Natural Products

ChemFaces

Esculentic acid Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Esculentic acid

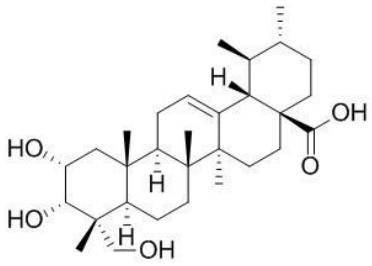
Catalog No.: CFN99059

Cas No.: 103974-74-9

Purity: > 95%

M.F: $C_{30}H_{48}O_5$

M.W: 488.70



Physical Description: Powder

Synonyms: 2a,3a,23-Trihydroxyurs-12-en-28-oic acid.

[Intended Use]

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

[Source]

The roots of *Phytolacca acinosa Roxb.*

[Biological Activity or Inhibitors]

Esculentic acid (EA), a pentacyclic triterpenoids compound extracted from the Chinese

herb Phytolacca esculenta, has long been used in traditional Chinese medicine for the treatment of rheumatoid arthritis, edema, hepatitis and bronchitis disease; EA possesses potent anti-inflammatory activity both in vivo and in vitro, while the anti-inflammation action in vitro may be attributed to the inhibition of the level of TNF-α and IL-6 pro-inflammatory cytokines and PGE2 inflammatory mediator in macrophages, meanwhile, the production of PGE2 is possibly associated with COX-2 protein expression which is similar to that of NSAIDS.[1]

Esculentic acid has protective effects against LPS-induced endotoxic shock, which may be mediated, at least in part, by regulation the release of inflammatory cytokines and mediators, and protein expression of COX-2 in mice.[2]

Esculentic acid exhibits anti-complement activity with IC_{50} values of 56 microM, it seems to play an important role in inhibiting the hemolytic activity of human serum against erythrocytes. [3]

[Solvent]

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

[HPLC Method]

Not data available.

[Storage]

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

[References]

[1] Niu X, Mu Q, Li W, *et al. Eur. J. Pharmacol., 2014, 740:532-8.*

[2] Niu X, Mu Q, Li W, *et al. Int. Immunopharmacol., 2014, 23(1):229-35.*

[3] Thuong P T, Min B S, Jin W, *et al. Biol. Pharm. Bull., 2006, 29(4):830-3.*

[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