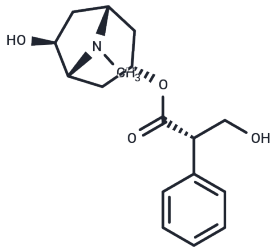
Data Sheet (Cat.No.T21532)

TargetMol

Anisodamine

Chemical Properties



CAS No. : 55869-99-3

Formula: C17H23NO4

Molecular Weight: 305.37

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Anisodamine (6-beta-Hydroxyhyoscyamine) is an antagonist of muscarinic and nicotinic cholinoceptor with similar affinities at the muscarinic receptor as scopolamine and atropine. Anisodamine improve the microcirculation in states of shock and can be used in studies about organophosphate poisoning.
Targets(IC50)	AChR
In vitro	In RAW264.7 cells, Anisodamine (100 μg/mL) blocks muscarinic receptors thus allowing more endogenous ACh binding to the α-7nAChR and attenuating α-bungarotoxin binding[3].
In vivo	Intraperitoneal administration of Anisodamine (50 mg/kg) significantly reduces mortality of LPS-induced shock mice(20%)[3].

Solubility Information

Solubility	DMSO: 150 mg/mL (491.21 mM),Sonication is recommended. H2O: 18 mg/mL (58.94 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (10.81 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2747 mL	16.3736 mL	32.7472 mL
5 mM	0.6549 mL	3.2747 mL	6.5494 mL
10 mM	0.3275 mL	1.6374 mL	3.2747 mL
50 mM	0.0655 mL	0.3275 mL	0.6549 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

Binding of tropane alkaloids to nicotinic and muscarinic acetylcholine receptors. Pharmazie. 1995 Jul;50(7):493-5.
Eisenkraft A, et al. Possible role for anisodamine in organophosphate poisoning. Br J Pharmacol. 2016 Jun;173(11):1719-27.
Liu C, et al. Antishock effect of anisodamine involves a novel pathway for activating alpha7 nicotinic acetylcholine receptor. Crit Care Med. 2009;37(2):634-641.