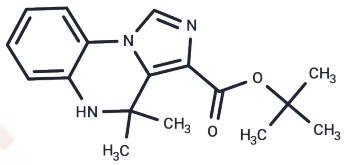
Data Sheet (Cat.No.T3644)

U93631

Chemical Properties



CAS No. : 152273-12-6

Formula: C17H21N3O2

Molecular Weight: 299.37

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	GABAA receptor antagonist that binds the picrotoxin site and stabilizes the inactive form of the channel via allosteric interaction. Accelerates the decay of GABA-induced Cl- currents with little effect on peak amplitude. Also inhibits 5-HT3A receptors via a similar mechanism.
Targets(IC50)	GABA Receptor
In vitro	In the presence of U93631 at 5 UM, the peak amplitude decreased as a function of GABA concentration, with the half-maximal inhibitory concentration being approximately 100 nM, which is close to the Kd for the high affinity GABA site(85 nM). It appears that the drug interacts with GABA-bound receptors (at least monoliganded) and accelerates receptor desensitization, rather than acting as an open channel blocker.

Solubility Information

Solubility	DMSO: 55 mg/mL (183.72 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3403 mL	16.7017 mL	33.4035 mL
5 mM	0.6681 mL	3.3403 mL	6.6807 mL
10 mM	0.334 mL	1.6702 mL	3.3403 mL
50 mM	0.0668 mL	0.334 mL	0.6681 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

Dillon,GH et al. Mol Pharmacol. 1993 Oct;44(4):860-5.

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