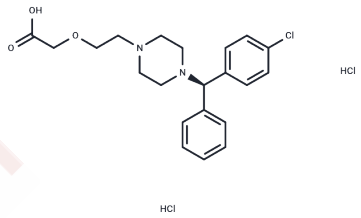
Data Sheet (Cat.No.T22354)

TargetMol

Levocetirizine Dihydrochloride

Chemical Properties



CAS No. : 130018-87-0

Formula: C21H27Cl3N2O3

Molecular Weight: 461.81

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	Levocetirizine Dihydrochloride (Xyzal Dihydrochloride) is a third-generation peripheral H1-receptor antagonist. Acting as an antihistaminic agent, it specifically targets the histamine H1-receptor. Levocetirizine Dihydrochloride is the R-enantiomer of Cetirizine, which gives it a higher affinity for the H1-receptor than the S-enantiomer. Due to this enhanced affinity, Levocetirizine Dihydrochloride is effective in treating allergic rhinitis and chronic idiopathic urticaria.
Targets(IC50)	Histamine Receptor
In vivo	Levocetirizine (0.4 mg/kg; oral administration; male Sprague-Dawley rats) yields a Cmax of 0.34 μg/mL, an AUC0-t of 3.26 μg h/mL, an AUC0-∞ of 3.67 μg h/mL, and a t1/2 of 2.34 hours in Sprague-Dawley rats[1].

Solubility Information

Solubility	H2O: 90 mg/mL (194.89 mM),Sonication is recommended. DMSO: 50 mg/mL (108.27 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: 2 mg/mL (4.33 mM),Sonication is recommended. *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	2.1654 mL	10.827 mL	21.6539 mL
5 mM	0.4331 mL	2.1654 mL	4.3308 mL
10 mM	0.2165 mL	1.0827 mL	2.1654 mL
50 mM	0.0433 mL	0.2165 mL	0.4331 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

Lohar P, et al. Simultaneous bioanalysis and pharmacokinetic interaction study of acebrophylline, levocetirizine and pranlukast in Sprague-Dawley rats. Biomed Chromatogr. 2019 Dec;33(12):e4672.