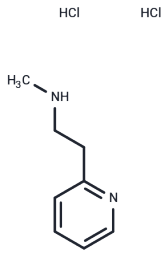
Data Sheet (Cat.No.T0246)

TargetMol

Betahistine dihydrochloride

Chemical Properties



CAS No. : 5579-84-0

Formula: C8H14Cl2N2

Molecular Weight: 209.12

Appearance: no data available

Storage: keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Betahistine dihydrochloride (Betahistine 2HCl) is a histamine analog and H1 receptor agonist that serves as a vasodilator.
Targets(IC50)	Histamine Receptor
In vitro	In mice, Betahistine (ED50=2 mg/kg) elevates t-MeHA levels in a dose-dependent manner. In patients with Ménière's disease, Betahistine (16 mg, twice daily for 3 months) significantly alleviates vertigo. Additionally, Betahistine (50 mg/kg) induces an upregulation of histidine decarboxylase mRNA in the nodose ganglion of the cat brain.
In vivo	In CHO(H3R) cells treated with 3 μM of, Betahistine progressively increased cAMP formation, peaking at 10 nM. Furthermore, in CHO(H3R) cells, Betahistine progressively reduced A23187-induced [3H]arachidonic acid release (EC50=0.1 nM), with the greatest effect observed at 30 nM.

Solubility Information

Solubility	DMSO: 50 mg/mL (239.1 mM),Sonication is recommended. H2O: 35 mg/mL (167.37 mM),Sonication is recommended. Ethanol: 1 mg/mL (4.78 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.7819 mL	23.9097 mL	47.8194 mL
5 mM	0.9564 mL	4.7819 mL	9.5639 mL
10 mM	0.4782 mL	2.391 mL	4.7819 mL
50 mM	0.0956 mL	0.4782 mL	0.9564 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.

Reference

Gbahou F, et al. J Pharmacol Exp Ther, 2010, 334(3), 945-954.
Mira E, et al. Eur Arch Otorhinolaryngol, 2003, 260(2), 73-77.
Strupp M, et al. Acta Otolaryngol, 2008, 128(5), 520-524.
Tighilet B, et al. Eur J Pharmacol, 2002, 446(1-3), 63-73.

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481