Data Sheet (Cat.No.T10813)

TargetMol

Cilobradine hydrochloride

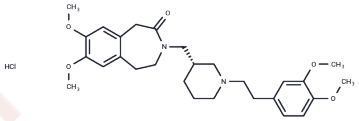
Chemical Properties

CAS No. : 186097-54-1

Formula: C28H39ClN2O5

Molecular Weight: 519.07

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	Cilobradine hydrochloride (DK-AH 269) is an HCN Channel blocker and an open channel blocker of neuronal Ih and related cardiac If channels.
Targets(IC50)	HCN Channel
In vitro	Cilobradine hydrochloride is an HCN channel blocker that is about 3 times more potent than ZD7288. At a concentration of 10 μM, Cilobradine hydrochloride inhibits WT mHCN2 channel current by 86%. In contrast, I432A and A425G channel currents were only reduced by 14% and 19%, respectively, by this concentration of Cilobradine hydrochloride. The double mutant (I432A/A425G) channel was even less sensitive to 10 μM Cilobradine hydrochloride (8 ± 2% inhibition)[1].

Solubility Information

Solubility	DMSO: 112.5 mg/mL (216.73 mM),Sonication is recommended. H2O: 91 mg/mL (175.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9265 mL	9.6326 mL	19.2652 mL
5 mM	0.3853 mL	1.9265 mL	3.853 mL
10 mM	0.1927 mL	0.9633 mL	1.9265 mL
50 mM	0.0385 mL	0.1927 mL	0.3853 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

Cheng L, et al. Molecular mapping of the binding site for a blocker of hyperpolarization-activated, cyclic nucleotide-modulated pacemaker channels. J Pharmacol Exp Ther. 2007 Sep;322(3):931-939.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481