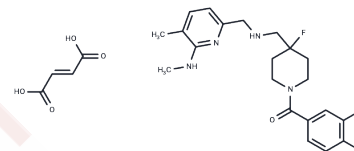


F13714 fumarate

Chemical Properties

CAS No. :	208109-39-1
Formula:	C ₂₅ H ₂₉ ClF ₂ N ₄ O ₅
Molecular Weight:	538.97
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	F13714 fumarate is a selective 5-HT _{1A} receptor-biased agonist with antidepressant-like properties after a single dose in a mouse model of chronic mild stress.
Targets(IC ₅₀)	5-HT Receptor
In vitro	F13714 targets the 5-HT _{1A} autoreceptor[1].
In vivo	METHODS: F13714 fumarate (1, 2, 4, 8, 16 mg/kg, oral) was administered to mice, and the antidepressant-like properties of the compound and its effects on cognitive function were evaluated using the forced swim test (FST) and novel object recognition (NOR), respectively; the depressive-like state was induced by the unpredictable chronic mild stress (UCMS) procedure to test the activity of F13714 fumarate in the depression model, and then sucrose preference, FST and locomotor activity were measured. The levels of phosphorylated cyclic AMP response element binding protein (p-CREB) and phosphorylated extracellular signal-regulated kinase (p-ERK1/2) were also determined. RESULTS: F13714 fumarate (2 and 4 mg/kg, p.o.) reduced immobility time in the FST, suggesting antidepressant-like properties in mice; F15599 did not disrupt long-term memory consolidation in the NOR at any dose tested, whereas F13714 fumarate impaired memory formation, especially at higher doses (4-16 mg/kg); F13714 fumarate rescued cortical and hippocampal deficits in p-ERK1/2 levels in UCMS mice, but did not affect p-CREB levels. [1]

Solubility Information

Solubility	DMSO: 200 mg/mL (371.08 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8554 mL	9.277 mL	18.5539 mL
5 mM	0.3711 mL	1.8554 mL	3.7108 mL
10 mM	0.1855 mL	0.9277 mL	1.8554 mL
50 mM	0.0371 mL	0.1855 mL	0.3711 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

Głuch-Lutwin M, et al. The selective 5-HT_{1A} receptor biased agonists, F15599 and F13714, show antidepressant-like properties after a single administration in the mouse model of unpredictable chronic mild stress. *Psychopharmacology (Berl)*. 2021 Aug;238(8):2249-2260.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481