Data Sheet (Cat.No.TN6645)

TargetMol

Lucidumol A

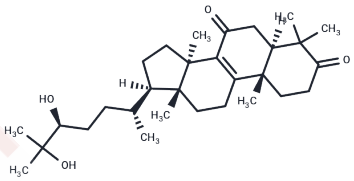
Chemical Properties

CAS No. : 217476-73-8

Formula: C30H48O4

Molecular Weight: 472.7

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	Lucidumol A has relatively good effect against aldose reductase with IC50 of 19.1uM. Lucidumol A has cytotoxic activity, it reduced cell growth in three human carcinoma cells (Caco-2, HepG2, and HeLa cells) dose dependently with LC50s from 20.87 to 84.36 uM.
In vitro	The medicinal mushroom Ganoderma lucidum is well recognized for its effective cancer-preventative and therapeutic properties, while specific components responsible for these anticancer effects are not well studied. METHODS AND RESULTS: Six triterpenoids that are ganolucidic acid E, Lucidumol A, ganodermanontriol, 7-oxo-ganoderic acid Z, 15-hydroxy-ganoderic acid S, and ganoderic acid DM were isolated and identified from an extract of the mushroom. All compounds reduced cell growth in three human carcinoma cells (Caco-2, HepG2, and HeLa cells) dose dependently with LC50s from 20.87 to 84.36 μM. Moreover, the six compounds induced apoptosis in HeLa cells with a maximum increase (22%) of sub-G1 accumulations and 43.03% apoptotic cells in terminal deoxynucleotidyl transferase dUTP nick end labeling (TUNEL) assay (15-hydroxy-ganoderic acid S treatment). Apoptosis was further confirmed by annexin-V staining. Four of the compounds also caused apoptosis in Caco-2 cells with maximum 9.5% increase of sub-G1 accumulations (7-oxo-ganoderic acid Z treatment) and maximum 29.84% apoptotic cells in TUNEL assay (ganoderic acid DM treatment). Contrarily, none of the compounds induced apoptosis in HepG2 cells. CONCLUSIONS: The different responses of the three cell lines following these treatments indicated that the bioactive properties of these compounds may vary from cells of different sites of origin and are likely acting under diverse regulatory mechanisms.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1155 mL	10.5775 mL	21.1551 mL
5 mM	0.4231 mL	2.1155 mL	4.231 mL
10 mM	0.2116 mL	1.0578 mL	2.1155 mL
50 mM	0.0423 mL	0.2116 mL	0.4231 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

Distinct Responses of Cytotoxic Ganoderma lucidum Triterpenoids in Human Carcinoma Cells. Phytother Res. 2015 Nov;29(11):1744-52.