3-Dehydrotrametenolic acid

Cat. No.: HY-N2177

CAS No.: 29220-16-4

Molecular Formula: $C_{30}H_{46}O_3$

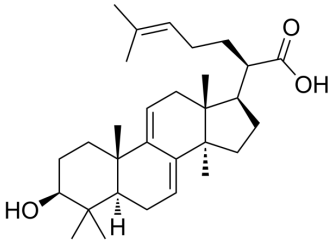
Molecular Weight: 454.68

Target: Lactate Dehydrogenase; Apoptosis

Pathway: Metabolic Enzyme/Protease; Apoptosis

Storage: 4°C, protect from light

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 14.29 mg/mL (31.43 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.1993 mL	10.9967 mL	21.9935 mL
5 mM	0.4399 mL	2.1993 mL	4.3987 mL
10 mM	0.2199 mL	1.0997 mL	2.1993 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: 1.43 mg/mL (3.15 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1.43 mg/mL (3.15 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

3-Dehydrotrametenolic acid, isolated from the sclerotium of Poria cocos, is a lactate dehydrogenase (LDH) inhibitor. 3-Dehydrotrametenolic acid promotes adipocyte differentiation in vitro and acts as an insulin sensitizer in vivo. 3-Dehydrotrametenolic acid induces apoptosis and has anticancer activity[1][2].

IC_{50} & Target

Lactate dehydrogenase [1]

REFERENCES

[1]. De Nicola GR, et al. Novel gram-scale production of enantiopure R-sulforaphane from Tuscan black kale seeds. Molecules. 2014 May 27;19(6):6975-86.

[2]. Abdull Razis AF, et al. The natural chemopreventive phytochemical R-sulforaphane is a far more potent inducer of the carcinogen-detoxifying enzyme systems in rat liver and lung than the S-isomer. Int J Cancer. 2011 Jun 15;128(12):2775-82.

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