# Pirepemat fumarate

**Cat. No.:** HY-137447A

**CAS No.:** 2251806-70-7

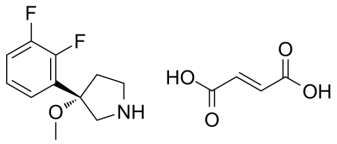
**Molecular Formula:** $C_{15}H_{17}F_2NO_5$

**Molecular Weight:** 329.3

**Target:** Others

**Pathway:** Others

**Storage:** 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)




## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (303.67 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 3.0367 mL | 15.1837 mL | 30.3674 mL |
| | 5 mM | 0.6073 mL | 3.0367 mL | 6.0735 mL |
| | 10 mM | 0.3037 mL | 1.5184 mL | 3.0367 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (7.59 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.59 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.59 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Pirepemat (IRL752) fumarate is a corticalpreferring catecholamine- and cognition-promoting agent. Pirepemat fumarate is used for the study of Parkinson's disease[1][2].

**In Vitro**

IRL752 fumarate displays its highest in vitro affinities for 5-HT and NA-related targets[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**In Vivo**

IRL752 (3.7-100 μmol/kg, s.c.) fumarate has no significant effect on acute hyper-dopaminergic or hypo-glutamatergic motor responses, but reverses deficits resulting from hypomonoaminergic function[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| | |
|---|---|
| Animal Model: | Normal rats[2] |
| Dosage: | 3.7-100 μmol/kg |
| Administration: | S.c., 30 min prior to testing |
| Result: | Induced dose-dependent and regio-selective alterations in brain monoamine transmission indices and gene expression. |

## REFERENCES


[1]. Ipsen and IRLAB Enter Exclusive Worldwide Licensing Agreement Aimed to Improve the Lives of People Living with Parkinson's Disease.

[2]. S Hjorth, et al. (3 S)-3-(2,3-difluorophenyl)-3-methoxypyrrolidine (IRL752) -a Novel Cortical-Preferring Catecholamine Transmission- and Cognition-Promoting Agent. J Pharmacol Exp Ther. 2020 Sep;374(3):404-419.





Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA