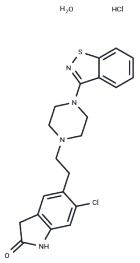
Data Sheet (Cat.No.T0031)

TargetMol

Ziprasidone hydrochloride monohydrate

Chemical Properties



CAS No. : 138982-67-9

Formula: C21H21ClN4OS·HCl·H2O

Molecular Weight: 467.12

Storage: Store at low temperature
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	Ziprasidone hydrochloride monohydrate (CP 88059) is a united 5-HT (serotonin) and dopamine receptor antagonist which shows potent effects of the antipsychotic activity.
Targets(IC50)	5-HT Receptor,Adrenergic Receptor,Norepinephrine,Histamine Receptor,Dopamine Receptor
In vitro	Ziprasidone blocked wild-type hERG currents in a voltage- and concentration-dependent manner in stably transfected HEK-293 cells with an IC(50) of 120 nM. Ziprasidone exhibited minimal hERG Ziprasidone significantly increased the time constant of the slow response to hERG current deactivation (-50 mV). ziprasidone is a 5-HT(1A) receptor agonist, as well as a 5-HT(2A), 5-HT(2C) and 5-HT(1B/1D) receptor antagonist. Ziprasidone is similar to the antidepressant promethazine in inhibiting the neuronal uptake of 5-HT and norepinephrine.Ziprasidone exhibits high affinity for human 5-HT receptors and human dopamine D(2) receptors.
In vivo	Ziprasidone blocked wild-type hERG currents in a voltage- and concentration-dependent manner in stably transfected HEK-293 cells with an IC(50) of 120 nM. Ziprasidone exhibited minimal hERG Ziprasidone significantly increased the time constant of the slow response to hERG current deactivation (-50 mV). ziprasidone is a 5-HT(1A) receptor agonist, as well as a 5-HT(2A), 5-HT(2C) and 5-HT(1B/1D) receptor antagonist. Ziprasidone is similar to the antidepressant promethazine in inhibiting the neuronal uptake of 5-HT and norepinephrine.Ziprasidone exhibits high affinity for human 5-HT receptors and human dopamine D(2) receptors.

Solubility Information

Solubility	DMSO: 4.67 mg/mL (10 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: 1 mg/mL (2.14 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	2.1408 mL	10.7039 mL	21.4078 mL
5 mM	0.4282 mL	2.1408 mL	4.2816 mL
10 mM	0.2141 mL	1.0704 mL	2.1408 mL
50 mM	0.0428 mL	0.2141 mL	0.4282 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

Seeger TF, et al. J Pharmacol Exp Ther. 1995 Oct;275(1):101-13.