Natural Products

ChemFaces

Demethylwedelolactone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

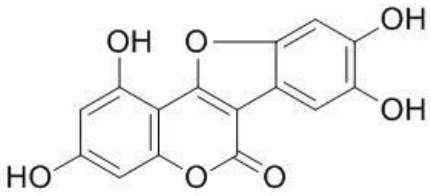
Name: Demethylwedelolactone

Catalog No.: CFN90521

Cas No.: 6468-55-9

Purity: >=98%

M.F: $C_{15}H_8O_7$



M.W: 300.22

Physical Description: Powder

Synonyms:1,3,8,9-TetrahydroxycouMestan;;Norwedelolactone;IsodeMethyl-wedelolactone;1,3,8,9-Tetrahydroxy-6H-benzofuro-[3,2-c]chromen-6-one.

[Intended Use]

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

[Source]

The herbs of *Eclipta prostrata.*

[Biological Activity or Inhibitors]

Demethylwedelolactone and wedelolactone can inhibit the anchorage-independent growth and suppress cell motility and cell invasion of MDA-MB-231 cells, they also can reduce the activity and expression of matrix metalloproteinases (MMPs) involved in blocking the IκB-α/NFκB and MEK/ERK signaling pathways in MDA-MB-231 cells; suggests that demethylwedelolactone derivatives exert anti-invasive growth effect on breast cancer cells.[1]

Demethylwedelolactone and wedelolactone have trypsin inhibitory effect, IC(50) values are 3.0 and 2.9 microg/mL respectively.[2]

Demethylwedelolactone and wedelolactone can dose dependently inhibit the de-granulation of mast cells induced by Compound 48/80 (C 48/80), they also inhibit the production of NO, pro-inflammatory cytokines such as TNF-α , IL-1β and IL-6 and the expression of costimulatory molecules such as CD40, CD80 and CD86 in LPS-stimulated macrophages; suggests they have immunomodulatory effects, can be exploited as alternative new therapeutics for various inflammatory diseases. [3]

Demethylwedelolactone is the major constituent of the butanolic and purified butanolic extracts (PBEs) of Eclipta prostrata, has anti-venom potential; both extracts partially inhibit the hemorrhagic activity but display very low anti-phospholipase Aactivity and do not inhibit proteolytic activity of Malayan pit viper (MPV) venom.[4]

[Solvent]

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

[HPLC Method][5]

Mobile phase: Methanol- 0.2% Formic acid in water=57:43;

Flow rate: 1.0 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 351 nm.

[Storage]

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

[References]

[1] Lee Y J, Lin W L, Chen N F, *et al. Eur. J.Med.Chem., 2012, 56(10):361-7.*

[2] Syed S D, Deepak M, Yogisha S, *et al. Phytother. Res., 2003, 17(4):420-1.*

[3] Maji A K, Mahapatra S, Banerji P, *et al. Oriental Pharmacy & Experimental Medicine, 2015, 15(1):23-31.*

[4] Pithayanukul P, Laovachirasuwan S, Bavovada R, *et al. J. Ethnopharmacol., 2004, 90(2-3):347-52.*

[5] Shailajan S, Menon S, Singh D, *et al. Pharmacogn. J., 2016, 8(2):132–9.*

[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