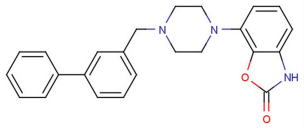
Data Sheet (Cat.No.T10542)

TargetMol
A DRUG SCREENING EXPERT

Bifeprunox

Chemical Properties



CAS No.:	350992-10-8
Formula:	C24H23N3O2
Molecular Weight:	385.46
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Bifeprunox is a potent partial agonist of dopamine D2-like and 5-HT1A receptor (pEC50: 6.37 for hippocampus 5-HT1A; pKis: 7.19 and 8.83 for cortex 5-HT1A and striatum D2). It is an antipsychotic for the research of schizophrenia.
Targets(IC_{50})	D2 Receptor: 8.83 (pKi) 5-HT1A Receptor: 6.37 (pEC50)
In vitro	Bifeprunox has a pKi of 8 at h5-HT1A receptors (Emax: 70%) [1].
In vivo	Bifeprunox (0.001-2.5 mg/kg) reduces marble burying in mice [2]. Bifeprunox (4-250 μg/kg) influences nicotine-seeking behavior in response to drug-associated stimuli in rats [3].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.594 mL	12.972 mL	25.943 mL
5 mM	0.519 mL	2.594 mL	5.189 mL
10 mM	0.259 mL	1.297 mL	2.594 mL
50 mM	0.052 mL	0.259 mL	0.519 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Newman-Tancredi A, et al. Novel antipsychotics activate recombinant human and native rat serotonin 5-HT1A receptors: affinity, efficacy and potential implications for treatment of schizophrenia. Int J Neuropsychopharmacol. 2005 Sep;8(3):341-56.
2. Bruins Slot LA, et al. Effects of antipsychotics and reference monoaminergic ligands on marble burying behavior in mice. Behav Pharmacol. 2008 Mar;19(2):145-52.
3. Di Clemente A, et al. Bifeprunox: a partial agonist at dopamine D2 and serotonin 1A receptors, influences nicotine-seeking behaviour in response to drug-associated stimuli in rats. Addict Biol. 2012 Mar;17(2):274-86.

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