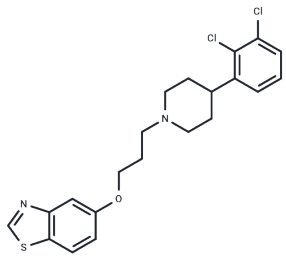
Data Sheet (Cat.No.T62853)

TargetMol

UNC9994 hydrochloride

Chemical Properties



CAS No. :	2108826-33-9
Formula:	C21H23Cl3N2OS
Molecular Weight:	457.84
Storage:	Keep away from moisture 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	UNC9994 hydrochloride is a functionally selective, beta-arrestin-biased dopamine D2 receptor (D2R) agonist with a Ki of 79 nM for D2R binding. UNC9994 hydrochloride also acts as an antagonist of Gi-regulated cAMP production and a partial agonist for D2R/beta-arrestin-2 interactions, exhibiting potent antipsychotic-like activity.
Targets(IC50)	Arrestin,Dopamine Receptor
In vitro	In vitro, UNC9994 hydrochloride induces D2-mediated beta-arrestin-2 translocation with EC50 values of 6.1 nM (Tango assay) and 448 nM (DiscoveRx assay). It acts as an antagonist for 5-HT2A and 5-HT2B receptors while serving as an agonist for 5-HT2C and 5-HT1A receptors [1].
In vivo	In vivo, intraperitoneal administration of UNC9994 hydrochloride (2.0 mg/kg) markedly inhibits phencyclidine (PCP)-induced hyperlocomotion in wild-type mice. This antipsychotic-like activity is completely abolished in beta-arrestin-2 knockout mice, demonstrating that its effects are dependent on the beta-arrestin-2 signaling pathway [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (174.73 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1842 mL	10.9208 mL	21.8417 mL
5 mM	0.4368 mL	2.1842 mL	4.3683 mL
10 mM	0.2184 mL	1.0921 mL	2.1842 mL
50 mM	0.0437 mL	0.2184 mL	0.4368 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

Allen JA, et al. Discovery of β-arrestin-biased dopamine D2 ligands for probing signal transduction pathways essential for antipsychotic efficacy. Proc Natl Acad Sci U S A. 2011 Nov 8;108(45):18488-93.