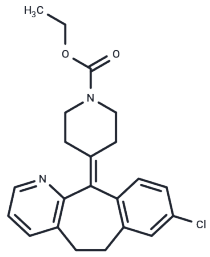
Data Sheet (Cat.No.T1097)

TargetMol

Loratadine

Chemical Properties



CAS No. : 79794-75-5

Formula: C22H23ClN2O2

Molecular Weight: 382.88

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	Loratadine (SCH 29851) is a second-generation histamine H1 receptor antagonist used in the treatment of allergic rhinitis and urticaria. Unlike most classical antihistamines (HISTAMINE H1 ANTAGONISTS) it lacks central nervous system depressing effects such as drowsiness.
Targets(IC50)	Anti-infection,Histamine Receptor,Influenza Virus
In vivo	Loratadine blocks Kv1.5 channels in a concentration-, voltage-, time-, and use-dependent manner when expressed in human Ltk-cells transfected with the hKv1.5 channel gene at concentrations exceeding therapeutic plasma levels. It also inhibits rhinovirus-induced upregulation of ICAM-1 in main bronchial or transformed respiratory epithelial cells. Identified as a selective inhibitor of B(0)AT 2 with an IC50 of 4 μM, loratadine exhibits low or no activity against several other members of the SLC6 family. Pre-incubation with loratadine concentration-dependently suppresses the release of histamine and LTC4 in human FcεRI+ cells upon challenge with Der p1 antigen or anti-FcεRI. In human umbilical vein endothelial cells, loratadine significantly inhibits histamine-induced secretion of IL-6 and IL-8, with its active metabolites showing even stronger effects. Additionally, loratadine in a dose-dependent manner inhibits the mRNA of ICAM-1 induced by rhinovirus infection and completely suppresses the activation of the rhinovirus-induced ICAM-1 promoter.

Solubility Information

Solubility	Ethanol: 77 mg/mL (201.11 mM),Sonication is recommended. DMSO: 25 mg/mL (65.29 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 (5.22 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	2.6118 mL	13.0589 mL	26.1178 mL
5 mM	0.5224 mL	2.6118 mL	5.2236 mL
10 mM	0.2612 mL	1.3059 mL	2.6118 mL
50 mM	0.0522 mL	0.2612 mL	0.5224 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

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Genovese A, et al. Clin Exp Allergy, 1997, 27(5), 559-567.
Molet S, et al. Clin Exp Allergy, 1997, 27(10), 1167-1174.
Delpón E, et al. Cardiovasc Res. 1997 Aug;35(2):341-50.
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