Data Sheet (Cat.No.T6488)

TargetMol

Epinastine hydrochloride

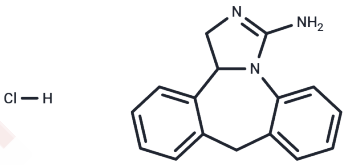
Chemical Properties

CAS No. : 108929-04-0

Formula: C16H15N3·HCl

Molecular Weight: 285.77

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	Epinastine hydrochloride (WAL-801CL HCl) is an antihistamine and mast cell stabilizer that is used in eye drops to treat allergic conjunctivitis.
Targets(IC50)	5-HT Receptor,Histamine Receptor,Interleukin
In vitro	Epinastine shows a high affinity to H1-receptors in receptor binding studies in the guinea pig ileum. [1] Epinastine is able to displace specific [3H]NC-5Z binding at low concentrations in the locust nervous tissue. Epinastine binds to the honey bees neuronal octopamine receptor with Ki of 1.1 nM. Epinastine antagonises octopamine-induced cAMP formation in the insect brain. [2] Epinastine causes an inhibition of histamine release from rat peritoneal mast cells induced by both antigen-antibody reaction and compound 48/80. Epinastine is similarly effective in inhibiting compound 48/80-induced histamine release not only from isolated rat peritoneal mast cells but also from rat mesenterial pieces. Epinastine is effective in inhibiting not only Ca2+ uptake into lung mast cells in actively sensitized guinea pigs but also Ca2+ release from the intracellular Ca store of rat peritoneal mast cells exposed to both compound 48/80 and substance P. [3] Epinastine shows a dose- and time-dependent suppressive effect on IL-8, one of the chemokines for eosinophils, released from eosinophils isolated from atopic diseases. [4]
In vivo	Epinastine inhibits histamine-induced reactions in the skin or the lung of rats, dogs and guinea pigs. [1]

Solubility Information

Solubility	DMSO: 50 mg/mL (174.97 mM),Sonication is recommended. H2O: 52 mg/mL (181.96 mM),Sonication is recommended. Ethanol: 53 mg/mL (185.46 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (7 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4993 mL	17.4966 mL	34.9932 mL
5 mM	0.6999 mL	3.4993 mL	6.9986 mL
10 mM	0.3499 mL	1.7497 mL	3.4993 mL
50 mM	0.070 mL	0.3499 mL	0.6999 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

Fügner A, et al. Arzneimittelforschung. 1988 Oct;38(10):1446-53.
Roeder T, et al. Eur J Pharmacol, 1998, 349(2-3), 171-177.
Kamei C, et al. Immunopharmacol Immunotoxicol, 1992, 14(1-2), 191-205.
Kohyama T, et al. Biochem Biophys Res Commun, 1997, 230(1), 125-128.