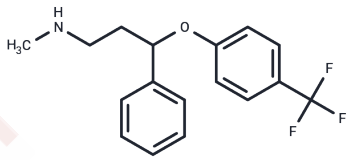
Data Sheet (Cat.No.T0450)

TargetMol

Fluoxetine

Chemical Properties



CAS No. : 54910-89-3

Formula: C17H18F3NO

Molecular Weight: 309.33

Storage: Keep away from direct sunlight
Pure form: -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 (LY-110140) is a highly specific serotonin uptake inhibitor and selective 5-hydroxytryptamine (5-HT) reuptake inhibitor. Fluoxetine has antidepressant activity.
Targets(IC50)	5-HT Receptor,Autophagy,MRP,Serotonin Transporter
In vitro	**METHODS**: Mouse cortical near-pure neuronal cell cultures were treated with Fluoxetine (3-30 μM) for 24 h. Cell viability was measured by MTT assay. **RESULTS**: Fluoxetine induced neuronal death in a concentration-dependent manner. [1] **METHODS**: Human gastric cancer cells AGS were treated with Fluoxetine (10-20 μM) for 24 h. Apoptosis was detected by Flow cytometry. **RESULTS**: The number of early apoptotic cells in Fluoxetine-treated group was significantly increased by about 4-fold and 10-fold, respectively. [2]
In vivo	**METHODS**: To assay antidepressant activity in vivo, Fluoxetine (2.5-10 mg/kg) was administered intraperitoneally to MRL/MpJ mice twice daily for twenty-six days. **RESULTS**: Chronic treatment with 5 and 10 mg/kg Fluoxetine significantly increased cell proliferation and BDNF levels in the hippocampus. Only chronic treatment with the highest Fluoxetine increased BDNF levels in the frontal cortex. [3] **METHODS**: To test antidepressant activity in vivo, Fluoxetine (18 mg/kg) was administered orally once daily for three weeks to a model of corticosterone-induced anxiety/depression-like behavior in C57BL/6Ntac mice. **RESULTS**: Chronic Fluoxetine treatment reversed the anxiety phenotype. Regarding total distance traveled, chronic corticosterone treatment showed a nonsignificant trend that was eliminated by chronic Fluoxetine treatment. [4]

Solubility Information

Solubility	DMSO: 237.5 mg/mL (767.79 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	5% DMSO+95% Saline: 0.3 mg/mL (0.97 mM),Solution. *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*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2328 mL	16.164 mL	32.3279 mL
5 mM	0.6466 mL	3.2328 mL	6.4656 mL
10 mM	0.3233 mL	1.6164 mL	3.2328 mL
50 mM	0.0647 mL	0.3233 mL	0.6466 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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