Natural Products

ChemFaces

Dehydrocostus lactone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Dehydrocostus lactone

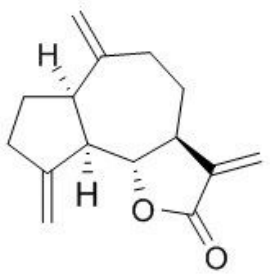
Catalog No.: CFN98720

Cas No.: 477-43-0

Purity: > 98%

M.F: $C_{15}H_{18}O_2$

M.W: 230.3



Physical Description: Cryst.

Synonyms:(3aS,6aR,9aR,9bS)-3,6,9-trimethylene-3a,4,5,6a,7,8,9a,9b-octahydroazuleno[4,5-b]furan-2-one.

[Intended Use]

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

[Source]

The roots of *Saussurea lappa.*

[Biological Activity or Inhibitors]

Dehydrocostus lactone(DCL) is exuded from sunflower roots and low DCL concentrations stimulate germination of the root parasite Orobanche cumana.[1]

Dehydrocostus lactone(0.1-10microg/ml) can protect osteoblasts against H_2O_2-induced cellular dysfunction, may be valuable as a protective agent against oxidative damage in osteoblasts.[2]

Dehydrocostus lactone increases cellular resistance to oxidant injury in HepG2 cells, may via causing the nuclear accumulation of the nuclear factor E2-related factor 2 (Nrf2) and increasing the promoter activity of antioxidant response element (ARE).[3]

Dehydrocostus lactone and costunolide exhibits strong larvicidal activity against A. albopictus with LC(50) values of 2.34 and 3.26 ug/ml, respectively, while the essential oil had an LC(50) value of 12.41 ug/ml. [4]

[Solvent]

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

[HPLC Method][5]

Mobile phase: 5% Acetonitrile-Acetonitrile=58：42;

Flow rate: 1.0 ml/min;

Column temperature: Room temperature;

The wave length of determination: 225 nm.

[Storage]

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

[References]

[1] El-Nadi M, Zohni O. *Phytochemistry, 2011, 72(7):624-34.*

[2] Choi E M, Kim G H, Yong S L. *Toxicol. In Vitro, 2009, 23(5):862-7.*

[3] Jeong G S, Pae H O, Jeong S O, *et al. Eur. J. Phamarmacol., 2007, 565(565):37-44.*

[4] Zhi L L, He Q, Sha S C, et al. *Parasitol .Res. , 2011, 110(6):2125-30.*

[5] Tan S J, Qiu D, Liu G, et al. *Chinese Journal of Pharmaceutical Analysis, 2011, 31(1): 145-7.*

[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