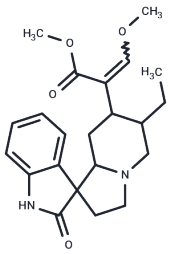
Data Sheet (Cat.No.T6S0659)

TargetMol

Rhynchophylline

Chemical Properties



CAS No. : 76-66-4

Formula: C22H28N2O4

Molecular Weight: 384.47

Storage: Keep away from moisture,Store at low temperature
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	1. Rhynchophylline (Mitrinermine) can protect against ischemic damage, probably via regulating the Akt/mTOR pathway. 2. Rhynchophylline can protect against glutamate-induced neuronal death, can inhibit MA impairment in cultured neurons in vitro. 3. Rhynchophylline and isorhynchophylline have a non-competitive antagonistic effect on the NMDA-type ionotropic glutamate receptors, suggest that these alkaloids exert their protective action against ischemia-induced neuronal damage by preventing NMDA, muscarinic M1, and 5-HT2 receptors-mediated neurotoxicity during ischemia.
Targets(IC50)	Calcium Channel,NF-κB

Solubility Information

Solubility	DMSO: 28.06 mg/mL (72.98 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: 2 mg/mL (5.2 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	2.601 mL	13.0049 mL	26.0098 mL
5 mM	0.5202 mL	2.601 mL	5.202 mL
10 mM	0.2601 mL	1.3005 mL	2.601 mL
50 mM	0.052 mL	0.2601 mL	0.5202 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

He Y , Zeng S Y , Zhou S W , et al. Effects of rhynchophylline on GluN1 and GluN2B expressions in primary cultured hippocampal neurons[J]. Fitoterapia, 2014, 98:166-173.