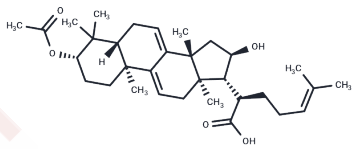
Data Sheet (Cat.No.TN1109)

TargetMol

3-O-Acetyl-16α-hydroxydehydrotrametenolic acid

Chemical Properties



CAS No. : 168293-14-9

Formula: C32H48O5

Molecular Weight: 512.72

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	3-O-Acetyl-16α-hydroxydehydrotrametenolic acid (3-O-Acetyl-16 alpha-hydroxydehydrotrametenolic acid) exhibits anti-inflammatory activity by inhibiting NO production and iNOS expression in LPS-stimulated Raw264.7 cells.
Targets(IC50)	NOS,NO Synthase,Prostaglandin Receptor
In vitro	Based on bioassay-guided fractionation using lipopolysaccharide (LPS)-stimulated Raw264.7 cells, chemical investigation of the EtOH extract of the sclerotia of P. cocos resulted in the isolation and identification of eight compounds including six triterpenoids, namely poricoic acid A (1), 3-O-Acetyl-16 alpha-hydroxydehydrotrametenolic acid(2), polyporenic acid C (3), 3β-hydroxylanosta-7,9(11), 24-trien-21-oic acid (4), trametenolic acid (5), and dehydroeburicoic acid (6), as well as (-)-pinoresinol (7) and protocatechualdehyde (8). The structures of the isolated compounds were determined by spectroscopic analysis, including 1H and 13C NMR spectra, and LC/MS analysis. The anti-inflammatory activities of the isolates were evaluated by estimating their effect on the production of nitric oxide (NO) and prostaglandin E2 (PGE2) in LPS-stimulated Raw264.7 as well as on the expression of inducible nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2). Compounds 1-5 inhibited NO production and iNOS expression in LPS-stimulated Raw264.7 cells. Among them, compound 1 exerted the highest anti-inhibitory activity and reduced PGE2 levels via downregulation of COX-2 protein expression.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9504 mL	9.7519 mL	19.5038 mL
5 mM	0.3901 mL	1.9504 mL	3.9008 mL
10 mM	0.195 mL	0.9752 mL	1.9504 mL
50 mM	0.039 mL	0.195 mL	0.3901 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

Bioactivity-guided isolation of anti-inflammatory triterpenoids from the sclerotia of Poria cocos using LPS-stimulated Raw264.7 cells.Bioorg Chem. 2017 Feb;70:94-99.