Natural Products

ChemFaces

Oleanolic acid Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Oleanolic acid

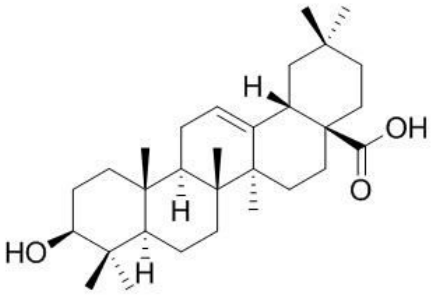
Catalog No.: CFN98800

Cas No.: 508-02-1

Purity: > 98%

M.F: $C_{30}H_{48}O_3$

M.W: 456.7



Physical Description: Powder

Synonyms:(4aS,6aR,6aS,6bR,8aR,10S,12aR,14bS)-10-hydroxy-2,2,6a,6b,9,9,12a-heptamethyl-1,3,4,5,6,6a,7,8,8a,10,11,12,13,14b-tetradecahydropicene-4a-carboxylic acid.

[Intended Use]

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

[Source]

The herb of *Boehmeria nivea (Linn.) Gaudich.*

[Biological Activity or Inhibitors]

Oleanolic acid is a pentacyclic triterpenoid compound with a widespread occurrence throughout the plant kingdom, it exists either as a free acid or as an aglycone precursor for triterpenoid saponins, in which it can be linked to one or more sugar chains; oleanolic acid and its derivatives possess hepatoprotective effects, and anti-inflammatory, antioxidant, or anticancer activities. [1]

Oleanolic acid may be a promising agent to disturb adipocyte differentiation and suppress obesity-associated inflammation, 25mol/L oleanolic acid-treated adipocytes can significantly repress visfatin production possibly through blocking PPAR activation.[2]

Oleanolic acid and ursolic acid exhibit anti-HCV activity at least partly through suppressing HCV NS5B RdRp activity as noncompetitive inhibitors,could be used as potential HCV antivirals that can be applied to clinic trials either as monotherapy or in combination with other HCV antivirals.[3]

Oleanolic acid may be a possible bioactive agent that blunts adipogenesis and adipokine inflammation, can suppress adipocyte differentiation-associated resistin and adipogenesis production by disturbing the Tyk2-STAT1/3 signaling pathway and promoting SOCS3 expression. [4]

[Solvent]

Pyridine, DMSO, Methanol, etc.

[HPLC Method][5]

Mobile phase: Methanol - 0.03 M Phosphate buffer (pH 2.8)=88:12;

Flow rate: 1.0 ml/min;

Column temperature: Room temperature;

The wave length of determination: 210 nm.

[Storage]

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

[References]

[1] Pollier J, Goossens A. *Phytochemistry, 2012, 77(5):10-15.*

[2] Sung H Y, Kang S W, Kim J L, *et al. Nutr. Res., 2010, 30(12):831-9.*

[3] Kong L, Li S, Liao Q, *et al. Antivir Res.,2013, 98(1):44-53.*

[4] Kim H S, Sung H Y, Kim M S, *et al. Nutr. Res., 2013, 33(2):144-53.*

[5] Zhou C, Chen K, Sun C, *et al. Biomed. Chromatogr., 2007, 21(7):755-61.*

[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