Natural Products

ChemFaces

3-O-Acetyl-11-keto-beta-boswellic acid Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: 3-O-Acetyl-11-keto-beta-boswellic acidllic acid

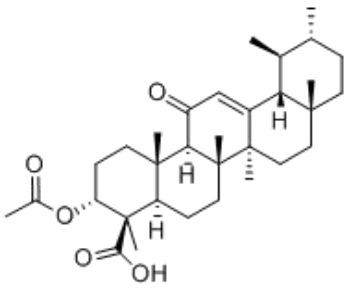
Catalog No.: CFN90531

Cas No.: 67416-61-9

Purity: > 98%

M.F: $C_{32}H_{48}O_5$

M.W: 512.72



Physical Description: Powder

Synonyms:

(3α)-3-(acetyloxy)-11-oxours-12-en-24-oic acid; 3-Acetyl-11-keto-beta-boswellic acid.

[Intended Use]

1. Reference standards;

2. Pharmacological research;

3. Synthetic precursor compounds;

4. Intermediates & Fine Chemicals;

5. Others.

[Source]

The herbs of *Boswellia carterii Birdw.*

[Biological Activity or Inhibitors]

3-O-Acetyl-11-Keto-beta-Boswellic acid (AKBA) and its analogs exhibit 5-Lipoxigenase inhibitory properties, they may be used in pharmaceutical compositions for therapeutic applications against a variety of inflammations and hypersensitivity-based human diseases including asthma, arthritis, bowel diseases such as ulcerative colitis and circulatory disorders such as shock and ischemia; they also inhibit the growth of brine shrimp in cultures, which may be considered as a positive indication for cytotoxicity and antitumor activity.[1]

3-O-Acetyl-11-keto-beta-boswellic acid is a novel oral anti-TNF anti-inflammatory agent.[2]

3-O-acetyl-11-keto-beta-boswellic acid is cytotoxic to ovarian cancer cells, it also induces DNA damage and G2/M arrest, which may be related to its cytotoxic effects; it may form the basis of a novel anticancer treatment for ovarian cancer perhaps alongside conventional chemotherapy. [3]

3-Acetyl-11-keto-beta-boswellic acid has anti-inflammatory and anti-arthritic activities, AKBA polymeric nanomicelle gel significantly enhances skin permeability, and anti-inflammatory and anti-arthritic activity.[4]

[Solvent]

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

[HPLC Method][5]

Mobile phase: Acetonitrile- 0.1% Phosphoric acid H2O, gradient eiution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 248 nm.

[Storage]

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

[References]

[1] Gokaraju G R, Gokaraju R R, Gottumukkala V S, *et al. EP1765761[P]. 2013.*

[2] Raychaudhuri S, Sengupta K, Krishnaraju A, *et al. Clin. Immun., 2009, 131:S77.*

[3] Salmani K K A, Marcus S. Cooke, Ikram Burney, *et al. A A.C.R. 2013.*

[4] Amit Goel, Farhan Jalees Ahmad, Raman Mohan Singh,*et al. J. Pharm. Pharmacol., 2010, 62(2):273-8.*

[5] Subbaraju G V, Sridhar P, Ramakrishna S, *et al. Asian J.Chem., 2004, 16(3):1824-32.*

[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