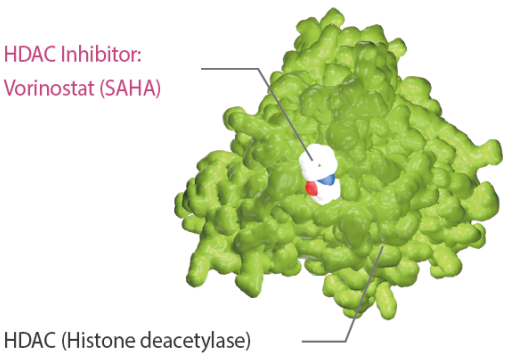
Proton Pump

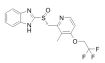


Proton pump is an integral membrane protein that is capable of moving protons across a biological membrane. Mechanisms are based on conformational changes of the protein structure or on theQ cycle. In cell respiration, the proton pump uses energy to transport protons from the matrix of the mitochondrion to the inter-membrane space. It is an active pump, that generates a protonconcentration gradient across the inner mitochondrial membrane, because there are more protons outside the matrix than inside. The difference in pH and electric charge (ignoring differences inbuffer capacity) creates an electrochemical potential difference that works similar to that of a battery or energy storing unit for the cell. The process could also be seen as analogous to cycling uphill or charging a battery for later use, as it produces potential energy. The proton pump does not create energy, but forms a gradient that stores energy for later use.

Proton Pump Inhibitors & Modulators

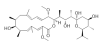
(R)-Lansoprazole
(Dexlansoprazole) Cat. No.: HY-13662B

Bioactivity: (R)-Lansoprazole is a proton pump inhibitor which prevents the stomach from producing acid. Target: Proton Pump Lansoprazole sodium is sodium salt form of lansoprazole, lansoprazole, a substituted benzimidizole proton pump inhibitor, on pharmacokinetics and metabolism of theophylline has been...
Purity: 98.0%
Clinical Data: Launched
Size: 100 mg, 500 mg



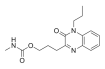
Bafilomycin A1
((-)-Bafilomycin A1) Cat. No.: HY-100558

Bioactivity: Bafilomycin A1, a macrolide antibiotic isolated from the Streptomyces species, is a specific inhibitor of **vacuolar-type H+ ATPase**. Bafilomycin A1 inhibits **autophagy** [1].
Purity: 99.0%
Clinical Data: No Development Reported
Size: 100u g



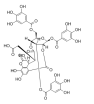
Bamaquimast
(F 10126; L 0042) Cat. No.: HY-101427

Bioactivity: Bamaquimast is an inhibitor of **proton pump** extracted from patent US2005165041, example 138.
Purity: 98.79%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



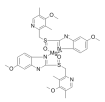
Chebulinic acid
Cat. No.: HY-N2033

Bioactivity: Chebulinic acid is a potent natural inhibitor of M. tuberculosis DNA gyrase, also can inhibit SMAD-3 phosphorylation, inhibit H+ K+-ATPase activity.
Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg



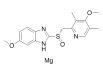
Esomeprazole magnesium
((S)-Omeprazole magnesium; (-)-Omeprazole magnesium) Cat. No.: HY-B1446

Bioactivity: Esomeprazole magnesium is an inhibitor of **H^+, K^+-ATPase**, effectively used in the research of upper intestinal disorder.
Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 50 mg



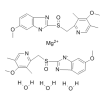
Esomeprazole magnesium salt
Cat. No.: HY-17021A

Bioactivity: Esomeprazole magnesium salt is a proton pump inhibitor which reduces acid secretion through inhibition of the H+ / K+ ATPase in gastric parietal cells. IC50 value: Target: proton pump Esomeprazole magnesium salt is a proton pump inhibitor and gastric antisecretory agent indicated for the short-term...
Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg



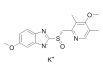
Esomeprazole Magnesium trihydrate
((S)-Omeprazole magnesium trihydrate) Cat. No.: HY-17022

Bioactivity: Esomeprazole Magnesium trihydrate is a proton pump inhibitor which reduces acid secretion through inhibition of the H+ / K+ ATPase in gastric parietal cells. IC50 value: Target: proton pump Esomeprazole sodium (Nexium) is the S-isomer of omeprazole and acts as a proton pump inhibitor and gastric...
Purity: 95.0%
Clinical Data: Launched
Size: 50 mg, 100 mg, 200 mg, 500 mg



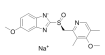
Esomeprazole potassium salt
((S)-Omeprazole potassium) Cat. No.: HY-17021B

Bioactivity: Esomeprazole potassium salt is a proton pump inhibitor which reduces acid secretion through inhibition of the H+ / K+ ATPase in gastric parietal cells.
Purity: >98%
Clinical Data: Launched
Size: 50 mg, 100 mg



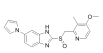
Esomeprazole sodium
((S)-Omeprazole sodium) Cat. No.: HY-17023

Bioactivity: Esomeprazole sodium is a proton pump inhibitor which reduces acid secretion through inhibition of the H+ / K+ ATPase in gastric parietal cells. IC50 value: Target: proton pump Esomeprazole sodium (Nexium) is the S-isomer of omeprazole and acts as a proton pump inhibitor and gastric antisecretory...
Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg



Ilaprazole
(IY-81149) Cat. No.: HY-101664

Bioactivity: Ilaprazole (IY-81149) is a **proton pump** inhibitor; inhibits H^+/K^+-ATPase with an **IC_{50}** of 6.0 μM.
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg



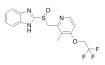
Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

Lansoprazole

(AG-1749) Cat. No.: HY-13662

Bioactivity: Lansoprazole(AG 1749) is a proton pump inhibitor which prevents the stomach from producing acid.

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

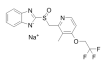


Lansoprazole sodium

(AG-1749 sodium) Cat. No.: HY-13662A

Bioactivity: Lansoprazole sodium(AG-1749) is a proton pump inhibitor which prevents the stomach from producing acid.

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

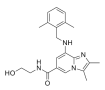


Linaprazan

(AZD0865) Cat. No.: HY-100412

Bioactivity: AZD0865 inhibits gastric H+,K+-ATPase by K+-competitive binding. (IC50: 1.0 ± 0.2 μM) It is a acid-suppressing agents with rapid onset of action and potent acid inhibition. In vitro: AZD0865 can inhibit the final step in acid secretion. AZD0865 reduced porcine renal Na+,K+-ATPase activity by 9 ±...

Purity: 98.51%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

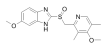


Omeprazole

(H 16868) Cat. No.: HY-B0113

Bioactivity: Omeprazole (H 16868) is a proton pump inhibitor used in the treatment of dyspepsia.

Purity: 97.06%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

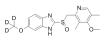


Omeprazole D3

(H 16868 D3) Cat. No.: HY-B0113S

Bioactivity: Omeprazole D3 (H 16868 D3) is deuterium labeled Omeprazole, which is a proton pump inhibitor used in the treatment of dyspepsia.

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

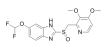


Pantoprazole

(BY1023; SKF96022) Cat. No.: HY-17507

Bioactivity: Pantoprazole(SKF96022; Protonix) is a proton pump inhibitor drug used for short-term treatment of erosion and ulceration of the esophagus caused by gastroesophageal reflux disease. IC50 value: Target: proton pump inhibitor

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

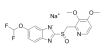


Pantoprazole sodium

(BY1023 (sodium); SKF96022 (sodium)) Cat. No.: HY-17507A

Bioactivity: Pantoprazole sodium salt(SKF96022; Protonix) is a proton pump inhibitor drug used for short-term treatment of erosion and ulceration of the esophagus caused by gastroesophageal reflux disease. IC50 value: Target: proton pump inhibitor

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

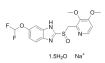


Pantoprazole sodium hydrate

(BY1023 (sodium hydrate); SKF96022 (sodium hydrate)) Cat. No.: HY-17507B

Bioactivity: Pantoprazole sodium hydrate is a proton pump inhibitor drug used for short-term treatment of erosion and ulceration of the esophagus caused by gastroesophageal reflux disease. IC50 value: Target: proton pump inhibitor

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

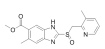


Picoprazole

Cat. No.: HY-15384

Bioactivity: Picoprazole is a specific inhibitor of **H^+/K^+-ATPase** with **IC_{50}** of 3.1±0.4 μM.

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

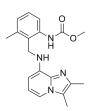


Pumaprazole

(BY-841) Cat. No.: HY-19223

Bioactivity: Pumaprazole is a reversible **proton pump** antagonist.

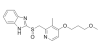
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg



Rabeprazole
(LY307640) Cat. No.: HY-B0656

Bioactivity: Rabeprazole is an antiulcer drug in the class of proton pump inhibitors.

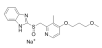
Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg



Rabeprazole sodium
(LY307640 sodium) Cat. No.: HY-B0656A

Bioactivity: Rabeprazole sodium(LY307640 sodium) is an antiulcer drug in the class of proton pump inhibitors.

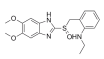
Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg



S3337
Cat. No.: HY-U00222

Bioactivity: S3337 is an H $^{+}$, K $^{+}$-ATPase inhibitor.

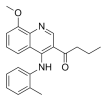
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



SKF96067
Cat. No.: HY-U00042

Bioactivity: SKF96067 is a reversible inhibitor of the gastric **H^+/K^+-ATPase**.

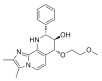
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



Soraprazan
(BYK61359) Cat. No.: HY-100414

Bioactivity: Soraprazan is a reversible, and fast-acting inhibitor of gastric **H^+/K^+ ATPase**.

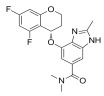
Purity: 99.02%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Tegoprazan
Cat. No.: HY-17623

Bioactivity: Tegoprazan, a potassium-competitive acid blocker, is a potent, oral active and highly selective inhibitor of gastric **H^+/K^+-ATPase** that could control gastric acid secretion and motility, with **IC_{50}** values ranging from 0.29-0.52 μM ...

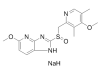
Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg



Tenatoprazole sodium
(Tenatoprazole sodium salt) Cat. No.: HY-17421A

Bioactivity: Tenatoprazole sodium (TU-199 sodium) is a **proton pump** inhibitor; inhibits hog gastric H $^{+}$/K $^{+}$-ATPase with an **IC_{50}** of 6.2 μM.

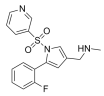
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



Vonoprazan
(TAK-438) Cat. No.: HY-100007

Bioactivity: TAK-438 (free base) is a novel P-CAB (potassium-competitive acid blocker) that reversibly inhibits H+/K+ ATPase with IC50 of 19 nM (pH 6.5), controls gastric acid secretion. IC50 value: 19 nM [1] Target: H+/K+ ATPase in vitro: TAK-438 is a pyrrole derivative with a chemical structure that is...

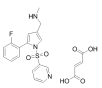
Purity: 99.33%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg



Vonoprazan Fumarate
(TAK-438) Cat. No.: HY-15295

Bioactivity: Vonoprazan Fumarate (TAK-438) is an orally active **potassium-competitive acid blocker** which inhibits H $^{+}$, K $^{+}$-ATPase activity with an **IC_{50}** of 19 nM.

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



Zinc Pyrithione
Cat. No.: HY-B0572

Bioactivity: Zinc Pyrithione is an antifungal and antibacterial agent disrupting membrane transport by blocking the proton pump. Target: Proton Pump Zinc pyrithione is considered as a coordination complex of zinc. The pyrithione ligands, which are formally monoanions, are chelated to Zn 2+ via oxygen and...

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