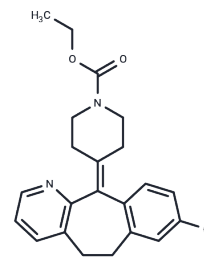


## Loratadine

## Chemical Properties

CAS No. :	79794-75-5
Formula:	C <sub>22</sub> H <sub>23</sub> ClN <sub>2</sub> O <sub>2</sub>
Molecular Weight:	382.88
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## 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)	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 IC <sub>50</sub> 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 LTC <sub>4</sub> 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: 50 mg/mL (130.59 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## 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.

## Reference

Cuboni S, et al. J Med Chem, 2014, 57(22), 9473-9479.

Wang W, Li J, Qi W, et al. Drug repurposing for hard-to-treat human alveolar echinococcosis: pyronaridine and beyond. Parasitology. 2024: 1-8.

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.

Papi A, et al. J Allergy Clin Immunol, 2001, 108(2), 221-228.

**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: 36 Washington Street, Wellesley Hills, MA 02481