Natural Products



Sugiol Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Sugiol

Catalog No.: CFN92187

Cas No.: 511-05-7

Purity: >95%

M.F: C₂₀H₂₈O₂

M.W: 300.4



Physical Description: Powder

Synonyms:4aS,10aS)-6-hydroxy-1,1,4a-trimethyl-7-propan-2-yl-3,4,10,10a-tetrahy dro-2H-phenanthren-9-one;(+)-Sugiol;(4aS)-2,3,4,4a,10,10a-Hexahydro-6-hydroxy-1,1,4a -trimethyl-7-isopropylphenanthren-9(1H)-one;12-Hydroxyabieta-8,11,13-triene-7-one;10-Deoxoxanthoperol.

[Intended Use]

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

[Source]

The herbs of Salvia yunnanensis.

[Biological Activity or Inhibitors]

Sugiol is a diterpene which was isolated and purified from alcohol extracts of the bark of Calocedrus formosana Florin (Cupressaceae), it has low inhibitory activity against the DPPH radical, it can effectively reduce intracellular reactive oxygen species (ROS) production in lipopolysaccharide (LPS)-stimulated macrophages; also has potential anti-inflammatory activity, sugiol's efficacy in inhibiting the inflammatory cytokines of IL-1beta and TNF-alpha could be attributed to a reduction of the ROS that leads to a decrease in the phosphorylation of MAPKs.^[1]

Sugiol inhibits signal transducer and activator of transcription 3 (STAT3) activity via regulation of transketolase and ROS-mediated ERK activation in DU145 prostate carcinoma cells, sugiol could be as an inhibitor of the STAT3 pathway for the treatment of human solid tumors with activated STAT3.^[2]

Sugiol has antiviral activity, sugiol (500 pg/ml) exhibits considerable anti-cytopathic effect on MDCK cell line confirming its antiviral efficacy against HiN] influenza virus, sugiol could be a candidate of choice in combinational regimen with potential antiviral efficacy. ^[3]

[Solvent]

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

[HPLC Method]^[4]

Mobile phase: 0.1%Formic acid in water- 0.1%Formic acid in acetonitrile,gradient elution ; Flow rate: 0.5 ml/min; Column temperature: Room Temperature; The wave length of determination: 300 nm.

[Storage]

 $2-8^{\circ}$ C, Protected from air and light, refrigerate or freeze.

[References]

[1] Chao K P, Hua K F, Hsu H Y, et al. Planta Med., 2005, 71(4):300-5.

[2] Kim J, Lee Y J, Shin D S, et al. Bioorg. Med.Chem., 2011, 19(24):7582-9.

[3] Bajpai V K, Kim N H, Kim K, et al. Pak. J. Pharm. Sci., 2016, 29(3(Suppl)):1077-80.

[4] Fronza M, Murillo R, Ślusarczyk S, et al. Bioorg.Med. Chem., 2011, 19(16):4876-81.

[Contact]

Address: S5-3 Building, No. 111, Dongfeng Rd., Wuhan Economic and Technological Development Zone, Wuhan, Hubei 430056, China Email: info@chemfaces.com Tel: +86-27-84237783 Fax: +86-27-84254680 Web: www.chemfaces.com Tech Support: service@chemfaces.com