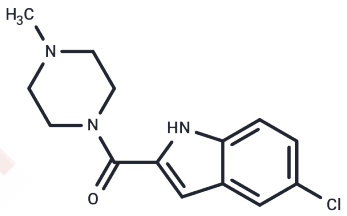
Data Sheet (Cat.No.T2232)

TargetMol

JNJ-7777120

Chemical Properties



CAS No. : 459168-41-3

Formula: C14H16ClN3O

Molecular Weight: 277.75

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	JNJ-7777120 is the first potent and selective non-imidazole histamine H4 receptor antagonist with Ki of 4.5 nM, exhibits >1000-fold selectivity over the other histamin receptors.
Targets(IC50)	Histamine Receptor
In vitro	JNJ 7777120 administration in mice inhibits the migration of tracheal mast cells from connective to epithelial tissues induced by histamine. Furthermore, JNJ 7777120 treatment in mice-derived bone marrow mast cells suppresses histamine-induced chemotaxis and calcium influx. In a peritonitis model induced by yeast polysaccharides in mice, JNJ 7777120 markedly inhibits neutrophil infiltration. The compound demonstrates oral bioavailability, with a 30% rate in rats and 100% in dogs, and a half-life of 3 hours for both species.
In vivo	JNJ 7777120 is an effective, selective antagonist for the H4 receptor, with little to no affinity for over 50 other targets. It binds with high affinity to the H4 receptor, exhibiting over a thousand times greater selectivity compared to other histamine receptors.

Solubility Information

Solubility	DMSO: 62.5 mg/mL (225.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 6.25 mg/mL (22.5 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 6.25 mg/mL (22.5 mM),Solution. *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	3.6004 mL	18.0018 mL	36.0036 mL
5 mM	0.7201 mL	3.6004 mL	7.2007 mL
10 mM	0.360 mL	1.8002 mL	3.6004 mL
50 mM	0.072 mL	0.360 mL	0.7201 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

Jablonowski JA, et al. J Med Chem, 2003, 46(19), 3957-3960.
Thurmond RL, et al. J Pharmacol Exp Ther, 2004, 309(1), 404-413.