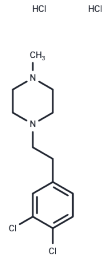
Data Sheet (Cat.No.T7488)

TargetMol

BD1063 dhydrochloride

Chemical Properties



CAS No. : 206996-13-6

Formula: C13H20Cl4N2

Molecular Weight: 346.12

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	BD1063 dihydrochloride is a potent and selective sigma 1 (σ1) receptor antagonist (Ki = 9 nM).
Targets(IC50)	Sigma receptor
In vivo	BD 1063 dose-dependently reduced ethanol self-administration in sP rats (3.3–11 mg/kg) and withdrawn, dependent Wistar rats (4–11 mg/kg) at doses that did not modify mean ethanol self-administration in non-dependent Wistar controls[1]
Animal Research	Rats (controls, N=11;?dependent, N=9) were pretreated with BD-1063 (0, 4.4, 7 and 11 mg/kg of body weight, free base weights) using a within-subject Latin square design.? sP rats: Rats (N=9) were pretreated with BD-1063 (0, 3, 4.4, 7 and 11 mg/kg of body weight, free base basis) using a within-subject Latin square design[1].

Solubility Information

Solubility	H2O: 50 mg/mL (144.46 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8892 mL	14.4459 mL	28.8917 mL
5 mM	0.5778 mL	2.8892 mL	5.7783 mL
10 mM	0.2889 mL	1.4446 mL	2.8892 mL
50 mM	0.0578 mL	0.2889 mL	0.5778 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

Sabino V , Cottone P , Zhao Y , et al. The σ-Receptor Antagonist BD-1063 Decreases Ethanol Intake and Reinforcement in Animal Models of Excessive Drinking[J]. Neuropsychopharmacology, 2009, 34(6):1482-1493.
Zhang Z, Zhou H, Gu W, et al.CGI1746 targets σ1R to modulate ferroptosis through mitochondria-associated membranes.Nature Chemical Biology.2024: 1-11.
Nieto F R , Cruz Miguel Cendán, Cristina Sánchez-Fernández, et al. Role of Sigma-1 Receptors in Paclitaxel-Induced Neuropathic Pain in Mice[J]. The journal of pain: official journal of the American Pain Society, 2012, 13(11):1107-1121.

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