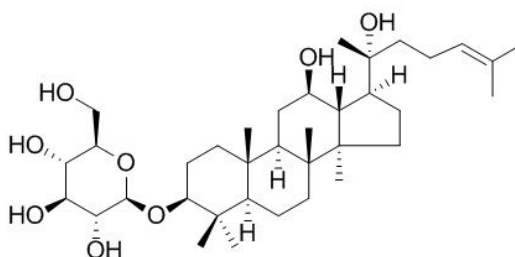


20(R)-Ginsenoside Rh2 Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: 20(R)-Ginsenoside Rh2**Catalog No.:** CFN90340**Cas No.:** 112246-15-8**Purity:** >=98%**M.F:** C₃₆H₆₂O₈**M.W:** 622.88**Physical Description:** Powder

Synonyms: (2R,3R,4S,5R,6R)-2-[[[(10S,12S,14R,17S)-12-hydroxy-17-[(2R)-2-hydroxy-6-methyl-hept-5-en-2-yl]-4,4,10,14,17-pentamethyl-2,3,5,6,7,8,9,11,12,1,3,15,16-dodecahydro-1H-cyclopenta[a]phenanthren-3-yl]oxy]-6-(hydroxymethyl)oxane-3,4,5-triol]; b-D-Glucopyranoside, (3b,12b,20R)-12,20-dihydroxydammar-24-en-3-yl.

[Intended Use]

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

[Source]

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

[Biological Activity or Inhibitors]

20(R)-Ginsenoside Rh2 is isolated from Chinese traditional ginsengs with main antitumor effects, it has the effect of promoting A549 cell apoptosis.^[1]

20(R)-ginsenoside Rh2 possesses matrix metalloproteinase inhibitory, anti-inflammatory and antioxidative activity, it can suppress NO, PGE2, ROS and pro-matrix metalloproteinase-9 (pro-MMP-9) levels that are enhanced in the LPS-stimulated murine RAW264.7 macrophage cells, it also exhibits inhibitory effects on the level of ROS and the activity of MMP-9 and -2 in human HaCat keratinocyte cells without stimulant exposure.^[2]

20(R)-ginsenoside Rh2 has antiviral activity against murine gamma-herpesvirus.^[3]

Ginsenoside 20(R)-Rh2, not 20(S) shows selective osteoclastogenesis inhibitory activity without any cytotoxicity up to 100 μ M, implies that the stereochemistry of the hydroxyl group at C-20 may play an important role in selective osteoclastogenesis inhibitory activity.^[4]

Ginsenoside Rh2 possesses skin anti-photoaging effects, it can suppress UV-B-induced ROS production in HaCat cells.^[5]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[6]

Mobile phase: Methanol- Acetonitrile=35:65 ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 203 nm.

[Storage]

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

[References]

- [1] Qi XD, Zhang C J, Yu H T, *et al. Guide of China Medicine*, 2011, 09(21):8-10.
- [2] Woo - Yong C, Hye - Won L, Chang - Jin L. *J. Pharm. Pharmacol.* 2013, 65(2):310-6.
- [3] Soowon Kang, Kyungtaek Im, Geon Kim, *et al. J. Ginseng Res.*..2016.08.010.
- [4] Jie L, Shiono J, Shimizu K, *et al. Bioorg. Med. Chem. Lett.*, 2009, 19(12):3320-3.
- [5] Oh S J, Lee S, Choi W Y, *et al. J. Biosci.*, 2014, 39(4):673-82.
- [6] Dong X, Zhang C Y, Zhou P. *Chinese Journal of New Drugs*, 2008, 17(19):1692-4.

[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