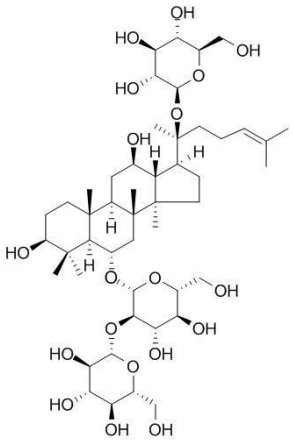
Natural Products

ChemFaces

Ginsenoside Rd Datasheet

4th Edition (Revised in July, 2016)

[Product Information]



Name: Ginsenoside Rd

Catalog No.: CFN99975

Cas No.: 52705-93-8

Purity: > 98%

M.F: $C_{48}H_{82}O_{19}$

M.W: 963.17

Physical Description: White powder

Synonyms:2-O-beta-D-Glucopyranosyl-(3beta,12beta)-20-(beta-D-glucopyranosyloxy)-12-hydroxydammara-24-en-3-yl-beta-D-glucopyranoside.

[Intended Use]

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

[Source]

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

[Biological Activity or Inhibitors]

Ginsenoside Rd (Rd), a saponin isolated from the roots of panax notoginseng, Rd has immunological adjuvant activity, and elicits a Th1 and Th2 immune response by regulating production and gene expression of Th1 cytokines and Th2 cytokines.[1]

Ginsenoside-Rd can play a crucial role in enhancing the defence system to counteract the aging process, through regulation of the GSH/GSSG redox status, decreasing in the superoxide dismutase (SOD) and catalase activity in old SAM.[2]

Ginsenoside-Rd treatment shows attenuation of hypertensive cerebrovascular remodeling, the underlying mechanism might be associated with inhibitory effects of ginsenoside-Rd on voltage-independent Ca^{2+} entry and BAVSMC proliferation, but not with VDCC-mediated Ca^{2+} entry.[3]

Ginsenoside Rd has exhibited an encouraging neuroprotective efficacy in both laboratory and clinical studies, could be as a neuroprotective agent for acute .[4]

Ginsenoside Rd can enhance the proliferation but not affect the differentiation of neural stem cells in vivo and in vitro.[5]

Ginsenoside Rd prevents glutamate-induced apoptosis in rat cortical neurons and may be the potential of voltage-independent Cachannel blockers as new neuroprotective drugs for the prevention of neuronal apoptosis and death induced by cerebral ischaemia.[6]

[Solvent]

Pyridine, Methanol, Ethanol, Hot water, etc.

[HPLC Method][7]

Mobile phase: Acetonitrile -H2O=35:65 ;

Flow rate: 1.0 ml/min;

Column temperature: Room temperature ;

The wave length of determination: 205 nm.

[Storage]

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

[References]

[1] Yang Z, Chen A, Sun H, *et al. Vaccine, 2007, 25(1):161-9.*

[2] Takako Y, Akiko S, Ju C E. *J. Pharm. Pharmacol., 2004, 56(1):107-13.*

[3] Cai B X, Li X Y, Chen J H, *et al. Eur. J. Pharmacol., 2009, 606(1–3):142-9.*

[4] Ye R, Gang Z, Liu X. *Expert Rev. Neuroth., 2013, 13(6):603-13.*

[5] Lin T, Liu Y, Shi M, *et al. J. Ethnopharmacol., 2012, 142(3):754–61.*

[6] Li X Y, Liang J, Tang Y B, *et al. Clin. Exp. Pharmacol. P. , 2010, 37(2):199-204.*

[7] Qin H Y, Suo Z R, Wei Y Q. *Journal of Southwest University of Science & Technology, 2013, 28(02):92-4.*

[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