ATP Synthase

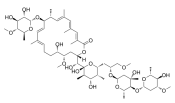
ATPases are a class of enzymes that catalyze the decompositionof ATP into ADP and a free phosphate ion. This dephosphorylation reaction releases energy, which the enzyme (in most cases) harnesses to drive other chemical reactions that would not otherwise occur. Some such enzymes are integral membrane proteins and move solutes across the membrane, typically against their concentration gradient. These are called transmembrane ATPases. Transmembrane ATPases import many of the metabolites necessary for cell metabolism and export toxins, wastes, and solutes that can hinder cellular processes. Such as the sodium-potassium exchanger (or Na^+/K^+ ATPase) and the hydrogen potassium ATPase (H^+/K^+ ATPase or gastric proton pump) that acidifies the contents of the stomach.

ATP Synthase Inhibitors

Apoptolidin

Cat. No.: HY-126679

Apoptolidin is a polyketide isolated from Nocardiopsis bacteria. Apoptolidin is a selective mitochondrial **F_1F_O ATPase** inhibitor.

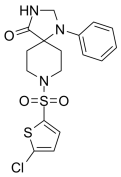


Purity: ≥95.0%
Clinical Data: No Development Reported
Size: 100 μg

ATP synthase inhibitor 1

Cat. No.: HY-112715

ATP synthase inhibitor 1 is a potent inhibitor of **c subunit of the F_1/F_O-ATP synthase** complex, inhibits mitochondrial permeability transition pore (mPTP) opening, does not affect ATP levels.

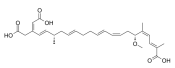


Purity: 99.84%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Bongkrekic acid

Cat. No.: HY-136406

Bongkrekic acid is a **mitochondrial toxin** secreted by the bacteria Pseudomonas cocovenenans. Bongkrekic acid specific ligand for mitochondrial **adenine nucleotide translocase (ANT)** rather than the electron transport chain.

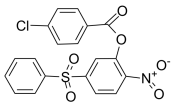


Purity: ≥95.0%
Clinical Data: No Development Reported
Size: 500 μg

BTB06584

Cat. No.: HY-15877

BTB06584 is a selective and IF1-dependent **mitochondrial F_1F_o-ATPase** inhibitor without compromising ATP synthesis. BTB06584 can delays ischaemic cell death.

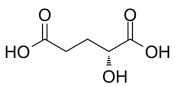


Purity: 99.83%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

D-α-Hydroxyglutaric acid ((R)-2-Hydroxyglutarate; (R)-2-Hydroxyglutaric acid; ...)

Cat. No.: HY-113038

D-α-Hydroxyglutaric acid ((R)-2-Hydroxyglutarate) is the principal metabolite accumulating in neurometabolic disease D-2-hydroxyglutaric aciduria.

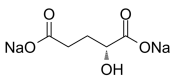


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

D-α-Hydroxyglutaric acid disodium (Disodium (R)-2-hydroxyglutarate)

Cat. No.: HY-100542

D-α-Hydroxyglutaric acid disodium (Disodium (R)-2-hydroxyglutarate) is the principal metabolite accumulating in neurometabolic disease D-2-hydroxyglutaric aciduria.

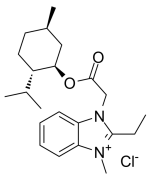


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg

Gboxin

Cat. No.: HY-111651

Gboxin is an oxidative phosphorylation (OXPHOS) inhibitor that targets glioblastoma. Gboxin inhibits the activity of **F_0F_1 ATP synthase**. Antitumour activity.

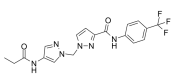


Purity: 99.49%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

KUSC-5037

Cat. No.: HY-144750

KUSC-5037 is a potent **HIF-1** inhibitor (**IC_{50}**=1.2 μM). KUSC-5037 inhibits mitochondrial respiratory complex V and F_oF_1-ATP synthase.



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

Oligomycin

Cat. No.: HY-N6782

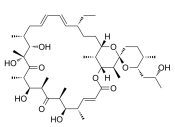
Oligomycin, an antifungal antibiotic, is an inhibitor of **H^+-ATP-synthase**. Oligomycin blocks oxidative phosphorylation and the electron transport chain. Oligomycin inhibits HIF-1alpha expression in hypoxic tumor cells.

Purity: 98.53%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

Oligomycin A (MCH 32)

Cat. No.: HY-16589

Oligomycin A (MCH 32), created by Streptomyces, acts as a mitochondrial **F_0F_1-ATPase** inhibitor, with a **K_i** of 1 μM; Oligomycin A shows anti-fungal activity.



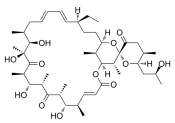
Purity: 99.94%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

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

Oligomycin B

Cat. No.: HY-N6784

Oligomycin B is an antibiotic isolated from marine Streptomyces, used as an eukaryotic **ATP synthase** inhibitor, induces **apoptosis**.



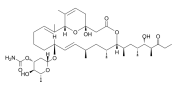
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

Venturicidin A

(Aabomycin A1)

Cat. No.: HY-N125722

Venturicidin A (Aabomycin A1), from actinomycetes, is a membrane-active natural product inhibitor of **ATP synthase**.



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