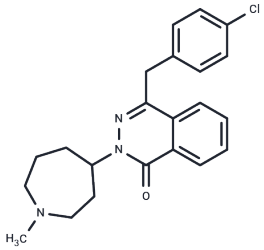
Data Sheet (Cat.No.T0211L)

TargetMol

Azelastine hydrochloride

Chemical Properties



CAS No. :	79307-93-0
Formula:	C22H24ClN3O·HCl
Molecular Weight:	418.36
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	Azelastine hydrochloride (Astelin) is a phthalazinone derivative with antihistaminergic activity.
Targets(IC50)	Histamine Receptor,SARS-CoV
In vivo	In the rat basophilic leukemia RBL-2H3 cell line, Azelastine inhibited antigen (Ag)-induced TNF-alpha release (IC50=25.7 mM) and ionomycin-induced TNF-alpha release (IC50=1.66 mM). In mouse peritoneal macrophages, Azelastine suppressed inducible nitric oxide synthase (iNOS) mRNA expression and nitric oxide (NO) production. In normal human mast cells, Azelastine inhibited the secretion of IL-6, TNF-alpha, and IL-8, and the activation of NF-κB, as well as intracellular calcium levels. In human gingival fibroblasts, Azelastine dose-dependently inhibited DNA and protein synthesis.

Solubility Information

Solubility	DMSO: 84 mg/mL (200.78 mM),Sonication is recommended. H2O: 35 mg/mL (83.66 mM),Sonication is recommended. Ethanol: 57 mg/mL (136.25 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: 3.3 mg/mL (7.89 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	2.3903 mL	11.9514 mL	23.9029 mL
5 mM	0.4781 mL	2.3903 mL	4.7806 mL
10 mM	0.239 mL	1.1951 mL	2.3903 mL
50 mM	0.0478 mL	0.239 mL	0.4781 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

Hide I, et al. J Immunol,1997, 159(6), 2932-2940.
Bowden G D, Land K M, O'Connor R M, et al. High-throughput screen of drug repurposing library identifies inhibitors of Sarcocystis neurona growth. International Journal for Parasitology: Drugs and Drug Resistance. 2018 Apr；8(1): 137-144
Yoneda K, et al. Jpn J Pharmacol,1997, 73(2), 145-153.
Kempuraj D, et al. Int Arch Allergy Immunol,2003, 132(3), 231-239.
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