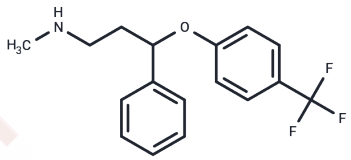
# Data Sheet (Cat.No.T0450)

TargetMol

## Fluoxetine

### Chemical Properties



CAS No. : 54910-89-3

Formula: C17H18F3NO

Molecular Weight: 309.33

Appearance: no data available

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

### Biological Description

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|---|---|
| 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.<br>**RESULTS**: Fluoxetine induced neuronal death in a concentration-dependent manner. [1]<br>**METHODS**: Human gastric cancer cells AGS were treated with Fluoxetine (10-20 μM) for 24 h. Apoptosis was detected by Flow cytometry.<br>**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.<br>**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]<br>**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.<br>**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

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| Solubility | 5% DMSO+95% Saline: 0.3 mg/mL (0.97 mM),Solution.<br>DMSO: 10 mg/mL (32.33 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

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.

Reference

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