

Ganoderic acid DM

Chemical Properties

CAS No. :	173075-45-1
Formula:	C ₃₀ H ₄₄ O ₄
Molecular Weight:	468.67
Storage:	Keep away from direct sunlight, Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

Biological Description

Description	Ganoderic acid DM is an antiandrogenic inhibitor of osteoclastogenesis that markedly suppresses the expression of c-Fos and nuclear factor of activated T cells c1 (NFATc1). The suppression mediated by Ganoderic acid DM results in the inhibition of dendritic cell-specific transmembrane protein (DC-STAMP) expression and a consequent reduction in osteoclast fusion. Ganoderic acid DM is therefore of considerable interest for mechanistic investigations involving osteoclast differentiation, bone remodeling, and androgen-associated signaling pathways in musculoskeletal research models.
Targets(IC50)	Others
In vitro	Ganoderic acid DM effectively inhibited cell proliferation and colony formation in MCF-7 human breast cancer cells, which was much stronger than that of MDA-MB-231 breast cancer cells. Ganoderic acid DM both concentration- and time-dependently mediated G1 cell cycle arrest and significantly decreased the protein level of CDK2, CDK6, cycle D1, p-Rb and c-Myc in MCF-7 cells. Moreover, GADM obviously induced DNA fragmentation and cleavage of PARP which are the characteristics of apoptosis and decreased the mitochondrial membrane potential in MCF-7 cells. Besides, we also showed that GADM elicited DNA damage as measured by comet assay which is a sensitive method for DNA damage detection. γ -H2AX, a marker of DNA damage, was also slightly up-regulated after treated with GADM for 6h, suggesting that the G1 cell cycle arrest and apoptosis induced by GADM may be partially resulted from GADM-induced DNA damage[1]

Solubility Information

Solubility	DMSO: 40 mg/mL (85.35 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1337 mL	10.6685 mL	21.337 mL
5 mM	0.4267 mL	2.1337 mL	4.2674 mL
10 mM	0.2134 mL	1.0668 mL	2.1337 mL
50 mM	0.0427 mL	0.2134 mL	0.4267 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

Ganoderic acid DM, a natural triterpenoid, induces DNA damage, G1 cell cycle arrest and apoptosis in human breast cancer cells. *Fitoterapia*. 2012 Mar;83(2):408-14.

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