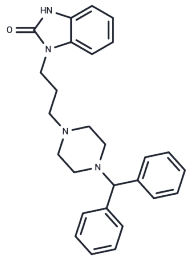
Data Sheet (Cat.No.T19839)

TargetMol

Oxatomide

Chemical Properties



CAS No. : 60607-34-3

Formula: C27H30N4O

Molecular Weight: 426.55

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	Oxatomide (Oxatomida) is a potent and orally active dual H1 histamine receptor and P2X7 receptor antagonist with antihistamine and antiallergic activity.Oxatomide can be used to block ATP-induced currents in the human P2X7 receptor with an IC50 value of 0.95 μM.Oxatomide has an inhibitory effect on ATP-induced Ca2+ inward currents with an IC50 value of 0.43 μM.Oxatomide inhibits 5-hydroxytryptamine. Oxatomide inhibits 5-hydroxytryptamine with an IC50 of 0.43 μM.Oxatomide is used in the treatment of immune system diseases and in the study of hypersensitivity reactions.
Targets(IC50)	Apoptosis,Calcium Channel,5-HT Receptor,Histamine Receptor,COX,P2X Receptor,p38 MAPK,PERK
In vitro	Oxatomide almost completely blocks the ATP-induced current in human P2X7 receptors (IC50 of 0.95 μM). Oxatomide inhibits ATP-induced Ca2+ influx with an IC50 value of 0.43 μM and also inhibits serotonin.[1]

Solubility Information

Solubility	DMSO: 170.62 mg/mL (400 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: 4 mg/mL (9.38 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	2.3444 mL	11.722 mL	23.4439 mL
5 mM	0.4689 mL	2.3444 mL	4.6888 mL
10 mM	0.2344 mL	1.1722 mL	2.3444 mL
50 mM	0.0469 mL	0.2344 mL	0.4689 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

Yoshida K, et al. P2X7 receptor antagonist activity of the anti-allergic agent oxatomide. Eur J Pharmacol. 2015;767: 41-51.

Ohmori K, et al. Pharmacological studies on oxatomide (KW-4354). (7) Antagonistic effects on chemical mediators. Nihon Yakurigaku Zasshi. 1983;81(5):399-409.

Raschi E, et al. The Contribution of National Spontaneous Reporting Systems to Detect Signals of Torsadogenicity: Issues Emerging from the ARITMO Project. Drug Saf. 2016 Jan;39(1):59-68.

Curtin Whelan L, Geary M, Sweetman P. Development and validation of a rapid liquid chromatographic method for the determination of oxatomide and its related impurities. J Chromatogr Sci. 2014 Nov-Dec;52(10):1267-72.