Data Sheet (Cat.No.T1077)

TargetMol

Fluvoxamine maleate

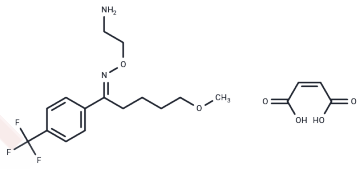
Chemical Properties

CAS No. : 61718-82-9

Formula: C19H25F3N2O6

Molecular Weight: 434.41

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	Fluvoxamine maleate (DU-23000 (maleate)) is a selective serotonin reuptake inhibitor that is used in the treatment of depression and a variety of anxiety disorders.
Targets(IC50)	5-HT Receptor,Serotonin Transporter
In vitro	Fluvoxamine increases [5-HT]ex levels in rat the prefrontal cortex and thalamus, and also increases [DA]ex levels in the striatum. [1] Fluvoxamine maleate ameliorates tactile allodynia via spinal 5-HT2A/2C receptors, by acting on the receptors or 5-HT neurons. [2]
In vivo	Fluvoxamine maleate also exhibits the antinociception in a dose-dependent manner in the paw pressure test in non-ligated mice. Fluvoxamine maleate also induces antinociceptive effect in the acute paw pressure test, and this effect is antagonized by the 5-HT3 receptor antagonist granisetron. [2] Fluvoxamine (10 and 30 mg/kg, i.p.) enhances synaptic efficacy in the hippocampo-mPFC pathway in a dose-dependent manner in the rat hippocampo-medial prefrontal cortex (mPFC). [3] Fluvoxamine (10 and 30 mg/kg, i.p.) suppresses long-term potentiation (LTP) in the hippocampal CA1 field of anesthetized rats. Fluvoxamine (30 mg/kg, i.p.)-induced suppression of LTP is completely reversed by the 5-HT(1A) receptor antagonist NAN-190 (0.5 mg/kg, i.p), but not by the 5-HT(4) receptor antagonist GR 113808 (20 mg/rat, i.c.v.) and the 5-HT(7) receptor antagonist DR 4004 (10 mg/rat, i.c.v.). [4] Fluvoxamine maleate reinforces the response to norepinephrine of isolated rat vas deferens incubated in Krebs-Henseleit solution. Fluvoxamine maleate and Fluoxetine hydrochloride inhibit the contraction induced by potassium ion on the isolated rat uterus preparation with IC50 of 3.99 μM and 18.2 μM, respectively. [5]

Solubility Information

Solubility	DMSO: 250 mg/mL (575.49 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: 2 mg/mL (4.6 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	2.302 mL	11.5099 mL	23.0197 mL
5 mM	0.4604 mL	2.302 mL	4.6039 mL
10 mM	0.2302 mL	1.151 mL	2.302 mL
50 mM	0.046 mL	0.2302 mL	0.4604 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

Denys D, et al. Psychopharmacology (Berl),2004, 176(2), 195-203.
Honda M, et al. Neuropharmacology,2006, 51(4), 866-872.
Ohashi S, et al. Brain Res,2002, 949(1-2), 131-138.
Kojima T, et al. Brain Res,2003, 959(1), 165-168.
Velasco A, et al. Gen Pharmacol,1997, 28(4), 509-512.