Natural Products

ChemFaces

Lupeol Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Lupeol

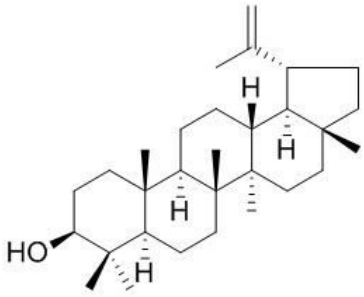
Catalog No.: CFN98913

Cas No.: 545-47-1

Purity: >=98%

M.F: $C_{30}H_{50}O$

M.W: 426.72



Physical Description: Powder

Synonyms: Monogynol;(3-beta)-Lup-20(29)-en-3-ol;Clerodol;Fagarsterol;

1H-Cyclopenta[a]chrysene, lup-20(29)-en-3-ol deriv.;Lup-20(29)-en-3beta-ol.

[Intended Use]

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

[Source]

The flower of *Chrysanthemum morifolium.*

[Biological Activity or Inhibitors]

Lupeol, a phytosterol and triterpene, is widely found in edible fruits, and vegetables; it has a potential to act as an anti-inflammatory, anti-microbial, anti-protozoal, anti-proliferative, anti-invasive, anti-angiogenic and cholesterol lowering agent.[1]

Lupeol possesses antiskin tumor-promoting effects in CD-1 mouse and inhibits conventional as well as novel biomarkers of tumor promotion, suggests that Lupeol is an attractive antitumor-promoting agent that must be evaluated in tumor models other than skin carcinogenesis.[2]

Lupeol prevents acetaminophen-induced in vivo hepatotoxicity by altering the Bax/Bcl-2 and oxidative stress-mediated mitochondrial signaling cascade. [3]

Lupeol and its ester derivative have beneficial effects on hypercholesterolemia-induced oxidative and inflammatory stresses.[4]

Lupeol exerts a significant synergistic cytotoxic effect when combined with low-dose cisplatin without side effects, suggests that lupeol may be an effective agent either alone or in combination for treatment of advanced tumors.[5]

Lupeol treatment can cause decreases in glycated haemoglobin, serum glucose and nitric oxide, with a concomitant increase in serum insulin level, it is shown to suppress the progression of diabetes after 21 days; furthermore, treatment with lupeol also can increase antioxidant levels, with a decrease in the level of thiobarbituric acid-reactive oxygen species.[6]

Lupeol (at 50 and 30 microg/mL) shows a marked inhibitory activity on human umbilical venous endothelial cells (HUVEC) tube formation while it does not affect the growth of tumor cell lines such as SK-MEL-2, A549, and B16-F10 melanoma; suggests that it has antiangiogenic effec.[7]

Lupeol has potential antimalarial activity.[8]

[Solvent]

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

[HPLC Method][9]

Mobile phase: 0.1% Acetic acid in water- Acetonitrile=6:94 ;

Flow rate: 1.0 ml/min;

Column temperature: 25 ℃;

The wave length of determination: 215 nm.

[Storage]

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

[References]

[1] Siddique H R, Saleem M. *Life Sci., 2011, 88(7-8):285-93.*

[2] Saleem M, Afaq F, Adhami V M, *et al. Oncogene, 2004, 23(30):5203-14.*

[3] Kumari A, Kakkar P. *Life Sci., 2012, 90(15-16):561-70.*

[4] Sudhahar V, Kumar S A, Mythili Y, *et al. Nutr. Res., 2007, 27(12):778-87.*

[5] Lee T K, Poon R T, Wo J Y, *et al. Cancer Res., 2007, 67(18):8800-9.*

[6]Gupta R, Sharma A K, Sharma M C, *et al. Nat. Prod. Res., 2012, 26(12):1125-9.*

[7] You Y, Nguyen‐Hai N, Yong K, *et al. Phytother. Res., 2003, 17(4):341-4.*

[8] Borgati T F, Pereira G R, Geraldo Célio Brandão, *et al. Orbital the Electronic Journal of Chemistry, 2012, 4(1):21-2.*

[9] Banerjee D, Maji A K, Pandit S, *et al. Int. J. Pharm. Pharm. Sci., 2014, 6(5):691-5.*

[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