Shanzhiside methyl ester

Cat. No.: HY-N0630

CAS No.: 64421-28-9

Molecular Formula: $C_{17}H_{26}O_{11}$

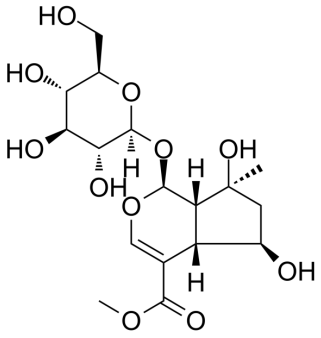
Molecular Weight: 406.38

Target: GCGR

Pathway: GPCR/G Protein

Storage: -20°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (246.08 mM; Need ultrasonic)

H_2O : 50 mg/mL (123.04 mM; Need ultrasonic)

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	2.4608 mL	12.3038 mL	24.6075 mL
5 mM	0.4922 mL	2.4608 mL	4.9215 mL
10 mM	0.2461 mL	1.2304 mL	2.4608 mL

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

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 50 mg/mL (123.04 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.15 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.15 mM); Clear solution
4. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.15 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Shanzhiside methy lester is isolated from lamiophlomis rotata. Shanzhiside methyl ester is a small molecule glucagon-like peptide-1 (GLP-1) receptor agonist and has the ability to induce anti-allodynic tolerance[1].

IC_{50} & Target

IC50: GLP-1 receptor[1]

In Vivo

Shanzhiside methyl ester exerts dose-dependent and long-lasting (>4 h) anti-allodynic effects in spinal nerve injury-induced

neuropathic rats, with a maximal inhibition of 49% and a projected ED_{50} of 40.4 μg[1].

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

REFERENCES

[1]. Fan H, et al. Shanzhiside methylester, the principle effective iridoid glycoside from the analgesic herb Lamiophlomis rotata, reduces neuropathic pain by stimulating spinal microglial β-endorphin expression.Neuropharmacology. 2016 Feb;101:98-109.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA