Natural Products

ChemFaces

Soyasaponin Bb Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Soyasaponin Bb

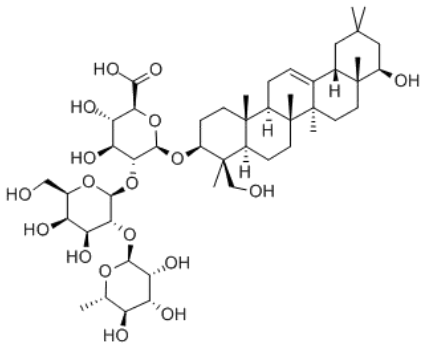
Catalog No.: CFN90456

Cas No.: 51330-27-9

Purity: >=97%

M.F: $C_{48}H_{78}O_{18}$

M.W: 943.12



Physical Description: Powder

Synonyms:

Soyasaponin I ;(3beta,22beta)-22,24-dihydroxyolean-12-en-3-yl 6-deoxy-alpha-L-mannopyranosyl-(1→2)-beta-D-galactopyranosyl-(1→2)-beta-D-glucopyranosiduronic acid.

[Intended Use]

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

[Source]

The seeds of *Glycine max*.

[Biological Activity or Inhibitors]

Soyasaponin Bb can impede kidney enlargement and cyst growth in the pcy mouse model of polycystic kidney disease.[1]

Soyasaponin Bb antagonizes inflammation by inhibiting TLR4 recruitment into lipid rafts and association with adaptor molecules through suppression of NADPH oxidase-dependent ROS generation. [2]

soyasaponin Bb can inhibit lipopolysaccharide (LPS)-induced inflammation in macrophages, it can inhibit TLR4 recruitment into lipid rafts and its signaling by suppressing the NADPH oxidase-dependent ROS generation..[3]

soyasaponin Bb can exhibit reverse effects on over expression of c-met,VEGF in Eca-9706 cells, Eca-9706 cell apoptosis can be induced by SSBb through inhibiting HDAC1-NF-κ B and activating PETEN and caspase-3 signaling pathways.[4]

Soyasaponin I and sapongenol B have limited absorption by Caco-2 intestinal cells and limited bioavailability in women.[5]

Soyasaponins (SSs) abundant in soybean have anti-inflammatory activities, low-dose SSs alleviated contact hypersensitivity (CHS) symptoms by attenuating inflammation and improving the intestinal microbiota composition, suggesting that dietary SSs may have beneficial effects on allergic contact dermatitis (ACD). [6]

Dietary soyasaponin has inhibitory effects on 2,4-dinitrofluorobenzene-induced contact hypersensitivity in mice.[7]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method][8]

Mobile phase: Acetonitrile- H2O=40:60(containing 0.1% trifluo roacetic acid0.1% Trifluo roacetic acid) ;

Flow rate: 1.0 ml/min;

Column temperature:40℃;

The wave length of determination: 205 nm.

[Storage]

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

[References]

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[4] Pei Y, Zhao H, Xiaoyan D U. *J. Hygiene Res., 2010, 39(4):444-6.*

[5] .Hu J, Reddy M B, Hendrich S, *et al. J. Nutr., 2004, 134(8):1867-73.*

[6] Zha L Y, Mao L M, Lu X C, *et al. Bioorg. Med. Chem. Lett., 2011, 21(8):2415-8.*

[7] Takao Nagano, Mitsuru Katase, Kazunobu Tsumura, *et al. Exp. Dermatol. , 2016, 9.*

[8] Quan J S, Yin X Z, Shigemitsu K.*Food Science & Technology, 2007, 32(4):172-4*

[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