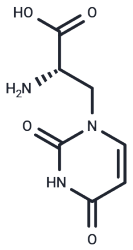
Data Sheet (Cat.No.T13456)

TargetMol

(S)-Willardiine

Chemical Properties



CAS No. : 21416-43-3

Formula: C7H9N3O4

Molecular Weight: 199.16

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	(S)-Willardiine (L-willardiine) is present in the seeds of Acacia and Mimosa. (S)-Willardiine is an AMPA/kainate receptor agonist (EC50 = 44.8 μM).
Targets(IC50)	iGluR
In vitro	(S)-Willardiine produces rapidly but incompletely desensitizing responses[1]. Ca2+(1.8 mM) inhibits the currents induced by willardiine(100 μM) by 50% [2].

Solubility Information

Solubility	DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.0211 mL	25.1054 mL	50.2109 mL
5 mM	1.0042 mL	5.0211 mL	10.0422 mL
10 mM	0.5021 mL	2.5105 mL	5.0211 mL
50 mM	0.1004 mL	0.5021 mL	1.0042 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

Patneau DK, et al. Activation and desensitization of AMPA/kainate receptors by novel derivatives of willardiine. J Neurosci. 1992 Feb;12(2):595-606.

Fukushima T, et al. Calcium inhibits willardiine-induced responses in kainate receptor GluR6(Q)/KA-2. Neuroreport. 2001 Jan 22;12(1):163-7.

Gressens P, et al. The effects of AMPA receptor antagonists in models of stroke and neurodegeneration. Eur J Pharmacol. 2005 Sep 5;519(1-2):58-67.

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