Data Sheet (Cat.No.T213090)

TargetMol

5-HT6R/FAAH modulator 1

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

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	5-HT6R/FAAH modulator 1 is a selective ligand for the serotonin 5-HT6 receptor and an inhibitor of the fatty acid amide hydrolase (FAAH). It exhibits a pKi of 6.33 for 5-HT6 and a pIC50 of 6.33 for FAAH. This compound also shows mild inhibitory effects on acetylcholinesterase (AChE) and butyrylcholinesterase (BChE) with a pIC50 of 5.12. Additionally, it can inhibit apoptosis and reduce reactive oxygen species (ROS) levels. 5-HT6R/FAAH modulator 1 is applicable in the study of neurological disorders such as Alzheimer's disease (AD).
Targets(IC50)	Apoptosis,FAAH,5-HT Receptor
In vitro	5-HT6R/FAAH modulator 1 (Compound 23) at concentrations ranging from 0.3 to 30 μM reduces the growth of HepG2 and SH-SY5Y cells over a period of 72 hours. Applied at 10 μM for 17 hours, it enhances the survival rate of HT-22 cells treated with Aβ1-42, inhibits apoptosis, and decreases reactive oxygen species levels. Additionally, at 0.03 to 0.15 μM, it exhibits significant antioxidant activity.
In vivo	Compound 23, a 5-HT6R/FAAH modulator, administered via intraperitoneal injection at doses of 0.3-1 mg/kg, can reverse memory impairment in rat models induced by MK-801.