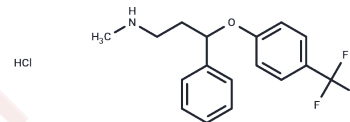


Fluoxetine hydrochloride

Chemical Properties

CAS No. :	56296-78-7
Formula:	C ₁₇ H ₁₉ ClF ₃ NO
Molecular Weight:	345.787
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	Fluoxetine hydrochloride (Lilly110140) is the first highly specific serotonin uptake inhibitor. It is used as an antidepressant and often has a more acceptable side-effects profile than traditional antidepressants.
Targets(IC50)	5-HT Receptor, Autophagy, Serotonin Transporter
In vitro	When co-administered in adult male SD rats, fluoxetine and olanzapine induce a robust and sustained increase in extracellular dopamine levels, with concentrations surpassing baseline by 361% and 272%, respectively—significantly higher than when either drug is used alone. Additionally, fluoxetine reverses the prolonged latency of escape caused by unavoidable shocks in adult male SD rats.
In vivo	Fluoxetine accelerates the maturation of immature neurons. It enhances the proliferation of new cells in the dentate gyrus of the adult rat hippocampus, strengthens neurodependent long-term potentiation in the hippocampal dentate gyrus, and increases the number of proliferating cells in the prefrontal cortex.

Solubility Information

Solubility	H ₂ O: 3.5 mg/mL (10.12 mM), Sonication is recommended. DMSO: 127 mg/mL (367.28 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: 4 mg/mL (11.57 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8919 mL	14.4596 mL	28.9193 mL
5 mM	0.5784 mL	2.8919 mL	5.7839 mL
10 mM	0.2892 mL	1.446 mL	2.8919 mL
50 mM	0.0578 mL	0.2892 mL	0.5784 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

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