Triprolidine hydrochloride monohydrate

Cat. No.: HY-B1301

CAS No.: 6138-79-0

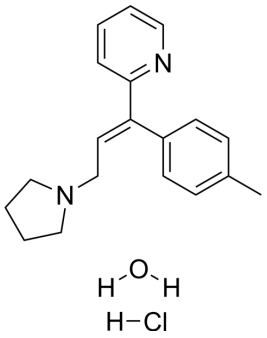
Molecular Formula: $C_{19}H_{25}ClN_2O$

Molecular Weight: 332.87

Target: Histamine Receptor

Pathway: GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (300.42 mM; Need ultrasonic)
H_2O : 100 mg/mL (300.42 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.0042 mL	15.0209 mL	30.0418 mL
5 mM	0.6008 mL	3.0042 mL	6.0084 mL
10 mM	0.3004 mL	1.5021 mL	3.0042 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (300.42 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (7.51 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.51 mM); Clear solution
4. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.51 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Triprolidine hydrochloride monohydrate, a first-generation antihistamine, is an oral active histamine H1 antagonist. Triprolidine hydrochloride monohydrate can be used for the research of allergic rhinitis. Triprolidine hydrochloride monohydrate exhibits spinal motor and sensory block in rats[1][2][3].

IC_{50} & Target

H_1 Receptor

In Vivo

Triprolidine hydrochloride monohydrate (292.81-1467.20 μg/kg; intrathecal injection) produces a dose-dependent effect of spinal motor and sensory block in rats[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley rat (300-350 g)[3]
Dosage:	292.81 μg/kg, 488.02 μg/kg, 733.60μg/kg, 1098.83 μg/kg, 1467.20 μg/kg
Administration:	Intrathecal injection
Result:	Elicited a dose-dependent spinal block.

REFERENCES

[1]. K J Simons, et al. An investigation of the H1-receptor antagonist triprolidine: pharmacokinetics and antihistaminic effects. J Allergy Clin Immunol. 1986 Feb;77(2):326-30.

[2]. D L Deal, et al. Disposition and metabolism of triprolidine in mice. Drug Metab Dispos. Nov-Dec 1992;20(6):920-7.

[3]. Jann-Inn Tzeng, et al. Spinal sensory and motor blockade by intrathecal doxylamine and triprolidine in rats. J Pharm Pharmacol. 2018 Dec;70(12):1654-1661.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

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