is a radiographic contrast agent and can be applied for myelography, computerized tomography (cisternography, ventriculography) and MicroCT imaging in vivo.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> Launched <b>Size:</b> 1 mg, 5 mg</p>	<p><b>Cat. No.:</b> HY-B0594S</p>  <p><b>Purity:</b> 99.68% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 100 mg</p>	<p><b>Cat. No.:</b> HY-B0329</p> 
<p><b>Isoniazid-d4 (INH-d4; Isonicotinic acid hydrazide-d4; Isonicotinic hydrazide-d4)</b></p> <p>Isoniazid-d4 (INH-d4) is the deuterium labeled Isoniazid. Isoniazid (INH) is a prodrug and must be activated by a bacterial catalase-peroxidase enzyme KatG. Isoniazid is <b>bactericidal</b> to rapidly dividing mycobacteria and has anti-tuberculostatic activity.</p> <p><b>Purity:</b> 98.95% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg, 10 mg</p>	<p><b>Cat. No.:</b> HY-B0329S</p>  <p><b>Purity:</b> 96.79% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 500 mg, 1 g</p>	<p><b>Cat. No.:</b> HY-15310</p> 
<p><b>Kaempferol</b> (Kempferol; Robigenin)</p> <p>Kaempferol (Kempferol), a flavonoid found in many edible plants, inhibits <b>estrogen receptor <math>\alpha</math></b> expression in breast cancer cells and induces apoptosis in glioblastoma cells and lung cancer cells by activation of MEK-MAPK. Kaempferol can be used for the research of breast cancer.</p> <p><b>Purity:</b> 99.67% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg</p>	<p><b>Cat. No.:</b> HY-14590</p>  <p><b>Purity:</b> 99.89% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 5 mg, 10 mg, 20 mg</p>	<p><b>Cat. No.:</b> HY-N0484</p> 
<p><b>Liensinine Diperchlorate</b></p> <p>Liensinine Diperchlorate is a major isoquinoline alkaloid, extracted from the seed embryo of <i>Nelumbo nucifera</i> Gaertn. Liensinine Diperchlorate inhibits late-stage <b>autophagy/mitophagy</b> through blocking autophagosome-lysosome fusion.</p> <p><b>Purity:</b> 99.63% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 5 mg, 10 mg, 20 mg</p>	<p><b>Cat. No.:</b> HY-N0485</p>  <p><b>Purity:</b> ≥98.0% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 100 mg, 200 mg, 500 mg</p>	<p><b>Cat. No.:</b> HY-N0164</p> 

<p><b>Mdivi-1</b> (Mitochondrial division inhibitor 1) Cat. No.: HY-15886</p> <p>Mdivi-1 is a selective dynamin-related protein 1 (Drp1) inhibitor. Mdivi-1 is a mitochondrial division/mitophagy inhibitor.</p>  <p><b>Purity:</b> 99.73% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p>	<p><b>Melatonin</b> (N-Acetyl-5-methoxytryptamine) Cat. No.: HY-B0075</p> <p>Melatonin is a hormone made by the pineal gland that can activate <b>melatonin receptor</b>. Melatonin plays a role in sleep and possesses important antioxidative and anti-inflammatory properties.</p>  <p><b>Purity:</b> 99.73% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 500 mg, 1 g, 5 g</p>
<p><b>Melatonin-d3</b> (N-Acetyl-5-methoxytryptamine-d3) Cat. No.: HY-B0075S1</p> <p>Melatonin-d3 (N-Acetyl-5-methoxytryptamine-d3) is the deuterium labeled Melatonin. Melatonin is a hormone made by the pineal gland that can activate <b>melatonin receptor</b>.</p>  <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>	<p><b>Melatonin-d4</b> (N-Acetyl-5-methoxytryptamine-d4) Cat. No.: HY-B0075S</p> <p>Melatonin D4 is deuterium labeled Melatonin. Melatonin is a hormone made by the pineal gland that can activate melatonin receptor. Antioxidative and anti-inflammatory properties.</p>  <p><b>Purity:</b> 95.87% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg, 10 mg</p>
<p><b>Melatonin-d7</b> (N-Acetyl-5-methoxytryptamine-d7) Cat. No.: HY-B0075S2</p> <p>Melatonin-d7 (N-Acetyl-5-methoxytryptamine-d7) is the deuterium labeled Melatonin. Melatonin is a hormone made by the pineal gland that can activate <b>melatonin receptor</b>.</p>  <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg, 10 mg</p>	<p><b>Metformin</b> (1,1-Dimethylbiguanide) Cat. No.: HY-B0627</p> <p>Metformin (1,1-Dimethylbiguanide) inhibits the <b>mitochondrial respiratory chain</b> in the liver, leading to activation of <b>AMPK</b>, enhancing insulin sensitivity for type 2 diabetes research. Metformin can cross the blood-brain barrier and triggers <b>autophagy</b>.</p>  <p><b>Purity:</b> 99.64% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 10 mg, 25 mg</p>
<p><b>Metformin hydrochloride</b> (1,1-Dimethylbiguanide hydrochloride) Cat. No.: HY-17471A</p> <p>Metformin hydrochloride (1,1-Dimethylbiguanide hydrochloride) inhibits the <b>mitochondrial respiratory chain</b> in the liver, leading to activation of <b>AMPK</b>, enhancing insulin sensitivity for type 2 diabetes research. Metformin hydrochloride triggers <b>autophagy</b>.</p>  <p><b>Purity:</b> 99.89% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 10 mg, 25 mg</p>	<p><b>Metformin-d6 hydrochloride</b> (1,1-Dimethylbiguanide-d6 hydrochloride) Cat. No.: HY-110228</p> <p>Metformin D6 hydrochloride is a deuterium labeled Metformin hydrochloride. Metformin hydrochloride inhibits the <b>mitochondrial respiratory chain</b> in the liver, leading to activation of <b>AMPK</b>, enhancing insulin sensitivity for type 2 diabetes research.</p>  <p><b>Purity:</b> ≥98.0% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>
<p><b>Naringin</b> (Naringoside) Cat. No.: HY-N0153</p> <p>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.</p>  <p><b>Purity:</b> 98.44% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 200 mg, 10 g</p>	<p><b>Olaparib</b> (AZD2281; KU0059436) Cat. No.: HY-10162</p> <p>Olaparib (AZD2281; KU0059436) is a potent and orally active <b>PARP</b> inhibitor with <math>IC_{50}</math>s of 5 and 1 nM for <b>PARP1</b> and <b>PARP2</b>, respectively. Olaparib is an <b>autophagy</b> and <b>mitophagy</b> activator.</p>  <p><b>Purity:</b> 99.98% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg</p>



**Olaparib-d4-1**  
(AZD2281-d4-1; KU0059436-d4-1) Cat. No.: HY-1016253

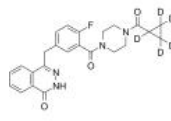
Olaparib-d4-1 (AZD2281-d4-1) is the deuterium labeled Olaparib. Olaparib (AZD2281; KU0059436) is a potent and orally active PARP inhibitor with IC<sub>50</sub>s of 5 and 1 nM for PARP1 and PARP2, respectively. Olaparib is an autophagy and mitophagy activator.



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

**Olaparib-d5**  
(AZD2281-d5; KU0059436-d5) Cat. No.: HY-101625

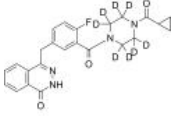
Olaparib D5 (AZD2281 D5) is a deuterium labeled Olaparib. Olaparib is a potent and oral PARP inhibitor.



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

**Olaparib-d8**  
(AZD2281-d8; KU0059436-d8) Cat. No.: HY-1016251

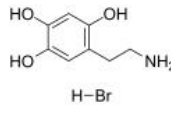
Olaparib D8 (AZD2281 D8) is the deuterium labeled Olaparib (AZD2281). Olaparib is a potent and orally active PARP inhibitor with IC<sub>50</sub>s of 5 and 1 nM for PARP1 and PARP2, respectively. Olaparib is an autophagy and mitophagy activator.



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

**Oxidopamine hydrobromide**  
(6-Hydroxydopamine hydrobromide; 6-OHDA hydrobromide) Cat. No.: HY-B1081A

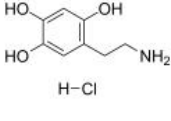
Oxidopamine hydrobromide (6-OHDA hydrobromide), an antagonist of the neurotransmitter dopamine, is a widely used neurotoxin that selectively destroys dopaminergic neurons.



**Purity:** 99.65%  
**Clinical Data:** No Development Reported  
**Size:** 50 mg, 100 mg, 200 mg, 500 mg, 1 g

**Oxidopamine hydrochloride**  
(6-Hydroxydopamine hydrochloride; 6-OHDA hydrochloride) Cat. No.: HY-B1081

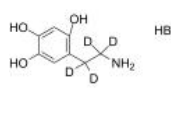
Oxidopamine hydrochloride (6-OHDA hydrochloride), an antagonist of the neurotransmitter dopamine, is a widely used neurotoxin that selectively destroys dopaminergic neurons.



**Purity:** ≥98.0%  
**Clinical Data:** No Development Reported  
**Size:** 5 mg

**Oxidopamine-d4 hydrobromide**  
(6-Hydroxydopamine-d4 hydrobromide; 6-OHDAd4 hydrobromide) Cat. No.: HY-B1081AS

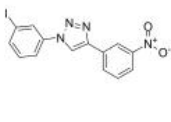
Oxidopamine-d4 (6-Hydroxydopamine-d4) hydrobromide is the deuterium labeled Oxidopamine hydrobromide. Oxidopamine (6-OHDA) hydrobromide, an antagonist of the neurotransmitter dopamine, is a widely used neurotoxin that selectively destroys dopaminergic neurons.



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

**P62-mediated mitophagy inducer (PMI)**  
Cat. No.: HY-115576

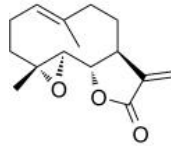
P62-mediated mitophagy inducer is a mitophagy regulator which activates mitophagy without recruiting Parkin or collapsing ΔΨ<sub>m</sub> and retains activity in cells devoid of a fully functional PINK1/Parkin pathway.



**Purity:** 98.94%  
**Clinical Data:** Phase 3  
**Size:** 1 mg, 5 mg, 10 mg, 25 mg

**Parthenolide**  
((-)-Parthenolide) Cat. No.: HY-N0141

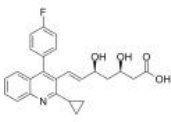
Parthenolide is a sesquiterpene lactone found in the medicinal herb Feverfew. Parthenolide exhibits anti-inflammatory activity by inhibiting NF-κB activation; also inhibits HDAC1 protein without affecting other class I/II HDACs.



**Purity:** 99.13%  
**Clinical Data:** Phase 2  
**Size:** 10 mM × 1 mL, 50 mg, 100 mg, 200 mg

**Pitavastatin**  
(NK-104) Cat. No.: HY-B0144A

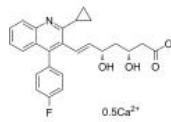
Pitavastatin (NK-104) is a potent hydroxymethylglutaryl-CoA (HMG-CoA) reductase inhibitor. Pitavastatin inhibits cholesterol synthesis from acetic acid with an IC<sub>50</sub> of 5.8 nM in HepG2 cells.



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

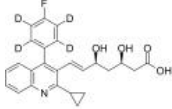
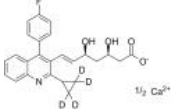
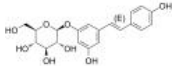
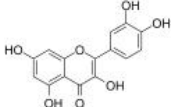
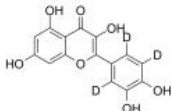
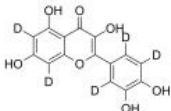
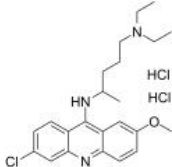
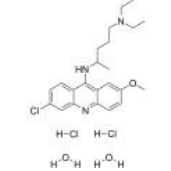
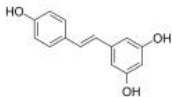
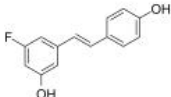
**Pitavastatin Calcium**  
(NK-104 hemicalcium; Pitavastatin hemicalcium) Cat. No.: HY-B0144

Pitavastatin Calcium (NK-104 hemicalcium) is a potent hydroxymethylglutaryl-CoA (HMG-CoA) reductase inhibitor. Pitavastatin Calcium (NK-104 hemicalcium) inhibits cholesterol synthesis from acetic acid with an IC<sub>50</sub> of 5.8 nM in HepG2 cells.



**Purity:** 99.45%  
**Clinical Data:** Launched  
**Size:** 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

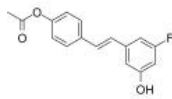


<p><b>Pitavastatin D4</b> (NK-104 D4) <span style="float: right;">Cat. No.: HY-B0144AS</span></p>	<p><b>Pitavastatin-d4 hemicalcium</b> (NK-104-d4 hemicalcium; Pitavastatin-d4 hemicalcium) <span style="float: right;">Cat. No.: HY-B0144S</span></p>
<p>Pitavastatin D4 (NK-104 D4) is deuterium labeled Pitavastatin. Pitavastatin is a potent HMG-CoA reductase inhibitor.</p>  <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>	<p>Pitavastatin-d4 (hemicalcium) is deuterium labeled Pitavastatin (Calcium). Pitavastatin Calcium (NK-104 hemicalcium) is a potent hydroxymethylglutaryl-CoA (HMG-CoA) reductase inhibitor.</p>  <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>
<p><b>Polydatin</b> (Piceid) <span style="float: right;">Cat. No.: HY-N0120A</span></p>	<p><b>Quercetin</b> <span style="float: right;">Cat. No.: HY-18085</span></p>
<p>Polydatin (Piceid), extracted from the roots of Polygonum cuspidatum Sieb, a widely used traditional Chinese remedies, possesses anti-inflammatory activity in several experimental models. Polydatin (Piceid) inhibits G6PD and induces oxidative and ER stresses.</p>  <p><b>Purity:</b> 98.55% <b>Clinical Data:</b> Phase 2 <b>Size:</b> 10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg</p>	<p>Quercetin, a natural flavonoid, is a stimulator of recombinant SIRT1 and also a PI3K inhibitor with IC<sub>50</sub> of 2.4 μM, 3.0 μM and 5.4 μM for PI3K γ, PI3K δ and PI3K β, respectively.</p>  <p><b>Purity:</b> 98.02% <b>Clinical Data:</b> Phase 4 <b>Size:</b> 10 mM × 1 mL, 500 mg, 1 g, 5 g</p>
<p><b>Quercetin-d3</b> <span style="float: right;">Cat. No.: HY-18085S1</span></p>	<p><b>Quercetin-d5</b> <span style="float: right;">Cat. No.: HY-18085S</span></p>
<p>Quercetin-d3 is the deuterium labeled Quercetin. Quercetin, a natural flavonoid, is a stimulator of recombinant SIRT1 and also a PI3K inhibitor with IC<sub>50</sub> of 2.4 μM, 3.0 μM and 5.4 μM for PI3K γ, PI3K δ and PI3K β, respectively.</p>  <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 2.5 mg, 25 mg</p>	<p>Quercetin-d5 is a deuterium labeled Quercetin. Quercetin, a natural flavonoid, is a stimulator of recombinant SIRT1 and also a PI3K inhibitor with IC<sub>50</sub> of 2.4 μM, 3.0 μM and 5.4 μM for PI3K γ, PI3K δ and PI3K β, respectively.</p>  <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>
<p><b>Quinacrine dihydrochloride</b> (Mepacrine dihydrochloride; SN-390 dihydrochloride) <span style="float: right;">Cat. No.: HY-13735A</span></p>	<p><b>Quinacrine hydrochloride hydrate</b> (Mepacrine hydrochloride hydrate; SN-390 hydrochloride hydrate) <span style="float: right;">Cat. No.: HY-13735B</span></p>
<p>Quinacrine (Mepacrine) dihydrochloride is an orally bioavailable antimalarial agent, which possess anticancer effect both in vitro and vivo. Quinacrine dihydrochloride suppresses NF-κB and activate p53 signaling, which results in the induction of the apoptosis.</p>  <p><b>Purity:</b> 99.01% <b>Clinical Data:</b> Phase 2 <b>Size:</b> 10 mM × 1 mL, 100 mg, 500 mg</p>	<p>Quinacrine hydrochloride hydrate (Mepacrine hydrochloride hydrate) is an antimalarial agent, which possess anticancer effect both in vitro and vivo. Quinacrine hydrochloride hydrate suppresses NF-κB and activates p53 signaling, which results in the induction of the apoptosis.</p>  <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p>
<p><b>Resveratrol</b> (trans-Resveratrol; SRT501) <span style="float: right;">Cat. No.: HY-16561</span></p>	<p><b>Resveratrol analog 1</b> <span style="float: right;">Cat. No.: HY-136203</span></p>
<p>Resveratrol (trans-Resveratrol; SRT501), a natural polyphenolic phytoalexin that possesses anti-oxidant, anti-inflammatory, cardioprotective, and anti-cancer properties.</p>  <p><b>Purity:</b> 99.89% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 200 mg, 500 mg</p>	<p>Resveratrol analog 1 is an analog of Resveratrol (HY-16561), compound 48. Resveratrol is a natural polyphenolic phytoalexin that possesses anti-oxidant, anti-inflammatory, cardioprotective, and anti-cancer properties.</p>  <p><b>Purity:</b> 98.06% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 5 mg, 10 mg, 50 mg</p>

## Resveratrol analog 2

Cat. No.: HY-136204

Resveratrol analog 2 is an **analog** of Resveratrol (HY-16561). Resveratrol is a natural polyphenolic phytoalexin that possesses anti-oxidant, anti-inflammatory, cardioprotective, and anti-cancer properties.



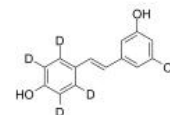
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

## Resveratrol-d4

(trans-Resveratrol-d4; SRT501-d4)

Cat. No.: HY-16561S

Resveratrol-d4 (trans-Resveratrol-d4) is the deuterium labeled Resveratrol. Resveratrol (trans-Resveratrol; SRT501), a natural polyphenolic phytoalexin that possesses anti-oxidant, anti-inflammatory, cardioprotective, and anti-cancer properties.



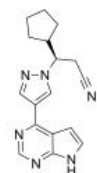
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

## Ruxolitinib

(INCB18424)

Cat. No.: HY-50856

Ruxolitinib (INCB18424) is a potent and selective JAK1/2 inhibitor with  $IC_{50}$ s of 3.3 nM and 2.8 nM in cell-free assays, and has 130-fold selectivity for JAK1/2 over JAK3. Ruxolitinib induces **autophagy** and kills tumor cells through toxic **mitophagy**.



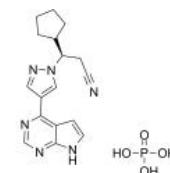
**Purity:** 99.99%  
**Clinical Data:** Launched  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

## Ruxolitinib phosphate

(INCB018424 phosphate)

Cat. No.: HY-50858

Ruxolitinib phosphate (INCB018424 phosphate) is a potent JAK1/2 inhibitor with  $IC_{50}$ s of 3.3 nM/2.8 nM, respectively, showing more than 130-fold selectivity over JAK3.



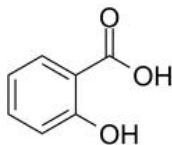
**Purity:** 99.98%  
**Clinical Data:** Launched  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

## Salicylic acid

(2-Hydroxybenzoic acid)

Cat. No.: HY-B0167

Salicylic acid (2-Hydroxybenzoic acid) inhibits cyclo-oxygenase-2 (COX-2) activity independently of transcription factor (NF- $\kappa$ B) activation.



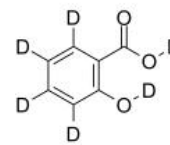
**Purity:** 96.22%  
**Clinical Data:** Launched  
**Size:** 10 mM × 1 mL, 500 mg, 10 g, 50 g

## Salicylic acid-d6

(2-Hydroxybenzoic acid-d6)

Cat. No.: HY-B0167S

Salicylic acid-D6 (2-Hydroxybenzoic acid-D6) is a deuterium labeled Salicylic acid. Salicylic acid inhibits cyclo-oxygenase-2 (COX-2) activity independently of transcription factor (NF- $\kappa$ B) activation.



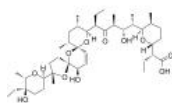
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 5 mg, 10 mg, 25 mg

## Salinomycin

(Procoxacin)

Cat. No.: HY-15597

Salinomycin (Procoxacin), a polyether potassium ionophore antibiotic, selectively inhibits the growth of **gram-positive bacteria**. Salinomycin is a potent inhibitor of Wnt/ $\beta$ -catenin signaling, blocks Wnt-induced LRP6 phosphorylation.



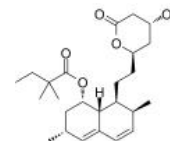
**Purity:**  $\geq$ 98.0%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## Simvastatin

(MK 733)

Cat. No.: HY-17502

Simvastatin (MK 733) is a competitive inhibitor of HMG-CoA reductase with a  $K_i$  of 0.2 nM.



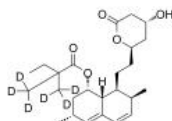
**Purity:** 99.45%  
**Clinical Data:** Launched  
**Size:** 50 mg, 100 mg, 200 mg, 500 mg

## Simvastatin-d6

(MK 733-d6)

Cat. No.: HY-110231

Simvastatin-d6 (MK 733-d6) is the deuterium labeled Simvastatin. Simvastatin (MK 733) is a competitive inhibitor of HMG-CoA reductase with a  $K_i$  of 0.2 nM.



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

## Sulfosuccinimidyl oleate


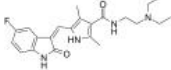
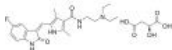
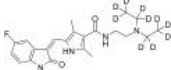
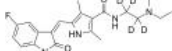
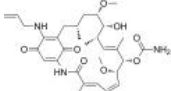
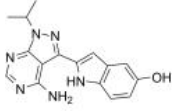
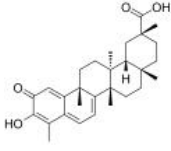
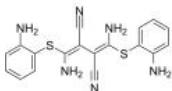
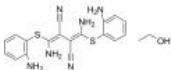
(Sulfo-N-succinimidyl oleate)

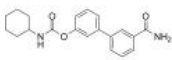
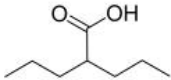
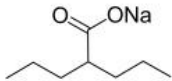
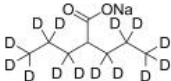
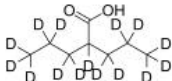
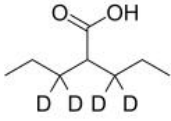
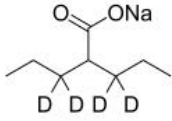
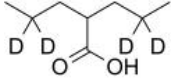
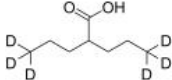
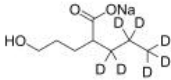
Cat. No.: HY-112847

Sulfosuccinimidyl oleate (Sulfo-N-succinimidyl oleate) is a long chain fatty acid that inhibits fatty acid transport into cells. Sulfosuccinimidyl oleate is a potent and irreversible inhibitor of mitochondrial respiratory chain.



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

<p><b>Sulfosuccinimidyl oleate sodium</b> (Sulfo-N-succinimidyl oleate sodium) <span style="float: right;">Cat. No.: HY-112847A</span></p> <p>Sulfosuccinimidyl oleate sodium (Sulfo-N-succinimidyl oleate sodium) is a long chain fatty acid that inhibits fatty acid transport into cells.</p> <p><b>Purity:</b> ≥98.0% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 5 mg, 10 mg</p> 	<p><b>Sunitinib</b> (SU 11248) <span style="float: right;">Cat. No.: HY-10255A</span></p> <p>Sunitinib (SU 11248) is a multi-targeted receptor tyrosine kinase inhibitor with <math>IC_{50}</math>s of 80 nM and 2 nM for VEGFR2 and PDGFR<math>\beta</math>, respectively.</p> <p><b>Purity:</b> 98.96% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 100 mg, 200 mg, 500 mg</p> 
<p><b>Sunitinib Malate</b> (SU 11248 Malate) <span style="float: right;">Cat. No.: HY-10255</span></p> <p>Sunitinib Malate (SU 11248 Malate) is a multi-targeted receptor tyrosine kinase inhibitor with <math>IC_{50}</math>s of 80 nM and 2 nM for VEGFR2 and PDGFR<math>\beta</math>, respectively.</p> <p><b>Purity:</b> 99.47% <b>Clinical Data:</b> Launched <b>Size:</b> 10 mM × 1 mL, 100 mg, 200 mg, 500 mg</p> 	<p><b>Sunitinib-d10</b> (SU 11248-d10) <span style="float: right;">Cat. No.: HY-10255AS</span></p> <p>Sunitinib D10 (SU 11248 D10) is a deuterium labeled Sunitinib. Sunitinib is a multi-targeted receptor tyrosine kinase inhibitor with <math>IC_{50}</math>s of 80 nM and 2 nM for VEGFR2 and PDGFR<math>\beta</math>, respectively.</p> <p><b>Purity:</b> 99.89% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p> 
<p><b>Sunitinib-d4</b> <span style="float: right;">Cat. No.: HY-10255AS1</span></p> <p>Sunitinib-d4 (SU 11248-d4) is the deuterium labeled Sunitinib. Sunitinib (SU 11248) is a multi-targeted receptor tyrosine kinase inhibitor with <math>IC_{50}</math>s of 80 nM and 2 nM for VEGFR2 and PDGFR<math>\beta</math>, respectively.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> <b>Size:</b> 2.5 mg, 1 mg, 25 mg</p> 	<p><b>Tanespimycin</b> (17-AAG; NSC 330507; CP 127374) <span style="float: right;">Cat. No.: HY-10211</span></p> <p>Tanespimycin (17-AAG) is a potent HSP90 inhibitor with an <math>IC_{50}</math> of 5 nM, having a 100-fold higher binding affinity for tumour cell derived HSP90 than normal cell derived HSP90. Tanespimycin depletes cellular STK38/NDR1 and reduces STK38 kinase activity.</p> <p><b>Purity:</b> 99.07% <b>Clinical Data:</b> Phase 3 <b>Size:</b> 10 mM × 1 mL, 10 mg, 25 mg, 100 mg, 200 mg</p> 
<p><b>Torkinib</b> (PP 242) <span style="float: right;">Cat. No.: HY-10474</span></p> <p>Torkinib (PP 242) is a selective and ATP-competitive mTOR inhibitor with an <math>IC_{50}</math> of 8 nM. PP242 inhibits both mTORC1 and mTORC2 with <math>IC_{50}</math>s of 30 nM and 58 nM, respectively.</p> <p><b>Purity:</b> 98.76% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p><b>Tripterin</b> (Celastrol) <span style="float: right;">Cat. No.: HY-13067</span></p> <p>Tripterin (Celastrol) is a proteasome inhibitor which potently and preferentially inhibits the chymotrypsin-like activity of a purified 20S proteasome with <math>IC_{50}</math> of 2.5 <math>\mu</math>M.</p> <p><b>Purity:</b> 99.90% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 10 mg, 50 mg, 100 mg</p> 
<p><b>U0126</b> <span style="float: right;">Cat. No.: HY-12031A</span></p> <p>U0126 is a potent, non-ATP competitive and selective MEK1 and MEK2 inhibitor, with <math>IC_{50}</math>s of 72 nM and 58 nM, respectively. U0126 is an autophagy and mitophagy inhibitor.</p> <p><b>Purity:</b> &gt;98% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 1 mg, 5 mg</p> 	<p><b>U0126-EtOH</b> <span style="float: right;">Cat. No.: HY-12031</span></p> <p>U0126 (U0126-EtOH) is a potent, non-ATP competitive and selective MEK1 and MEK2 inhibitor, with <math>IC_{50}</math>s of 72 nM and 58 nM, respectively. U0126 is an autophagy and mitophagy inhibitor.</p> <p><b>Purity:</b> 99.41% <b>Clinical Data:</b> No Development Reported <b>Size:</b> 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg</p> 

<p><b>URB-597</b> (KDS-4103)</p> <p style="text-align: right;">Cat. No.: HY-10864</p>	<p><b>Valproic acid</b> (VPA; 2-Propylpentanoic Acid)</p> <p style="text-align: right;">Cat. No.: HY-10585</p>
<p>URB-597 (KDS-4103) is an orally bioavailable and selective FAAH inhibitor. URB-597 inhibits FAAH activity with an <math>IC_{50}</math>s of approximately 5 nM in rat brain membranes, 0.5 nM in intact rat neurons, 3 nM in human liver microsomes. Antidepressant-like effects. Analgesic activity.</p> <p><b>Purity:</b> 99.01%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg</p> 	<p>Valproic acid (VPA; 2-Propylpentanoic Acid) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> <math>\geq</math>98.0%</p> <p><b>Clinical Data:</b> Launched</p> <p><b>Size:</b> 500 mg, 1 g, 5 g, 25 g</p> 
<p><b>Valproic acid sodium</b> (Sodium Valproate sodium)</p> <p style="text-align: right;">Cat. No.: HY-10585A</p>	<p><b>Valproic acid-d14 sodium</b> (Sodium Valproate-d14 sodium)</p> <p style="text-align: right;">Cat. No.: HY-10585AS1</p>
<p>Valproic acid sodium salt (Sodium Valproate) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> <math>\geq</math>98.0%</p> <p><b>Clinical Data:</b> Launched</p> <p><b>Size:</b> 500 mg, 1 g, 5 g, 25 g</p> 	<p>Valproic acid-d14 (sodium) is deuterium labeled Valproic acid (sodium). Valproic acid sodium salt (Sodium Valproate) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> <math>&gt;</math>98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 1 mg, 5 mg</p> 
<p><b>Valproic acid-d15</b> (VPA-d15; 2-Propylpentanoic Acid-d15)</p> <p style="text-align: right;">Cat. No.: HY-10585S2</p>	<p><b>Valproic acid-d4</b> (VPA-d4; 2-Propylpentanoic Acid-d4)</p> <p style="text-align: right;">Cat. No.: HY-10585S</p>
<p>Valproic acid-d15 is the deuterium labeled Valproic acid. Valproic acid (VPA; 2-Propylpentanoic Acid) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> <math>&gt;</math>98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 1 mg, 5 mg</p> 	<p>Valproic acid-d4 (VPA-d4) is the deuterium labeled Valproic acid. Valproic acid (VPA; 2-Propylpentanoic Acid) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> <math>&gt;</math>98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 1 mg</p> 
<p><b>Valproic acid-d4 sodium</b> (VPA-d4 sodium; 2-Propylpentanoic Acid-d4 sodium)</p> <p style="text-align: right;">Cat. No.: HY-10585S3</p>	<p><b>Valproic acid-d4-1</b> (VPA-d4-1; 2-Propylpentanoic Acid-d4-1)</p> <p style="text-align: right;">Cat. No.: HY-10585S4</p>
<p>Valproic acid-d4 (VPA-d4) sodium is the deuterium labeled Valproic acid. Valproic acid (VPA; 2-Propylpentanoic Acid) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> <math>&gt;</math>98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 1 mg, 5 mg</p> 	<p>Valproic acid-d4-1 (VPA-d4-1) is the deuterium labeled Valproic acid. Valproic acid (VPA; 2-Propylpentanoic Acid) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> <math>&gt;</math>98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 1 mg, 5 mg</p> 
<p><b>Valproic acid-d6</b> (VPA-d6; 2-Propylpentanoic Acid-d6)</p> <p style="text-align: right;">Cat. No.: HY-10585S1</p>	<p><b>Valproic acid-d7 sodium</b> (Sodium Valproate-d7 sodium)</p> <p style="text-align: right;">Cat. No.: HY-10585AS</p>
<p>Valproic acid-d6 (VPA-d6) is the deuterium labeled Valproic acid. Valproic acid (VPA; 2-Propylpentanoic Acid) is an HDAC inhibitor, with <math>IC_{50}</math> in the range of 0.5 and 2 mM, also inhibits HDAC1 (<math>IC_{50}</math>, 400 <math>\mu</math>M), and induces proteasomal degradation of HDAC2.</p> <p><b>Purity:</b> 98.71%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 5 mg, 10 mg</p> 	<p>Valproic acid-d7 (Sodium Valproate-d7) sodium is the deuterium labeled Valproic acid (sodium salt).</p> <p><b>Purity:</b> <math>&gt;</math>98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 1 mg, 10 mg</p> 

### Vorinostat

(SAHA; Suberoylanilide hydroxamic acid)

Cat. No.: HY-10221

Vorinostat (SAHA) is a potent and orally active pan-inhibitor of HDAC1, HDAC2 and HDAC3 (Class I), HDAC6 and HDAC7 (Class II) and HDAC11 (Class IV), with  $ID_{50}$  values of 10 nM and 20 nM for HDAC1 and HDAC3, respectively. Vorinostat induces cell apoptosis.



**Purity:** 99.90%

**Clinical Data:** Launched

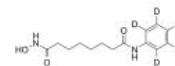
**Size:** 10 mM × 1 mL, 250 mg, 500 mg, 1 g, 5 g

### Vorinostat-d5

(SAHA-d5; Suberoylanilide hydroxamic acid-d5)

Cat. No.: HY-115412

Vorinostat-d5 (SAHA-d5) is the deuterium labeled Vorinostat. Vorinostat (SAHA) is a potent and orally active pan-inhibitor of HDAC1, HDAC2 and HDAC3 (Class I), HDAC7 (Class II) and HDAC11 (Class IV), with  $ID_{50}$  values of 10 nM and 20 nM for HDAC1 and HDAC3, respectively.



**Purity:** ≥99.0%

**Clinical Data:** No Development Reported

**Size:** 1 mg