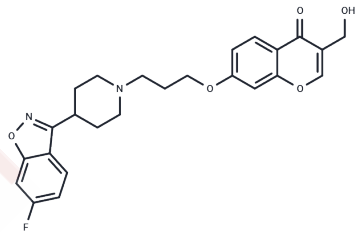
Data Sheet (Cat.No.T14083)

TargetMol

Abaperidone

Chemical Properties



CAS No. : 183849-43-6

Formula: C25H25FN2O5

Molecular Weight: 452.47

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	Abaperidone is a potent 5-HT2A receptor and dopamine D2 receptor antagonist with an IC50 of 6.2 for 5-HT2A receptors and 17 nM for dopamine D2 receptors.Abaperidone is a potentially atypical anti-psychotropic compound that reduces basal hsp70 mRNA expression in rat striatum and prefrontal cortex. expression in the striatum and prefrontal cortex of rats.
Targets(IC50)	5-HT Receptor,Dopamine Receptor
In vitro	Abaperidone exhibits a strong binding affinity for dopamine D2 receptors, as well as a higher affinity for 5-HT2 receptors, with IC50 values of 17 and 6.2 nM, respectively.[1]
In vivo	After oral administration of either 0.5 mg/kg of Abaperidone or risperidone, the time course of the inhibition of climbing behavior for a period of several hours is tested in mice.[1] In a study of serum prolactin levels after oral administration of Abaperidone and haloperidol, the prolactin levels of risperidone at 5 mg/kg for either 1 or 3 days in rats, showing the prolactin levels increased in smaller than those for reference drugs. A lesser induction of catalepsy is observed for Abaperidone.[1]

Solubility Information

Solubility	DMSO: 1.46 mg/mL (3.23 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2101 mL	11.0505 mL	22.1009 mL
5 mM	0.442 mL	2.2101 mL	4.4202 mL
10 mM	0.221 mL	1.105 mL	2.2101 mL
50 mM	0.0442 mL	0.221 mL	0.442 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

Bolós J, et al. 7-[3-(1-piperidinyl)propoxy]chromenones as potential atypical antipsychotics. 2. Pharmacological profile of 7-[3-[4-(6-fluoro-1, 2-benzisoxazol-3-yl)-piperidin-1-yl]propoxy]-3-(hydroxymeth yl)chromen -4-one (abaperidone, FI-8602). J Med Chem. 1998 Dec 31;41(27):5402-9.