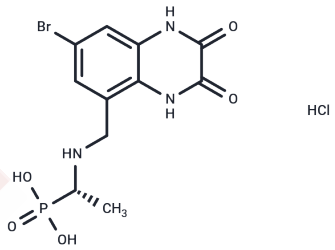
Data Sheet (Cat.No.T10781)

TargetMol

CGP 78608 hydrochloride

Chemical Properties



CAS No. : 1135278-54-4

Formula: C11H14BrClN3O5P

Molecular Weight: 414.58

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	CGP 78608 hydrochloride is a specific antagonist at the glycine binding site of the NMDA receptor (IC50 = 6 nM). CGP 78608 hydrochloride exhibits anticonvulsant activity. CGP 78608 hydrochloride potentiates GluN1/GluN3A-mediated glycine currents (estimated EC50 = 26.3 nM).
Targets(IC50)	NMDAR,iGluR
In vitro	CGP 78608 hydrochloride reduces ammonia-dependent cGMP synthesis and relieves ammonia neurotoxicity[2]. CGP-78608 hydrochloride reduces glycine sensitivity of GluN1 and GluN3A receptors[3].
In vivo	CGP-78608 (i.p.) exhibits anticonvulsant effects in the electroshock-induced convulsions assay in mice[1].

Solubility Information

Solubility	DMSO: 37.4 mg/mL (90.21 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4121 mL	12.0604 mL	24.1208 mL
5 mM	0.4824 mL	2.4121 mL	4.8242 mL
10 mM	0.2412 mL	1.206 mL	2.4121 mL
50 mM	0.0482 mL	0.2412 mL	0.4824 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

Catarzi D, et al. Competitive Gly/NMDA receptor antagonists. Curr Top Med Chem. 2006;6(8):809-21.
Hilgier W, et al. A novel glycine site-specific N-methyl-D-aspartate receptor antagonist prevents activation of the NMDA/NO/CGMP pathway by ammonia. Brain Res. 2004 Jul 23;1015(1-2):186-8.
Grand T, et al. Unmasking GluN1/GluN3A excitatory glycine NMDA receptors. Nat Commun. 2018 Nov 13;9(1):4769.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481