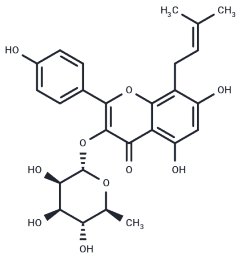
Data Sheet (Cat.No.T4124)

TargetMol

IKarisoside A

Chemical Properties



CAS No. : 55395-07-8

Formula: C26H28O10

Molecular Weight: 500.49

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	IKarisoside A(Baohuoside II) is a flavonol glycoside from the Berberidaceae plant Epimedium, with anti-inflammatory activity.
Targets(IC50)	NO Synthase
In vitro	Ikarisoside A is a natural flavonol glycoside derived from plants of the genus Epimedium, which have been used in Traditional Chinese Medicine as tonics, antirheumatics, and aphrodisiacs. We found that Ikarisoside A (1-100 μM) concentration-dependently inhibited the secretion of catecholamines induced by acetylcholine, a physiological secretagogue and agonist of nicotinic acetylcholine receptors. Ikarisoside A had little effect on catecholamine secretion induced by veratridine and 56 mM K(+). Ikarisoside A (1-100 μM) also inhibited (22)Na(+) influx and (45)Ca(2+) influx induced by acetylcholine in a concentration-dependent manner similar to that of catecholamine secretion. In Xenopus oocytes expressing α3β4 nicotinic acetylcholine receptors, Ikarisoside A (0.1-100 μM) directly inhibited the current evoked by acetylcholine. It also suppressed (14)C-catecholamine synthesis and tyrosine hydroxylase activity induced by acetylcholine at 1-100 μM and 10-100 μM, respectively. The present findings suggest that Ikarisoside A inhibits acetylcholine-induced catecholamine secretion and synthesis by suppression of nicotinic acetylcholine receptor-ion channels in bovine adrenal medullary cells.[1]

Solubility Information

Solubility	DMSO: 50 mg/mL (99.9 mM),Sonication is recommended. Ethanol: 1 mg/mL (2 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 (4 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	1.998 mL	9.9902 mL	19.9804 mL
5 mM	0.3996 mL	1.998 mL	3.9961 mL
10 mM	0.1998 mL	0.999 mL	1.998 mL
50 mM	0.040 mL	0.1998 mL	0.3996 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

Li X, et al. Ikarisoside A inhibits acetylcholine-induced catecholamine secretion and synthesis by suppressing nicotinic acetylcholine receptor-ion channels in cultured bovine adrenal medullary cells. Naunyn Schmiedebergs Arch Pharmacol. 2015 Dec;388(12):1259-69.