Acanthoside B

Cat. No.: HY-N2807

CAS No.: 7374-79-0

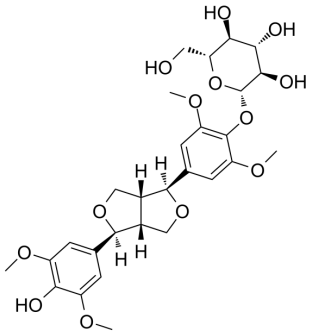
Molecular Formula: $C_{28}H_{36}O_{13}$

Molecular Weight: 580.58

Target: Others

Pathway: Others

Storage: -20°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (172.24 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7224 mL	8.6121 mL	17.2242 mL
	5 mM	0.3445 mL	1.7224 mL	3.4448 mL
	10 mM	0.1722 mL	0.8612 mL	1.7224 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (4.31 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (4.31 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.31 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Acanthoside B is a potential bioactive lignan with anti-inflammatory and anti-amnesic activities. Acanthoside B can be used for alzheimer's disease and lung inflammation research[1]

In Vivo

Acanthoside B (oral gavage; 10-20 mg/kg; 7 days prior to Scopolamine injection) attenuates Scopolamine inflicted AD-like amnesic traits by restoring the cholinergic activity, decreasing the endogenous antioxidant status, suppressing neuroinflammation, and activating the TrkB/CREB/BDNF pathway in mice[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Scopolamine-induced amnesic mouse model[1]
Dosage:	10 mg/kg; 20 mg/kg
Administration:	oral gavage; 7 days
Result:	Exhibited an anti-amnesic effect in mice.

REFERENCES

[1]. Govindarajan Karthivashan, et al. Cognitive-enhancing and ameliorative effects of acanthoside B in a scopolamine-induced amnesic mouse model through regulation of oxidative/inflammatory/cholinergic systems and activation of the TrkB/CREB/BDNF pathway. Food Chem Toxicol. 2019 Jul;129:444-457.

[2]. Ju Hee Lee, et al. Inhibition of Lung Inflammation by Acanthopanax divaricatus var. Albeofructus and Its Constituents. Biomol Ther (Seoul). 2016 Jan;24(1):67-74.

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