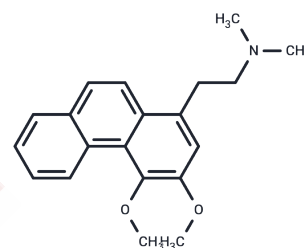


Atherosperminine

Chemical Properties

CAS No. :	5531-98-6
Formula:	C ₂₀ H ₂₃ NO ₂
Molecular Weight:	309.4
Storage:	Keep away from direct sunlight, Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Atherosperminine shows cholinesterase inhibitory activity against acetylcholinesterase (AChE) and butyrylcholinesterase (BChE). Atherosperminine exerts a non-specific relaxant effect on the trachealis, its major mechanism of action appears to be inhibition of cAMP phosphodiesterase.
Targets(IC50)	cAMP, Calcium Channel, AChR, Parasite
In vitro	Atherosperminine shows strong anti-plasmodial activity against Plasmodium falciparum, with the IC50 value of 5.80 μM. Atherosperminine also shows antioxidant activity in a DPPH assay with the IC50 value of 54.53 ug/mL[3].

Solubility Information

Solubility	DMSO: 50 mg/mL (161.6 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2321 mL	16.1603 mL	32.3206 mL
5 mM	0.6464 mL	3.2321 mL	6.4641 mL
10 mM	0.3232 mL	1.616 mL	3.2321 mL
50 mM	0.0646 mL	0.3232 mL	0.6464 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

Nasrullah AA, et al. Antiplasmodial alkaloids from the bark of *Cryptocarya nigra* (Lauraceae). *Molecules*. 2013 Jul 8;18(7):8009-17.

Lin CH, et al. The relaxant actions on guinea-pig trachealis of atherosperminine isolated from *Fissistigma glaucescens*. *Eur J Pharmacol*. 1993 Jun 11;237(1):109-16.

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C H Lin, et al. The relaxant actions on guinea-pig trachealis of atherosperminine isolated from *Fissistigma*. *Eur J Pharmacol*. 1993 Jun 11;237(1):109-16.

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