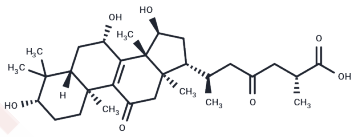
Data Sheet (Cat.No.TN1661)

TargetMol

Ganoderic acid C2

Chemical Properties



CAS No. : 103773-62-2

Formula: C30H46O7

Molecular Weight: 518.68

Storage: Store at low temperature,Keep away from direct sunlight
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	Ganoderic acid C2 has anti-inflammatory,and anti-tumor-promoting activities. Ganoderic acid C2 can inhibit histamine release, it also has inhibitory effects on the induction of Epstein-Barr Virus early antigen. Ganoderic acid C2 exhibits high inhibitory activity against the rat lens aldose reductase (IC50 = 3.8 μM).
Targets(IC50)	Reductase,Histamine Receptor,Immunology/Inflammation related
In vitro	The metabolites and pharmacokinetics of Ganoderic acid C2 (GAC2), a bioactive triterpenoid in Ganoderma lucidum in rat plasma were investigated by high-performance liquid chromatography coupled with electrospray ionization tandem mass spectrometry (HPLC-ESI-MS/MS). Totally, ten minor phase I metabolites of GAC2 were characterized after oral administration of GAC2, on the basis of their mass fragmentation pathways or direct comparison with authentic compounds by high-performance liquid chromatography coupled with diode array detection and electrospray ion trap tandem mass spectrometry (HPLC-DAD-ESI-MS(n)), and liquid chromatography coupled with electrospray ionization hybrid ion trap and time-of-flight mass spectrometry (LC-ESI-IT-TOF/MS) methods. Moreover, a rapid and specific method for quantification of GAC2 in rat plasma after oral administration was developed by using a liquid-liquid extraction procedure and HPLC-ESI-MS/MS analysis.

Solubility Information

Solubility	DMSO: 50 mg/mL (96.4 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: 1 mg/mL (1.93 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.928 mL	9.6399 mL	19.2797 mL
5 mM	0.3856 mL	1.928 mL	3.8559 mL
10 mM	0.1928 mL	0.964 mL	1.928 mL
50 mM	0.0386 mL	0.1928 mL	0.3856 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

Guo XY, et al. Structural characterization of minor metabolites and pharmacokinetics of ganoderic acid C2 in rat plasma by HPLC coupled with electrospray ionization tandem mass spectrometry. J Pharm Biomed Anal. 2013 Mar 5;75:64-73.

Fatmawati S, et al. Inhibition of aldose reductase in vitro by constituents of Ganoderma lucidum. Planta Med. 2010 Oct;76(15):1691-3.