

## Litoxetine

## Chemical Properties

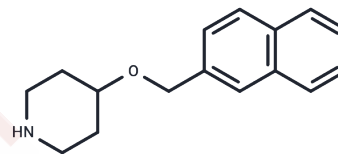
CAS No. : 86811-09-8

Formula: C<sub>16</sub>H<sub>19</sub>NO

Molecular Weight: 241.33

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 is a selective 5-HT uptake inhibitor and is a 5-HT <sub>3</sub> receptor antagonist. Litoxetine acts as an antidepressant and has shown antiemetic properties in ferrets. Litoxetine (1 and 10 mg/kg i.v.) dose-dependently reduced the number of regurgitations and vomiting and delayed the onset of vomiting. Litoxetine has an affinity for brain 5HT <sub>3</sub> receptors (K <sub>i</sub> = 85 nM).
Targets(IC <sub>50</sub> )	5-HT Receptor
In vitro	Litoxetine (0.3-3 microM) antagonized the high- and low-potency phases of the 5-HT curve.[1] Litoxetine (1 and 3 microM) responses to 5-MeOT were shifted to the right in a concentration-dependent manner.[1]
In vivo	Litoxetine (twice daily for 4 days), a novel specific serotonin reuptake inhibitor.[2]

## Solubility Information

Solubility	DMSO: 10 mg/mL (41.44 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	4.1437 mL	20.7185 mL	41.437 mL
5 mM	0.8287 mL	4.1437 mL	8.2874 mL
10 mM	0.4144 mL	2.0719 mL	4.1437 mL
50 mM	0.0829 mL	0.4144 mL	0.8287 mL

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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-HT<sub>3</sub> and 5-HT<sub>4</sub> receptors. *Br J Pharmacol.* 1995 ; 114(5):1017-1025.

Fairweather DB, et al. The psychomotor and cognitive effects of lioxetine in young and middle aged volunteers. *Br J Clin Pharmacol.* 1995 ; 40(2):119-125.

Lucchelli A, et al. Influence of fluoxetine and lioxetine on 5-HT<sub>4</sub> 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 lioxetine for treating urinary incontinence. *Neurourol Urodyn.* 2021 ; 40(6):1515-1523.

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