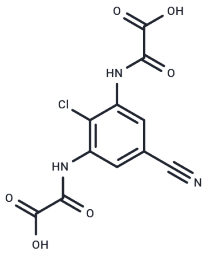
Data Sheet (Cat.No.T4566)

TargetMol

Lodoxamide

Chemical Properties



CAS No. : 53882-12-5

Formula: C11H6ClN3O6

Molecular Weight: 311.63

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Lodoxamide (Lodoxamidum) is an antiallergic drug acting as a mast-cell stabilizer. It is effective in the treatment of asthma and allergic conjunctivitis.
Targets(IC50)	Histamine Receptor
In vitro	Lodoxamide effectively inhibits histamine release induced by compound 48/80 and reduces 45Ca influx triggered by ionophores, accompanied by a decrease in histamine release in purified rat peritoneal mast cells [1]. Moreover, it significantly and dose-dependently suppresses eosinophil chemotaxis towards fMLP and IL-5. Additionally, Lodoxamide robustly inhibits the release of eosinophil peroxidase following IgA-dependent activation and, to a lesser extent, the release of eosinophil cationic protein and eosinophil-derived neurotoxin [2].
In vivo	Lodoxamide has been demonstrated to have cromolyn-like activity when studied in the rat peritoneal mast cell assay (PCA) model 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. anaesthetized 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].

Solubility Information

Solubility	DMSO: 250 mg/mL (802.23 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (32.09 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (32.09 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0642 mL	0.3209 mL	0.6418 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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

Capron M,et al. Inhibitory effects of lodoxamide on eosinophil activation. Int Arch Allergy Immunol. 1998 Jun;116 (2):140-6.

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.