Lodoxamide tromethamine

Cat. No.: HY-16289

CAS No.: 63610-09-3

Molecular Formula: $C_{19}H_{28}ClN_5O_{12}$

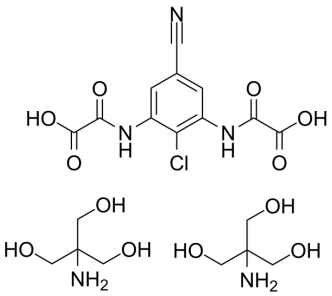
Molecular Weight: 553.9

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 : 20 mg/mL (36.11 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.8054 mL	9.0269 mL	18.0538 mL
	5 mM	0.3611 mL	1.8054 mL	3.6108 mL
	10 mM	0.1805 mL	0.9027 mL	1.8054 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (3.76 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (3.76 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (3.76 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Lodoxamide tromethamine (U-42585E) is a medication for the treatment of prophylaxis of mast cell-mediated allergic disease.

In Vitro

lodoxamide inhibits compound 48/80-induced histamine release and ionophore-induced ^{45}Ca influx with associated histamine release in purified rat peritoneal mast cells[1].

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

In Vivo

Lodoxamide has been demonstrated to have cromolyn-like activity when studied in the rat peritoneal mast cell assay (PCA) model3 and in Ascaris antigen-sensitized rhesus monkeys. When given intravenously, orally, or intrabronchially by aerosol,

lodoxamide significantly inhibits the increased respiratory frequency and decreased tidal volume induced by antigen challenge in Ascaris-sensitized. anesthetized rhesus monkeys[1]. Addition of lodoxamide tromethamine to Euro-Collins or University of Wisconsin solution results in a marked decrease in lung reperfusion injury as demonstrated by increased oxygenation, decreased microvascular permeability, and increased compliance[2]. Patients treated with lodoxamide tromethamine demonstrate an improvement in daytime breathing difficulty, cough, sputum production, and sleep[3].

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

REFERENCES

[1]. Watt GD, et al. Protective effect opf lodoxamide tromethamine on allergen inhalation challenge. J Allergy Clin Immunol. 1980 Oct;66(4):286-94.

[2]. Barr ML, et al. Addition of a mast cell stabilizing compound to organ preservation solutions decreases lung reperfusion injury. J Thorac Cardiovasc Surg. 1998 Mar;115(3):631-6; discussion 636-7.

[3]. Mann JS, et al. Inhaled lodoxamide tromethamine in the treatment of perennial asthma: a double-blind placebo-controlled study. J Allergy Clin Immunol. 1985 Jul;76(1):83-90.

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