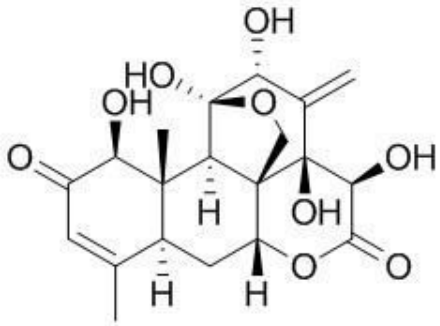
Natural Products

ChemFaces

Eurycomanone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]



Name: Eurycomanone

Catalog No.: CFN92008

Cas No.: 84633-29-4

Purity: > 98%

M.F: $C_{20}H_{24}O_9$

M.W: 408.4

Physical Description: Cryst.

Synonyms:(1beta,8xi,11beta,12alpha,15beta)-1,11,12,14,15-pentahydroxy-11,20-epoxy picrasa-3,13(21)-diene-2,16-dione.

[Intended Use]

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

[Source]

The roots of *Eurycoma longifolia*.

[Biological Activity or Inhibitors]

Eurycomanone has cytotoxic on HepG2 cells and Human Cervical Carcinoma Cells by inducing apoptosis through the up-regulation of p53 and Bax, and down-regulation of Bcl-2.[1,2]

Eurycomanone exerts antiproliferative activity via apoptosis in Hela cells and MCF-7cells .[3,4]

Eurycomanone at viable therapeutic concentrations of 5–20μg/ml exhibits significant anti-proliferative and anti-clonogenic cell growth effects on A549 lung cancer cells, the treatment also resulted in suppression of the lung cancer cell tumor markers and several known cancer cell growth-associated genes.[5]

Eurycomanone enhances testosterone steroidogenesis at the Leydig cells by inhibiting aromatase conversion of testosterone to oestrogen, and at a high concentration may also involve phosphodiesterase inhibition, it may be worthy for further development as a phytomedicine to treat testosterone-deficient idiopathic male infertility and sterility.[6]

Eurycomanone and eurycomanol as regulators of signaling pathways involved in proliferation, cell death and inflammation.[7]

Eurycomanone possesses growth inhibition of P.berghei by combination of eurycomanone-artesunate with doses 30 mg/kgBW-artesunate 4mg/kgBW, suggests that this combination can be used as potential antimalarial drug.[8]

[Solvent]

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

[HPLC Method][9]

Mobile phase: Acetonitrile- 0.1% Fomic acid H2O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 254 nm.

[Storage]

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

[References]

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[3] Nurkhasanah, Azimahtol Hawariah Lope Pihie,Jalifah Latip. *Majalah Farmasi Indonesia, 2009, 20(4): 190-7.*

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[5] Wong P F, Cheong W F, Shu M H, *et al.Phytomedicine, 2012, 19(2):138-44.*

[6] Low B S, Choi S B, Wahab H A, *et al. J. Ethnopharmacol., 2013, 149(1):201-7.*

[7] Hajjouli S, Chateauvieux S, Teiten M H, *et al. Molecules, 2014, 19(9):14649-66.*

[8] Yusuf H, Satria D. *J Chem. Pharm. Res., 2016,(82):18-22.*

[9] Khari N, Aisha A, Ismail Z. *Trop. J. Pharm. Res., 2014, 13(5):801-7.*

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