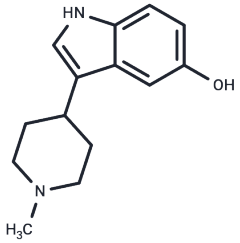
Data Sheet (Cat.No.T2459)

TargetMol

BRL 54443

Chemical Properties



CAS No. : 57477-39-1

Formula: C14H18N2O

Molecular Weight: 230.31

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	BRL 54443 is a potent 5-HT1E/1F receptor agonist (pKi values: 8.7 and 8.9, respectively).
Targets(IC50)	5-HT Receptor
In vitro	BRL 54443 induced contractions with a -logEC50 of 6.52. Contractions induced by BRL 54443 are likely mediated by stimulation of 5-HT 5-HT 2A receptors.
In vivo	BRL 54443 induced contractions with a -logEC50 of 6.52. Contractions induced by BRL 54443 are likely mediated by stimulation of 5-HT 5-HT 2A receptors.
Kinase Assay	In Vitro Radiometric PKD Kinase Assay: The radiometric kinase assay is carried out by coincubating 0.5 μCi of [γ-32P]ATP, 20 μM ATP, 50 ng of purified recombinant human PKD (PKD1, PKD2, and PKD3) or CAMKIIα proteins, and 2.5 μg of Syntide-2 in 50 μl of kinase buffer that contains 50 mM Tris-HCl, pH 7.5, 4 mM MgCl2, 10 mM β-mercaptoethanol. The reaction is carried out under conditions that the initial rate is within the linear kinetic range. The filter papers are then washed three times in 0.5% phosphoric acid, air-dried, and counted using a Beckman LS6500 multipurpose scintillation counter.

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 2 mg/mL (8.68 mM),Sonication is recommended. DMSO: 43 mg/mL (186.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.342 mL	21.7099 mL	43.4197 mL
5 mM	0.8684 mL	4.342 mL	8.6839 mL
10 mM	0.4342 mL	2.171 mL	4.342 mL
50 mM	0.0868 mL	0.4342 mL	0.8684 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.

Reference

Janssen P, et al. Eur J Pharmacol. 2004, 492(2-3), 259-267.
McKune CM, et al. J Pharmacol Exp Ther. 2001, 297(1), 88-95.
Xu P, Huang S, Zhang H, et al. Structural insights into the lipid and ligand regulation of serotonin receptors[J]. Nature. 2021, 592(7854): 469-473.