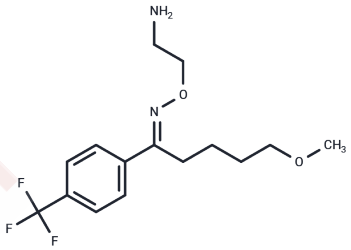
Data Sheet (Cat.No.T1077L)

TargetMol

Fluvoxamine

Chemical Properties



CAS No. : 54739-18-3

Formula: C15H21F3N2O2

Molecular Weight: 318.33

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	Fluvoxamine (DU-23000) is a selective, orally available 5-HT and serotonin reuptake inhibitor (SSRI) exhibiting antidepressant effects.
Targets(IC50)	5-HT Receptor,Serotonin Transporter
In vivo	Fluvoxamine effectively inhibits the uptake of serotonin (5-HT) by platelets and brain synaptosomes [1]. The antagonistic effect of fluvoxamine on reserpine-induced lowering of pentylenetetrazol (PTZ) seizure threshold can be attributed to its influence on 5-HT uptake [1]. In contrast to desipramine and imipramine, fluvoxamine did not elicit stimulant effects in rats after administration of a rapidly acting reserpine-like compound [1]. Fluvoxamine improves combat-related PTSD symptoms but is ineffective for depressive symptoms [2]. Due to high dropout rates and the lack of a placebo control group, the reliability of current findings is limited, and future controlled studies on fluvoxamine for PTSD treatment are needed [2]. When ethanol is available with food, fluvoxamine is less effective in reducing ethanol self-administration than when ethanol is available alone [ED_{50} values were 4.0 (2.7–5.9) and 5.1 (4.3–6.0), respectively] [3]. Under each condition where food was available, fluvoxamine had no significant effect on food intake [3]. These results indicate that the efficacy of fluvoxamine in suppressing ethanol-maintained behavior is influenced by whether ethanol is concurrently available with food reinforcement [3].

Solubility Information

Solubility	DMSO: 125 mg/mL (392.67 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: 3.3 mg/mL (10.37 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	3.1414 mL	15.707 mL	31.4139 mL
5 mM	0.6283 mL	3.1414 mL	6.2828 mL
10 mM	0.3141 mL	1.5707 mL	3.1414 mL
50 mM	0.0628 mL	0.3141 mL	0.6283 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

Escalona, R., et al., Fluvoxamine treatment in veterans with combat-related post-traumatic stress disorder. Depress Anxiety, 2002. 15(1): p. 29-33.
Ginsburg, B.C., J.W. Pinkston, and R.J. Lamb, The potency of fluvoxamine to reduce ethanol self-administration decreases with concurrent availability of food. Behav Pharmacol, 2012. 23(2): p. 134-42.
Claassen, V., et al., Fluvoxamine, a specific 5-hydroxytryptamine uptake inhibitor. Br J Pharmacol, 1977. 60(4): p. 505-16.

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