Natural Products

ChemFaces

Ganoderic acid C1 Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Ganoderic acid C1

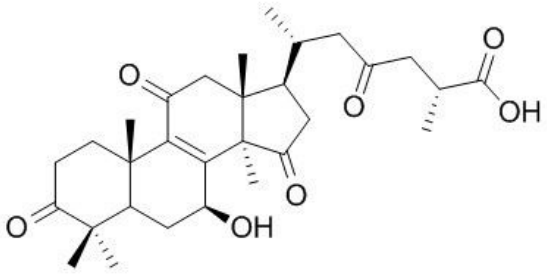
Catalog No.: CFN92053

Cas No.: 95311-97-0

Purity: > 95%

M.F: $C_{30}H_{42}O_7$

M.W: 514.7



Physical Description: White cryst.

Synonyms: 7-Hydroxy-3,11,15,23-tetraoxolanost-8-en-26-oic acid.

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

[Source]

The fruiting bodys of *Ganoderma lucidum.*

[Biological Activity or Inhibitors]

Ganoderic acid C1(GAC1), isolated from the ganoderma mushroom, has cytotoxicity in vitro against Lewis lung carcinoma (LLC), T-47D, Sarcoma 180, and Meth-A tumor cell lines. [1]

Ganoderic acid C1 significantly reduces TNF-α production by murine macrophages (RAW 264.7 cells) and peripheral blood mononuclear cells (PBMCs) from asthma patients; inhibition is associated with down-regulation of NF-κB expression, and partial suppression of MAPK and AP-1 signaling pathways; suggests that GAC1 may have potential for treating TNF-α mediated inflammation in asthma and other inflammatory diseases. [2]

Ganoderic acid C1 is moderately active inhibitors against HIV-1 PR with a 50% inhibitory concentration of 0.17–0.23mM. [3]

Ganoderic acid C1 can inhibit TNF-α production in RW-stimulated RAW264.7 cells in association with suppression of phosphorylated IκB and increas HDAC2 expression, GAC1 may be a valuable option for treating neutrophil-predominant asthma. [4]

[Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

[HPLC Method] [5]

Mobile phase: Acetonitrile- 0.04% Formic acid H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 15 ℃;

The wave length of determination: 254 nm.

[Storage]

2-8℃, Protected from air and light, refrigerate or freeze.

[References]

[1] Gao J J, Min B S, Ahn E M, *et al. Chem. Pharm. Bull., 2002, 50(6):837-40.*

[2] Liu C, Nan Y, Ying S, *et al. Int. Immunopharmacol., 2015, 27(2):1556-8.*

[3] El-Mekkawy S, Meselhy M R, Nakamura N, *et al. Phytochemistry, 1998, 49(6):1651-7.*

[4] Srivastava K D, Dunkin D, Liu C, *et al. Ann. Aller Asthma Im., 2014, 112(4):1-2.*

[5] Li B M, Gu H F, Li Y, *et al. China Journal of Chinese Materia Medica, 2012, 37(23): 3599-603.*

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