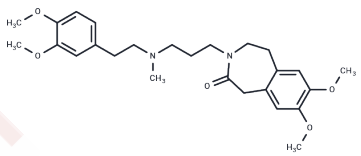
Data Sheet (Cat.No.T13387)

TargetMol

Zatebradine

Chemical Properties



CAS No. : 85175-67-3

Formula: C26H36N2O5

Molecular Weight: 456.57

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	Zatebradine is a potent hyperpolarization-activated cyclic nucleotide-gated (HCN) channels inhibitor(IC50 of 1.96 μM).
Targets(IC50)	HCN Channel,Dopamine Receptor
In vitro	Zatebradine exhibits a use-dependent blockade of the cardiac pacemaker current in rabbit sino-atrial node cells (Kd 480 nM) [2].
In vivo	In male C57/Bl6-mice, Zatebradine (0-20 mg/kg; intraperitoneal injection; for 30 minutes) reduces the heart rate dose-dependently from 600 to 200 bpm with ED50 value of 1.8 mg/kg and induces increasing arrhythmia[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (109.51 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: 2.5 mg/mL (5.48 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	2.1902 mL	10.9512 mL	21.9024 mL
5 mM	0.438 mL	2.1902 mL	4.3805 mL
10 mM	0.219 mL	1.0951 mL	2.1902 mL
50 mM	0.0438 mL	0.219 mL	0.438 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

Stieber J, et al. Bradycardic and proarrhythmic properties of sinus node inhibitors. Mol Pharmacol. 2006 Apr;69(4): 1328-37. Epub 2005 Dec 30.

Van Bogaert PP, et al. Use-dependent blockade of cardiac pacemaker current (If) by cilobradine and zatebradine. Eur J Pharmacol. 2003 Oct 8;478(2-3):161-71.