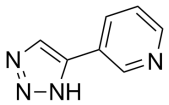
Sirtuin

Sirtuin (Sir2 proteins) are a class of proteins that possess either mono-ADP-ribosyltransferase, or deacylase activity, including deacetylase, desuccinylase, demalonylase, demyristoylase and depalmitoylase activity. Sirtuins regulate important biological pathways in bacteria, archaeaand eukaryotes. Sirtuins have been implicated in influencing a wide range of cellular processes like aging, transcription, apoptosis, inflammation and stress resistance, as well as energy efficiency and alertness during low-calorie situations. Sirtuins can also control circadian clocks and mitochondrial biogenesis.

3-TYP

Cat. No.: HY-108331

3-TYP is a selective **SIRT3** inhibitor, with an IC_{50} of 16 nM, more potent over SIRT1 (IC_{50}=88 nM), SIRT2 (IC_{50}=92 nM).

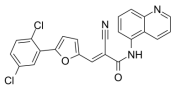


Purity: 99.87%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

AGK2

Cat. No.: HY-100578

AGK2 is a selective **SIRT2** inhibitor with IC_{50} of 3.5 μM. AGK2 can also inhibit **SIRT1** and **SIRT3** with IC_{50} of 30 and 91 μM, respectively.

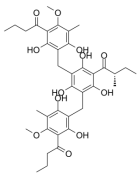


Purity: 98.66%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Agrimol B

Cat. No.: HY-N0704

Agrimol B is a polyphenol derived from Agrimonia pilosa Ledeb, suppresses adipogenesis via inducing **SIRT1** translocation and expression, and reducing **PPARγ** expression.

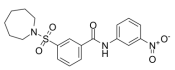


Purity: 99.36%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

AK-1

Cat. No.: HY-101465

AK-1 is a potent, specific and cell-permeable **SIRT2** inhibitor, with an IC_{50} of 12.5 μM.

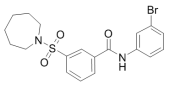


Purity: 99.81%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

AK-7

Cat. No.: HY-16691

AK-7 is a selective cell- and brain-permeable **SIRT2** inhibitor, with an IC_{50} of 15.5 μM.

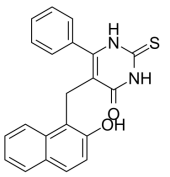


Purity: 99.91%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Cambinol

Cat. No.: HY-100732

Cambinol is a **SIRT1** and **SIRT2** inhibitor with IC_{50} values of 56 μM and 59 μM, respectively.

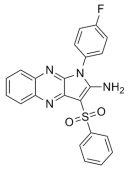


Purity: 99.70%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

CAY10602

Cat. No.: HY-104073

CAY10602 is a **SIRT1** activator.



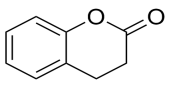
Purity: 98.65%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Dihydrocoumarin

(Hydrocoumarin; Chroman-2-one)

Cat. No.: HY-N1926

Dihydrocoumarin is a compound found in Melilotus officinalis. Dihydrocoumarin is a **yeast Sir2p** inhibitor. Dihydrocoumarin also inhibits **human SIRT1** and **SIRT2** with IC_{50}s of 208 μM and 295 μM, respectively.

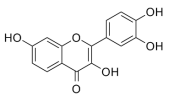


Purity: 99.81%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 100 mg

Fisetin

Cat. No.: HY-N0182

Fisetin is a natural flavonol found in many fruits and vegetables with various benefits, such as antioxidant, anticancer, neuroprotection effects.

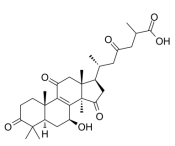


Purity: 98.02%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 100 mg, 500 mg, 1 g

Ganoderic acid D

Cat. No.: HY-N1511

Ganoderic acid D, a highly oxygenated tetracyclic triterpenoid, is the major active component of Ganoderma lucidum. Ganoderic acid D upregulates the protein expression of **SIRT3** and induces the deacetylated cyclophilin D (CypD) by SIRT3.



Purity: 99.40%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

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

Gardenia yellow

(Crocin I)

Cat. No.: HY-N6675

Gardenia yellow is an active member of crocin, increases mRNA expression of **SIRT3**, and acts as an orally active antidepressant agent.

Gardenia yellow

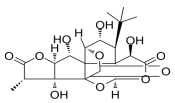
Purity: >98%
Clinical Data:
Size: 1 mg, 5 mg

Ginkgolide C

(BN-52022; Ginkgolide-C)

Cat. No.: HY-N0785

Ginkgolide C is a flavone isolated from Ginkgo biloba leaves, possessing multiple biological functions, such as decreasing platelet aggregation and ameliorating Alzheimer disease.



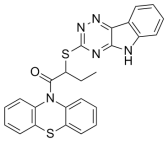
Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

Inauhzin

(INZ)

Cat. No.: HY-15869

Inauhzin is a dual **SirT1/IMPDH2** inhibitor, and acts as an activator **p53**, used in the research of cancer.

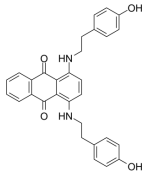


Purity: 99.49%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

JFD00244

Cat. No.: HY-108986

JFD00244 is a **sirtuin 2** (**SIRT2**) inhibitor. Anti-tumor effect.

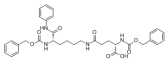


Purity: >98.0%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

MC3482

Cat. No.: HY-112587

MC3482 is a specific sirtuin5 (**SIRT5**) inhibitor.



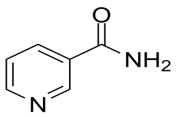
Purity: 99.22%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

Nicotinamide

(Niacinamide; Nicotinic acid amide; Vitamin B3)

Cat. No.: HY-B0150

Nicotinamide is a form of vitamin B3 that plays essential roles in cell physiology through facilitating NAD+ redox homeostasis and providing NAD+ as a substrate to a class of enzymes that catalyze non-redox reactions. Nicotinamide is an inhibitor of **SIRT1**.

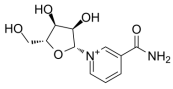


Purity: 99.86%
Clinical Data: Launched
Size: 10 mM × 1 mL, 500 mg, 1 g, 5 g

Nicotinamide riboside

Cat. No.: HY-123033

Nicotinamide riboside, an orally active NAD^+ precursor, increases NAD^+ levels and activates **SIRT1** and **SIRT3**. Nicotinamide riboside is a source of vitamin B3 (niacin) and enhances oxidative metabolism, protection against high fat diet-induced metabolic abnormalities.

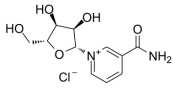


Purity: >98%
Clinical Data: Phase 4
Size: 1 mg, 5 mg

Nicotinamide riboside chloride

Cat. No.: HY-123033A

Nicotinamide riboside Chloride, an orally active NAD^+ precursor, increases NAD^+ levels and activates **SIRT1** and **SIRT3**.

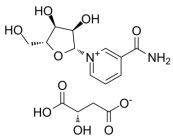


Purity: 99.53%
Clinical Data: Phase 4
Size: 10 mM × 1 mL, 100 mg

Nicotinamide riboside malate

Cat. No.: HY-123033C

Nicotinamide riboside malate, an orally active NAD^+ precursor, increases NAD^+ levels and activates **SIRT1** and **SIRT3**.

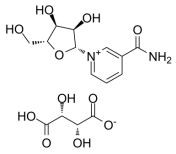


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Nicotinamide riboside tartrate

Cat. No.: HY-123033B

Nicotinamide riboside tartrate, an orally active NAD^+ precursor, increases NAD^+ levels and activates **SIRT1** and **SIRT3**.

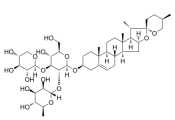


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Ophiopogonin D'

Cat. No.: HY-N3504

Ophiopogonin D', isolated from the tubers of Ophiopogon japonicus, is a rare naturally occurring C_{29} steroidal glycoside. Ophiopogonin D' shows cytotoxic activity against two human tumor cell lines MG-63 and SNU387 with IC_{50}s of 3.09 μM and 3.63 μM, respectively.

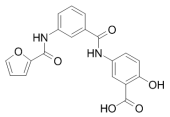


Purity: 99.85%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg

OSS_128167

Cat. No.: HY-107454

OSS_128167 is a potent selective **sirtuin 6 (SIRT6)** inhibitor with **IC_{50}**s of 89 μM, 1578 μM and 751 μM for **SIRT6**, SIRT1 and SIRT2, respectively. OSS_128167 has anti-**HBV** activity that inhibits **HBV** transcription and replication.

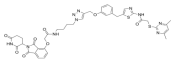


Purity: 98.22%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

PROTAC Sirt2 Degrader-1

Cat. No.: HY-103636

PROTAC Sirt2 Degrader-1 is a SirReal-based **PROTAC**, acts as a **Sirt2** degrader, composed of a highly potent and isotype-selective **Sirt2** inhibitor, a linker, and a bona fide cereblon ligand for E3 ubiquitin ligase.



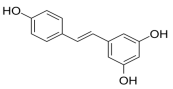
Purity: 98.76%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

Resveratrol

(trans-Resveratrol; SRT501)

Cat. No.: HY-16561

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

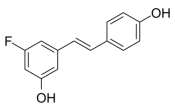


Purity: 99.70%
Clinical Data: Launched
Size: 10 mM × 1 mL, 200 mg, 500 mg

Resveratrol analog 1

Cat. No.: HY-136203

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.

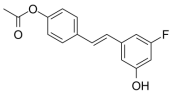


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

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.

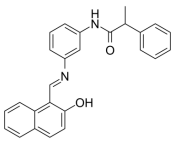


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Salermide

Cat. No.: HY-101073

Salermide is an inhibitor of **Sirt1** and **Sirt2**; can cause strong cancer-specific apoptotic cell death.

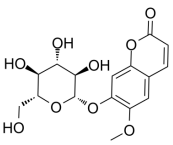


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Scopolin

Cat. No.: HY-N0341

Scopolin is a coumarin isolated from Arabidopsis thaliana (Arabidopsis) roots. Scopolin attenuated hepatic steatosis through activation of **SIRT1**-mediated signaling cascades.



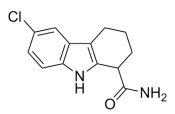
Purity: >99.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg

Selisistat

(EX-527)

Cat. No.: HY-15452

Selisistat (EX-527) is a potent and selective **SIRT1** inhibitor with **IC_{50}** of 98 nM.



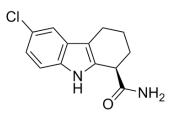
Purity: 99.85%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

Selisistat R-enantiomer

(EX-527 (R-enantiomer))

Cat. No.: HY-15452B

Selisistat R-enantiomer (EX-527 R-enantiomer) is much less active R-enantiomer of Selisistat, with an IC_{50} of > 100 μM for SIRT1.



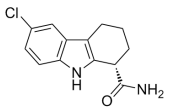
Purity: 98.69%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

Selisistat S-enantiomer

(EX-527 (S-enantiomer))

Cat. No.: HY-15452A

Selisistat S-enantiomer (EX-527 S-enantiomer) is the S-enantiomer of Selisistat, with an IC_{50} of 123 nM for SIRT1. Selisistat S-enantiomer is much more potent than Selisistat R-enantiomer.

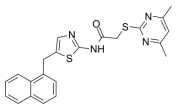


Purity: 98.50%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

SirReal2

Cat. No.: HY-100591

SirReal2 is a potent, isotype-selective **Sirt2** inhibitor with an IC_{50} value of 140nM and has very little effect on the activities of Sirt3-5. SirReal2 leads to tubulin hyperacetylation in HeLa cells and induces destabilization of the checkpoint protein BubR1.

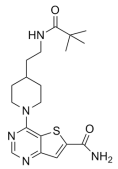


Purity: >99.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

SIRT-IN-1

Cat. No.: HY-16615

SIRT-IN-1 is a potent inhibitor of **SIRT1/2/3**, with IC_{50}**s** of 15, 10, 33 μM, respectively.

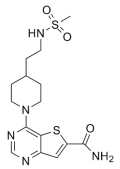


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

SIRT-IN-2

Cat. No.: HY-16616

SIRT-IN-2 is a potent inhibitor of **SIRT1/2/3**, with IC_{50}**s** of 4, 4, 7 μM, respectively.

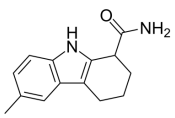


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

SIRT1-IN-1

Cat. No.: HY-136199

SIRT1-IN-1 is a selective **SIRT1** inhibitor with an IC_{50} of 0.205 μM. SIRT1-IN-1 inhibits SIRT2 with an IC_{50} of 11.5 μM. SIRT1-IN-1, a indole, is a **cytomegalovirus (CMV)** inhibitors and has antiviral activity.

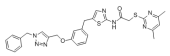


Purity: 98.01%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

Sirt2-IN-1

Cat. No.: HY-112427

Sirt2-IN-1 (Compound 9) is a **sirtuin 2** (**Sirt2**) inhibitor with an IC_{50} of 163 nM.

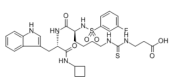


Purity: 98.03%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

SIRT5 inhibitor 1

Cat. No.: HY-112634

SIRT5 inhibitor 1 is a potent Human **Sirtuin 5** deacylase inhibitor, with an IC_{50} of 0.11 μM.

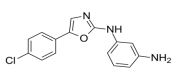


Purity: 99.36%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

SIRT7 inhibitor 97491

Cat. No.: HY-135899

SIRT7 inhibitor 97491, a potent **SIRT7** inhibitor with an IC_{50} of 325 nM, reduces deacetylase activity of SIRT7 in a dose-dependent manner. SIRT7 inhibitor 97491 prevents tumor progression by increasing p53 stability through acetylation at K373/382.

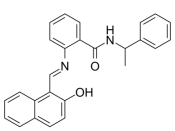


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

Sirtinol

Cat. No.: HY-13515

Sirtinol is a **sirtuin (SIRT)** inhibitor, with IC_{50}s of 48 μM, 57.7 μM and 131 μM for ySir2, hSIRT2 and hSIRT2, respectively.

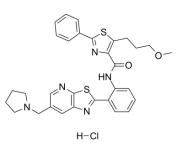


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Sirtuin modulator 1

Cat. No.: HY-19758A

Sirtuin modulator 1 is a modulator of **SIRTI**, a homolog of **SIRT3**, with $EC_{1.5}$ of < 1 μM, extracted from patent WO 2010071853 A1, Compound No.4.

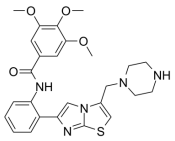


Purity: 99.44%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

SRT 1460

Cat. No.: HY-124037

SRT 1460, a potent **Sirtuin-1 (SIRT1)** activator with an $EC_{1.5}$ value of 2.9 μM, shows good selectivity for activation of SIRT1 versus SIRT2 and SIRT3 (EC1.5>300 μM), and is more potent than Resveratrol and the closest sirtuin homologues.

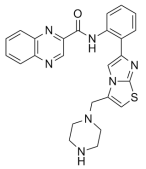


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

SRT 1720

Cat. No.: HY-10532

SRT 1720 is a selective activator of human **SIRT1** with an $EC_{1.5}$ of 0.16 μM, and shows less potent activities agaiinst SIRT2 and SIRT3 with $EC_{1.5}$s of 37 μM and > 300 μM, respectively.

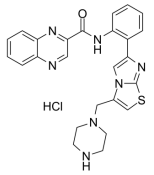


Purity: >98%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

SRT 1720 Hydrochloride

Cat. No.: HY-15145

SRT 1720 Hydrochloride is a selective activator of **SIRT1** with an EC_{50} of 0.10 μM, and shows less potent activities on SIRT2 and SIRT3.

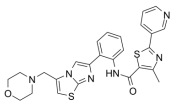


Purity: 99.92%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

SRT 2104

Cat. No.: HY-15262

SRT 2104 is a first-in-class, highly selective and brain-permeable activator of the NAD^+ dependent deacetylase **Sirt1**, increases Sirt1 protein, but shows no effect on Sirt1 mRNA. Used in the research of diabetes mellitus and Huntington's disease.

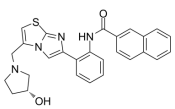


Purity: 98.87%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g

SRT 2183

Cat. No.: HY-19759

SRT 2183 is a selective **Sirtuin-1 (SIRT1)** activator with an $EC_{1.5}$ value of 0.36 μM. SRT 2183 induces growth arrest and apoptosis, concomitant with deacetylation of STAT3 and NF-κB, and reduction of c-Myc protein levels.

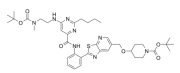


Purity: 98.48%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

SRT3657

Cat. No.: HY-136094

SRT3657 is a brain-permeable activator of **SIRT1**, with neuroprotective effect.

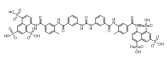


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Suramin

Cat. No.: HY-B0879

Suramin is a reversible and competitive **protein-tyrosine phosphatases (PTPases)** inhibitor. Suramin is a potent inhibitor of **sirtuins**: SirT1 (IC_{50}=297 nM), SirT2 (IC_{50}=1.15 μM), and SirT5 (IC_{50}=22 μM).



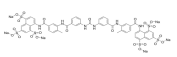
Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

Suramin sodium salt

(Suramin hexasodium salt)

Cat. No.: HY-B0879A

Suramin sodium salt (Suramin hexasodium salt) is a reversible and competitive **protein-tyrosine phosphatases (PTPases)** inhibitor. Suramin sodium salt is a potent inhibitor of **sirtuins**: SirT1 (IC_{50}=297 nM), SirT2 (IC_{50}=1.15 μM), and SirT5 (IC_{50}=22 μM).

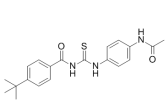


Purity: 99.93%
Clinical Data: Launched
Size: 10 mM × 1 mL, 50 mg

Tenovin-1

Cat. No.: HY-13423

Tenovin-1 is an inhibitor of **sirtuin 1** and **sirtuin 2**, an activator of **p53** and may have potential in the management of cancer.

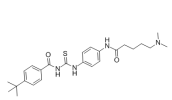


Purity: 99.88%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Tenovin-6

Cat. No.: HY-15510

Tenovin-6 is an inhibitor of **SIRT1** and **SIRT2**, slightly inhibits **HDAC8**, and is also a potent activator of **p53**, with IC_{50}s of 21 μM, 10 μM, and 67 μM for SirT1, SirT2, and SirT3, respectively.

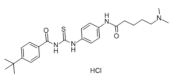


Purity: 98.61%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

Tenovin-6 Hydrochloride

Cat. No.: HY-15510B

Tenovin-6 Hydrochloride is an inhibitor of **SIRT1** and **SIRT2**, slightly inhibits **HDAC8**, and is also a potent activator of **p53**, with IC_{50}s of 21 μM, 10 μM, and 67 μM for SirT1, SirT2, and SirT3, respectively.

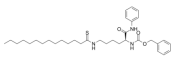


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

Thiomyristoyl

Cat. No.: HY-101278

Thiomyristoyl is a potent and specific **SIRT2** inhibitor with an IC_{50} of 28 nM.

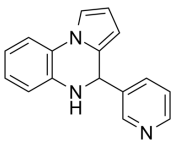


Purity: 98.94%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

UBCS039

Cat. No.: HY-115453

UBCS039 is the first synthetic, specific **Sirtuin 6 (SIRT6)** activator, inducing autophagy in human tumor cells, with an EC_{50} of 38 μM.



Purity: 98.55%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg