Data Sheet (Cat.No.T67956L)

TargetMol

Litoxetine HCl

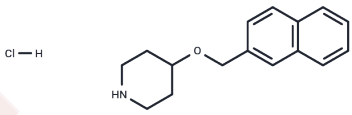
Chemical Properties

CAS No. :

Formula: C16H20ClNO

Molecular Weight: 277.79

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	Litoxetine HCl is a selective 5-hydroxytryptamine (5-HT) reuptake inhibitor (SSRI) and mixed 5-hydroxytryptamine antagonist used in the treatment of urinary incontinence. Litoxetine HCl in the absence of antimuscarinic concentrations without antimuscarinic properties (10 nM-1 microM) caused concentration-dependent relaxation of isolated oesophageal muscle mucosa in rats, reducing carbachol tone by up to 37%. Higher concentrations of Litoxetine HCl (3 microM-300 microM) were associated with significant relaxation up to abolition of carbachol tone. The antiarrhythmic activity of Litoxetine HCl, previously demonstrated in the isolated guinea pig intestine, was exerted in the isolated rat oesophageal muscle mucosa at concentrations greater than 1 microM. The 5-HT-releasing effect of Litoxetine HCl could explain the potency of Litoxetine HCl on 5-HT-induced relaxation in untreated rat tissue, which was reversed by pCPA treatment.
Targets(IC50)	5-HT Receptor
In vitro	Litoxetine HCl (0.3-3 microM) antagonized the high- and low-potency phases of the 5-HT curve.[1] Litoxetine HCl (1 and 3 microM) responses to 5-MeOT were shifted to the right in a concentration-dependent manner.[1]
In vivo	Litoxetine HCl (twice daily for 4 days), a novel specific serotonin reuptake inhibitor.[2]

Solubility Information

Solubility	DMSO: 22.5 mg/mL (81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5998 mL	17.9992 mL	35.9984 mL
5 mM	0.720 mL	3.5998 mL	7.1997 mL
10 mM	0.360 mL	1.7999 mL	3.5998 mL
50 mM	0.072 mL	0.360 mL	0.720 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

Lucchelli A, et al. The interaction of antidepressant drugs with central and peripheral (enteric) 5-HT3 and 5-HT4 receptors. Br J Pharmacol. 1995 ; 114(5):1017-1025.
Fairweather DB, et al. The psychomotor and cognitive effects of litoxetine in young and middle aged volunteers. Br J Clin Pharmacol. 1995 ; 40(2):119-125.
Lucchelli A, et al. Influence of fluoxetine and litoxetine on 5-HT4 receptor-mediated relaxation in the rat isolated oesophagus. Fundam Clin Pharmacol. 1999 ; 13(3):330-336.
Dmochowski RR, et al. A randomized, placebo-controlled clinical development program exploring the use of litoxetine for treating urinary incontinence. Neurourol Urodyn. 2021 ; 40(6):1515-1523.

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