

Ontazolast

Chemical Properties

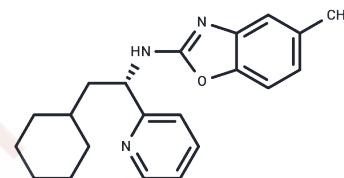
CAS No. : 147432-77-7

Formula: C₂₁H₂₅N₃O

Molecular Weight: 335.44

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	Ontazolast is a small molecule leukotriene B4 receptor (LTB4R) antagonist for the treatment of immune system disorders and respiratory diseases. Ontazolast is a candidate compound for the treatment of asthma.
Targets(IC50)	LTR, Leukotriene Receptor
In vivo	Ontazolast is a potent inhibitor (IC ₅₀ = 1 nM) of calcium ionophore A23187-stimulated leukotriene B4 (LTB4) biosynthesis in human peripheral blood leukocytes. The emulsion formulation and three additional lipid-based formulations were administered by gavage to conscious, minimally restrained rats in a novel, double-cannulated model to determine the effects of formulation on systemic blood absorption and mesenteric lymph transport of ontazolast. The bioavailability of ontazolast was significantly and substantially enhanced by all of the lipid-based formulations. While these formulations also significantly increased the amount of ontazolast transported by the lymph, the total amounts transported were insufficient to account for the improvement in bioavailability, which may be due to the elimination or reduction of the barriers of poor aqueous solubility and slow dissolution to absorption of ontazolast from the gastrointestinal tract, or the effects of lipid on the gastrointestinal membrane permeability, transit time, or metabolism of ontazolast.[1]

Solubility Information

Solubility	DMSO: 50 mg/mL (149.06 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9812 mL	14.9058 mL	29.8116 mL
5 mM	0.5962 mL	2.9812 mL	5.9623 mL
10 mM	0.2981 mL	1.4906 mL	2.9812 mL
50 mM	0.0596 mL	0.2981 mL	0.5962 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

Hamlin RL, et al. Hemodynamic and electrophysiologic effects of ontazolast in dogs. Am J Vet Res. 2000;61(11): 1364-1368.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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