

## Shanzhiside methyl ester

## Chemical Properties

CAS No. : 64421-28-9

Formula: C<sub>17</sub>H<sub>26</sub>O<sub>11</sub>

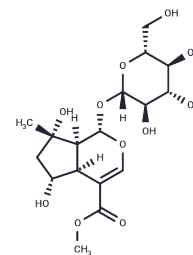
Molecular Weight: 406.38

Storage:

Keep away from moisture, Store at low temperature,  
Store under nitrogen

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	Shanzhiside methylester reduces neuropathic pain by activating spinal GLP-1 receptors and subsequently stimulating microglial $\beta$ -endorphin expression via the p38 MAPK signaling.
Targets(IC50)	Glucagon Receptor

## Solubility Information

Solubility	DMSO: 199.3 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 (4.92 mM), Sonication is recommended. <i>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.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0492 mL	0.2461 mL	0.4922 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

- Fan PC, et al. Simultaneous determination of four shanzhiside methylester derivatives in rabbit plasma by liquid chromatography/tandem mass spectrometry. *Biomed Chromatogr.* 2012 Dec;26(12):1543-51.
- Huang B, Lin B, Zheng H, et al. Discovery of natural products as influenza neuraminidase inhibitors: in silico screening, in vitro validation, and molecular dynamic simulation studies. *Molecular Diversity.* 2025: 1-17.
- Fan H1, et al. Shanzhiside methylester, the principle effective iridoid glycoside from the analgesic herb *Lamiophlomis rotata*, reduces neuropathic pain by stimulating spinal microglial  $\beta$ -endorphin expression. *Neuropharmacology.* 2016 Feb;101:98-109.
- Lee D, Lee S H, Kim H. Effects of Astragalus Extract Mixture HT042 on H295R Steroidogenesis and Hersherberger Assay[J]. *Food Supplements and Biomaterials for Health.* 2021, 1.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481