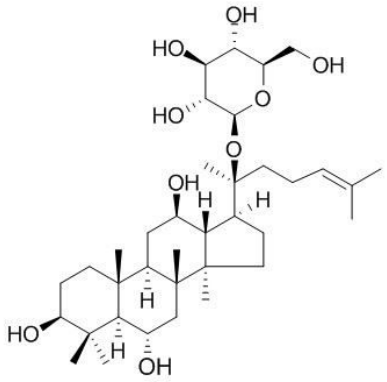
Natural Products

ChemFaces

Ginsenoside F1 Datasheet

4th Edition (Revised in July, 2016)

[Product Information]



Name: Ginsenoside F1

Catalog No.: CFN99754

Cas No.: 53963-43-2

Purity: > 98%

M.F: $C_{36}H_{62}O_9$

M.W: 638.88

Physical Description: White powder

Synonyms:

(2R,3S,4R,5R,6S)-2-(hydroxymethyl)-6-[(2R)-6-methyl-2-[(6R,10R,12S,13R,14R,17S)-3,6,12-trihydroxy-4,4,10,14,17-pentamethyl-2,3,5,6,7,8,9,11,12,13,15,16-dodecahydro-1H-cyclopenta[a]phenanthren-17-yl]hept-5-en-2-yl]oxyoxane-3,4,5-triol

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Cosmetic research;
5. Synthetic precursor compounds;
6. Care and daily chemicals;
7. Intermediates & Fine Chemicals;
8. Ingredient in supplements, beverages;

9. Others.

[Source]

The roots of *Panax ginseng C.A.Mey.*

[Biological Activity or Inhibitors]

Ginsenoside (G)-F1 is an enzymatic metabolite generated from G-Rg1, it has been reported to suppress platelet aggregation and to reduce gap junction-mediated intercellular communication, also as a novel anti-skin cancer drug with anti-proliferative and anti-migration features.[1]

Ginsenoside F1 significantly reduces ultraviolet-B-induced cell death by maintaining constant levels of Bcl-2 and protects HaCaT cells from apoptosis caused by ultraviolet B irradiation. [2]

Ginsenoside F1(GF1) has beneficial effects on skin, it reduces α-melanocyte-stimulating hormone-induced melanin secretion in B16F10 cell culture media by 60%, but does not suppress intracellular melanin levels, tyrosinase activity and expression; it primarily modulates the Rho family GTPases resulting in dendrite retraction, suggests that GF1 could act as a potent skin-whitening agent.[3]

Ginsenoside F1 has inhibitory effect of elastase and tyrosinase, indicates that ginsenoside F1 have a potential for industrial cosmetic materials.[4]

[Solvent]

Pyridine, Methanol, Ethanol, Hot water, etc.

[HPLC Method][5]

Mobile phase: Acetonitrie -H2O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 35 ℃;

The wave length of determination: 203 nm.

[Storage]

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

[References]

[1] Yoo D S, Rho H S, Yong G L, *et al. J. Ginseng Res., 2011, 35(1):86-91.*

[2] Lee E H, Cho S Y, Kim SJShin E S, *et al.J. Invest. Dermatol., 2003, 121(3):607-13.*

[3] Ji H K, Baek E J, Lee E J, *et al. Exp. Dermatol., 2014, 24(2):150-2*.

[4] Hong, S.C., *Korean J. Pharm., 2013, 44(1):10-5.*

[5] Chong G, Gao Y G, Pu Z, *et al. Chinese Trad. Herbal Drugs, 2014, 45(14):2009-13.*

[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