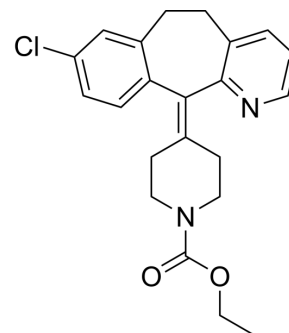


## Loratadine

<b>Cat. No.:</b>	HY-17043		
<b>CAS No.:</b>	79794-75-5		
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>23</sub> ClN <sub>2</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	382.88		
<b>Target:</b>	Histamine Receptor; Influenza Virus		
<b>Pathway:</b>	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling; Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (130.59 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	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	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (6.53 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.53 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (6.53 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Loratadine (SCH-29851) is a selective inverse peripheral histamine H <sub>1</sub> -receptor agonist with an IC <sub>50</sub> of >32 μM. Loratadine has anti-dengue-virus (DENV) activity. Loratadine can inhibit immunologic release of inflammatory mediators.
<b>IC<sub>50</sub> &amp; Target</b>	H <sub>1</sub> Receptor
<b>In Vitro</b>	Loratadine is an antihistamine that inhibits histamine-induced activities of IL-6 and IL-8 secretion in endothelial cells. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## CUSTOMER VALIDATION

- iScience. 5 January 2022, 103731.
- Sci Rep. 2021 Jul 22;11(1):14948.
- J Clin Psychopharmacol. 2022 Jun 2.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

---

## REFERENCES

- [1]. Kay GG, Harris AG. Loratadine: a non-sedating antihistamine. Review of its effects on cognition, psychomotor performance, mood and sedation. *Clin Exp Allergy*. 1999 Jul;29 Suppl 3:147-50.
  - [2]. Menardo JL, Horak F, Danzig MR, Czarlewski W. A review of loratadine in the treatment of patients with allergic bronchial asthma. *Clin Ther*. 1997 Nov-Dec;19(6):1278-93; discussion 1523-4.
  - [3]. Monroe EW. Loratadine in the treatment of urticaria. *Clin Ther*. 1997 Mar-Apr;19(2):232-42.
  - [4]. Haria M, Fitton A, Peters DH. Loratadine. A reappraisal of its pharmacological properties and therapeutic use in allergic disorders. *Drugs*. 1994 Oct;48(4):617-37.
  - [5]. Roman IJ, Danzig MR. Loratadine. A review of recent findings in pharmacology, pharmacokinetics, efficacy, and safety, with a look at its use in combination with pseudoephedrine. *Clin Rev Allergy*. 1993 Spring;11(1):89-110.
  - [6]. Shahan M, et al. Dengue virus causes changes of MicroRNA-genes regulatory network revealing potential targets for antiviral drugs. *BMC Syst Biol*. 2018 Jan 4;12(1):2.
  - [7]. Kleine-Tebbe J, et al. Inhibition of IgE- and non-IgE-mediated histamine release from human basophil leukocytes in vitro by a histamine H1-antagonist, desethoxycarbonyl-loratadine. *J Allergy Clin Immunol*. 1994;93(2):494-500.
- 

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA