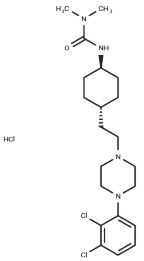
Data Sheet (Cat.No.T8382)

TargetMol

Cariprazine hydrochloride

Chemical Properties



CAS No. : 1083076-69-0

Formula: C21H33Cl3N4O

Molecular Weight: 463.87

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	Cariprazine hydrochloride (RGH188 hydrochloride) is an antipsychotic drug, is a D3 and D2 receptor partial agonist((Ki of 0.085 nM and 0.49 nM, respectively)
Targets(IC50)	5-HT Receptor,Dopamine Receptor
In vivo	Cariprazine occupied D(2)/D(3) receptors in a dose-dependent and saturable manner, with the lowest dose occupying ~5% of receptors and the highest dose showing more than 90% occupancy. 5-HT(1A) receptor occupancy was considerably lower compared with D(2)/D(3) occupancy at the same doses, with a maximal value of ~30% for the raphe nuclei[1].
Animal Research	Three monkeys using the following PET radioligands: [(11)C]MNPA (an agonist at D(2) and D(3) receptors), [(11)C]raclopride (an antagonist at D(2) and D(3) receptors), and [(11)C]WAY-100635 (an antagonist at 5-HT(1A) receptors). During each experimental day, the first PET measurement was a baseline study, the second after a low dose of cariprazine, and the third after the administration of a high dose[1].

Solubility Information

Solubility	H2O: 1.64 mg/mL (3.54 mM),Sonication is recommended. DMSO: < 1 mg/mL (insoluble or slightly soluble),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1558 mL	10.7789 mL	21.5578 mL
5 mM	0.4312 mL	2.1558 mL	4.3116 mL
10 mM	0.2156 mL	1.0779 mL	2.1558 mL
50 mM	0.0431 mL	0.2156 mL	0.4312 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

Seneca N, et al. Occupancy of dopamine D2 and D3 and serotonin 5-HT1A receptors by the novel antipsychotic drug candidate, cariprazine (RGH-188), in monkey brain measured using positron emission tomography. Psychopharmacology (Berl). 2011 Dec;218(3):579-8

Błażej, Misiak, Przemysław,et al. Cariprazine - a novel antipsychotic drug and its place in the treatment of schizophrenia.[J]. Psychiatria polska, 2018.