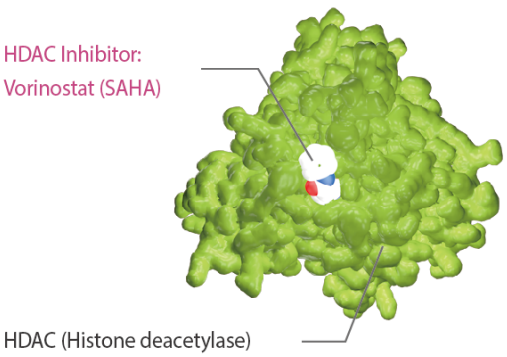
Carbonic Anhydrase

Carbonate dehydratase



Carbonic anhydrase is a zinc-containing enzyme that catalyzes the reversible hydration of carbon dioxide: $CO_2+H_2O<-->HCO_3^-+H^+$. The enzyme is the target for drugs, such as Acetazolamide, Methazolamide, and Dichlorphenamide, for the treatment of glaucoma. There are three evolutionarily unrelated CA families, designated alpha, beta, and gamma. All known CAs from the animal kingdom are of the alpha type. There are seven mammalian CA isozymes with different tissue distributions and intracellular locations, CA I-VII.

Carbonic anhydrase is one of the core enzyme in organism, which involves in osmoregulation, ionic regulation, acid-base regulation and other physiological and biochemical process.

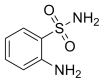
Carbonic Anhydrase Inhibitors & Modulators

2-Aminobenzenesulfonamide
(Orthanilamide)

Cat. No.: HY-B2147

Bioactivity: 2-Aminobenzenesulfonamide is a **carbonic anhydrase IX** inhibitor.

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

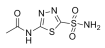


Acetazolamide

Cat. No.: HY-B0782

Bioactivity: Acetazolamide is a **carbonic anhydrase** (**CA**) **IX** inhibitor with an **IC_{50}** of 30 nM for **hCA IX** [1]. Diuretic effects [4].

Purity: 99.87%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g

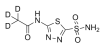


Acetazolamide D3

Cat. No.: HY-B0782S

Bioactivity: Acetazolamide D3 is deuterium labeled Acetazolamide, which is a potent carbonic anhydrase (CA) inhibitor.

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

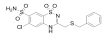


Benzthiazide

Cat. No.: HY-B1424

Bioactivity: Benzthiazide is a long-acting diuretic [1] and a hypertension agent. Benzthiazide is an inhibitor of **carbonic anhydrase 9 (CA9)**, with **K_i**s of 8.0, 8.8 and 10 nM for CA9, CA2 and CA1, respectively. Benzthiazide also suppresses proliferation...

Purity: 99.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

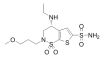


Brinzolamide
(AL-4862)

Cat. No.: HY-B0588

Bioactivity: Brinzolamide(AL 4862) is a potent carbonic anhydrase II inhibitor with IC50 of 3.19 nM.

Purity: 99.78%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

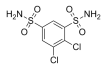


Dichlorphenamide
(Diclofenamide)

Cat. No.: HY-B0397

Bioactivity: Dichlorphenamide(Diclofenamide) is a carbonic anhydrase inhibitor that is used in the treatment of glaucoma.

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

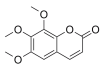


Dimethylfraxetin
(6,7,8-Trimethoxycoumarin; Fraxetin dimethyl ether)

Cat. No.: HY-N0085

Bioactivity: Dimethylfraxetin is a **Carbonic anhydrase** inhibitor, with a **K_i** value of 0.0097 μM.

Purity: 99.97%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg

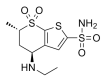


Dorzolamide
(L671152; MK507)

Cat. No.: HY-B0109

Bioactivity: Dorzolamide(L671152; MK507) is an anti-glaucoma agent, which is a carbonic anhydrase inhibitor. Target: carbonic anhydrase (CA) Dorzolamide is a carbonic anhydrase inhibitor. It is an anti-glaucoma agent, and acts by decreasing the production of aqueous humour [1]. Glaucoma was induced in the right eye of...

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg

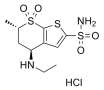


Dorzolamide hydrochloride
(L671152 hydrochloride; MK507 hydrochloride)

Cat. No.: HY-B0109A

Bioactivity: Dorzolamide Hcl(L671152 Hcl; MK507 Hcl) is an anti-glaucoma agent, which is a carbonic anhydrase inhibitor.

Purity: 99.47%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 10 mg, 50 mg, 100 mg

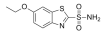


Ethoxzolamide
(Redupresin; L-643786; PNU-4191)

Cat. No.: HY-B1480

Bioactivity: Ethoxzolamide is a **carbonic anhydrase** inhibitor with **K_i** of 1 nM.

Purity: 98.78%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg



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

Indisulam

(E 7070)

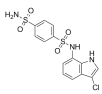
Cat. No.: HY-13650

Bioactivity: Indisulam (E 7070) is a **carbonic anhydrase** inhibitor and a G1-targeting agent. Indisulam causes a blockade in the G1/S transition through inhibition of the activation of both cyclin-dependent kinase 2 (CDK2) and cyclin E. Shows anti-tumor activity in human colon and lung cancer cells [1]...

Purity: >98%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg



Methazolamide

(L584601)

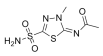
Cat. No.: HY-B0553

Bioactivity: Methazolamide is a carbonic anhydrase inhibitor used to treat glaucoma.

Purity: 97.72%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 1 g, 5 g



Sultiame

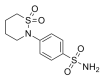
Cat. No.: HY-108316

Bioactivity: Sultiame is a **carbonic anhydrase** inhibitor, widely used as an antiepileptic drug.

Purity: 99.11%

Clinical Data: No Development Reported

Size: 5 mg



Tioxolone

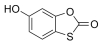
Cat. No.: HY-B0483

Bioactivity: Tioxolone, a metalloenzyme carbonic anhydrase I inhibitor, is an anti-acne preparation.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 1 g



U-104

(NSC-213841; MST-104)

Cat. No.: HY-13513

Bioactivity: U-104 is a potent carbonic anhydrase (CA) inhibitor for CA IX and CA XII with Ki of 45.1 nM and 4.5 nM; low inhibition for CA I and CA II.

Purity: 99.55%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg