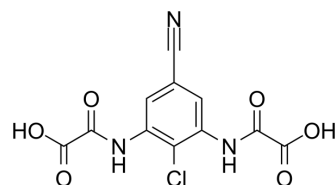


Lodoxamide

Cat. No.:	HY-14270		
CAS No.:	53882-12-5		
Molecular Formula:	C ₁₁ H ₆ ClN ₃ O ₆		
Molecular Weight:	311.63		
Target:	Histamine Receptor		
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (160.45 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.2089 mL	16.0447 mL	32.0893 mL
		5 mM	0.6418 mL	3.2089 mL	6.4179 mL
10 mM		0.3209 mL	1.6045 mL	3.2089 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 3.57 mg/mL (11.46 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.02 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.02 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Lodoxamide (U-42585E free acid) is an antiallergic compound acting as a mast-cell stabilizer for the treatment of asthma and allergic conjunctivitis.
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] . The chemotactic response of eosinophils to fMLP as well as to IL-5 is significant and dose-dependent inhibited by Lodoxamide. Lodoxamide is also able to strongly inhibit the release of eosinophil peroxidase after IgA-dependent activation and, to a lesser extent, the release of eosinophil cationic protein and

	eosinophil-derived neurotoxin ^[2] . 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) model ³ 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 ^[3] . Patients treated with lodoxamide tromethamine demonstrate an improvement in daytime breathing difficulty, cough, sputum production, and sleep ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Watt GD, et al. Protective effect of lodoxamide tromethamine on allergen inhalation challenge. *J Allergy Clin Immunol*. 1980 Oct;66(4):286-94.
- [2]. Capron M, et al. Inhibitory effects of lodoxamide on eosinophil activation. *Int Arch Allergy Immunol*. 1998 Jun;116(2):140-6.
- [3]. 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.
- [4]. 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.
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Caution: Product has not been fully validated for medical applications. For research use only.

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