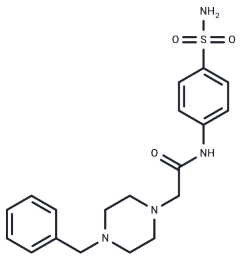
Data Sheet (Cat.No.T61745)

TargetMol

hCAI/II-IN-6

Chemical Properties



CAS No. : 694466-00-7

Formula: C19H24N4O3S

Molecular Weight: 388.48

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	hCAI/II-IN-6 is a selective and orally active inhibitor of human carbonic anhydrase (CA). hCAI/II-IN-6 inhibited hCA I, hCA II, hCA VII, and hCA XII with Ki values of 220, 4.9, 6.5, and > 50,000 nM. hCAI/II-IN-6 showed anticonvulsant activity in vivo. hCAI/II-IN-6 can be used to study epilepsy. hCAI/II-IN-6 showed anticonvulsant activity in vivo. hCAI/II-IN-6 can be used to study epilepsy.
Targets(IC50)	Carbonic Anhydrase
In vitro	hCAI/II-IN-6 (0-50 μM) inhibits the activities of hCA I, hCA II, hCA VII, and hCA XII, with Ki values of 220 nM, 4.9 nM, 6.5 nM, and >50000 nM, respectively.[1]
In vivo	In vivo, hCAI/II-IN-6 (30-100mg/kg; i.p. once; Swiss albino mice) provided seizure attenuation and good anticonvulsant effect and showed an ED 50 of 13.7mg/kg in anticonvulsant quantification study. [1] In vivo, hCAI/II-IN-6 (30 mg/kg; p.o.; once; Swiss albino mice) has been observed to possess anti-MES (maximal electroshock seizure) activity.[1]

Solubility Information

Solubility	DMSO: 225 mg/mL (579.18 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5741 mL	12.8707 mL	25.7414 mL
5 mM	0.5148 mL	2.5741 mL	5.1483 mL
10 mM	0.2574 mL	1.2871 mL	2.5741 mL
50 mM	0.0515 mL	0.2574 mL	0.5148 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Mishra CB, et al. Discovery of Benzenesulfonamides with Potent Human Carbonic Anhydrase Inhibitory and Effective Anticonvulsant Action: Design, Synthesis, and Pharmacological Assessment. J Med Chem. 2017;60(6): 2456-2469.