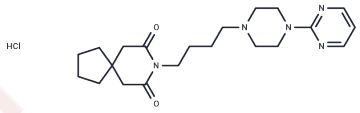
Data Sheet (Cat.No.T2132)

TargetMol

Buspirone hydrochloride

Chemical Properties



CAS No. : 33386-08-2

Formula: C21H32ClN5O2

Molecular Weight: 421.96

Appearance: no data available

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

Biological Description

Description	Buspirone hydrochloride (Buspar) is a 5HT(1A) receptor agonist, used to treat generalized anxiety disorder (GAD).
Targets(IC50)	5-HT Receptor,Dopamine Receptor
In vitro	Buspirone, a clinically effective non-benzodiazepine anxiolytic drug, causes inhibition of firing of these neurons when given by intravenous (ED50 = 0.011 mg/kg, i.v.), intraperitoneal (ED50 = 0.088 mg/kg, i.p.), and intragastric (effective dose = 1.0-20.0 mg/kg, i.g.) injection. Buspirone also inhibits these cells when it is administered to the outside of recorded neurons by microiontophoresis. [1] Buspirone is eliminated primarily by oxidative metabolism, which produces several hydroxylated metabolites, including 5-hydroxy-buspirone and 1-pyrimidinylpiperazine. [2]

Solubility Information

Solubility	H2O: 42.2 mg/mL (100.01 mM),Sonication is recommended. DMSO: 50 mg/mL (118.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3699 mL	11.8495 mL	23.6989 mL
5 mM	0.474 mL	2.3699 mL	4.7398 mL
10 mM	0.237 mL	1.1849 mL	2.3699 mL
50 mM	0.0474 mL	0.237 mL	0.474 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

VanderMaelen CP, et al. Eur J Pharmacol, 1986, 129(1-2), 123-130.
Gammans RE, et al. Am J Med, 1986, 80(3B), 41-51.
Schreiber R, et al. Eur J Pharmacol, 1993, 249(3), 341-351.
Detke MJ, et al. Psychopharmacology (Berl), 1995, 119(1), 47-54.
Bencan Z, et al. Pharmacol Biochem Behav, 2009, 94(1), 75-80.

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