

Ergosterol peroxide glucoside Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Ergosterol peroxide glucoside

Catalog No.: CFN99458

Cas No.: 140447-22-9

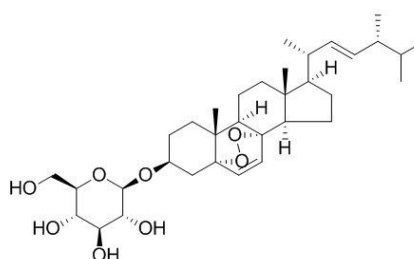
Purity: > 95%

M.F: C₃₄H₅₄O₈

M.W: 590.8

Physical Description: Powder

Synonyms:



[Intended Use]

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

[Source]

The mushroom of *Lactarius volemus*.

[Biological Activity or Inhibitors]

Ergosterol peroxide exhibits inhibitory effects on human breast adenocarcinoma MCF-7 cells, it inhibits the growth of MCF-7 cells by inducing cell apoptosis.^[1]

Ergosterol peroxide exhibits hACAT-1 and Lp-PLA2 inhibitory effects, with inhibitory values of 51.6 +/- 0.9 and 51.7 +/- 1.2%, at a treatment concentration of 0.23 mM; suggests that it could as an anti-atherosclerosis agent.^[2]

Ergosterol peroxide shows very strong anticomplementary activity on the classical pathway, the IC(50) values being 5.0 µM. ^[3]

Ergosterol peroxide can suppress inflammatory responses in RAW264.7 macrophages and growth of HT29 colon adenocarcinoma cells, it appears to suppress cell growth and STAT1 mediated inflammatory responses by altering the redox state in HT29 cells.^[4]

Ergosterol peroxide has anti-melanogenic activity.^[5]

Ergosterol peroxide has amoebicidal activity (IC50 =4.23nM), it produces a strong cytotoxic effect against amoebic growth.^[6]

Ergosterol peroxide has osteoclastogenesis inhibitory effect, it shows an inhibitory effect in a dose-dependent manner and an inhibition rate of up to 62% with low cytotoxicity, even at a concentration as low as 1.0 µg/mL.^[7]

Ergosterol peroxide has antibacterial activity against Mycobacterium tuberculosis and has antiviral action.^[8,9]

Ergosterol peroxide has anti-oxidant activity.^[10]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[11]

Mobile phase: Methanol- Aqueous sodium phosphate solution (containing 20 mmol/L sodium dihydrogen phosphate and 20mmol/L disodium hydrogen phosphate prepared with purified water),gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 260 nm.

[Storage]

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

[References]

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- [11] Yuan J P, Zhao S Y, Wang J H, *et al. J. Agr. Food Chem.*, 2008, 56(3):809-15.

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