Data Sheet (Cat.No.T5721)

TargetMol

Dehydroevodiamine hydrochloride

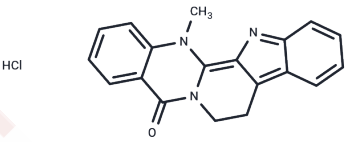
Chemical Properties

CAS No. : 111664-82-5

Formula: C19H16ClN3O

Molecular Weight: 337.8

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	Dehydroevodiamine (DHE), a natural compound isolated from Evodia rutaecarpa, can inhibit AChE. It has hypotensive and neuroprotective effects and modulates nitric oxide production.
Targets(IC50)	NF-κB,NO Synthase,Cholinesterase (ChE),COX,PGE Synthase
In vivo	Dehydroevodiaminehydrochloride has strong protective effects against cognitive impairments through its antioxidant activity and inhibition of neurotoxicity and intracellular calcium. Thus, DHED may be an important therapeutic agent for memory-impaired symptoms.
Animal Research	The effects of dehydroevodiamine·HCl (DHED) on cognitive improvement and the related mechanism in memory-impaired rat models, namely, a scopolamine-induced amnesia model and a Aβ1-42-infused model. The cognitive effects of DHED were measured using a water maze test and a passive avoidance test in the memory-impaired rat models. The results demonstrate that DHED (10 mg/kg, p.o.) and Donepezil (1 mg/kg, p.o.) ameliorated the spatial memory impairment in the scopolamine-induced amnestic rats.

Solubility Information

Solubility	DMSO: 37 mg/mL (109.53 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: 1 mg/mL (2.96 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	2.9603 mL	14.8017 mL	29.6033 mL
5 mM	0.5921 mL	2.9603 mL	5.9207 mL
10 mM	0.296 mL	1.4802 mL	2.9603 mL
50 mM	0.0592 mL	0.296 mL	0.5921 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

Shin K Y , Kim K Y , Suh Y H . Dehydroevodiamine·HCl enhances cognitive function in memory-impaired rat models [J]. Korean Journal of Physiology and Pharmacology, 2017, 21(1).