Ginsenoside Rb3 Datasheet

4th Edition (Revised in July, 2016)

[ Product Information ]

Name: Ginsenoside Rb3
Catalog No.: CFN99966
Cas No.: 68406-26-8
Purity: > 98%
M.F: C53H90O22
M.W: 1079.27

Physical Description: White powder


[ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Ingredient in supplements, beverages;
7. Aromatics;
8. Others.
[Source]

The root and rhizome of *Panax ginseng* C. A. Mey.

[Biological Activity or Inhibitors]

Ginsenoside Rb3 has protective effects on oxygen and glucose deprivation-induced ischemic injury in PC12 cells.[1]

Ginsenoside Rb3 possesses the effect against isoproterenol-induced myocardial injury and heart function impairment, and that the mechanism of pharmacological action was related to the antioxidant activity of ginsenoside Rb3 at least in part.[2]

Ginsenoside Rb3 is extracted from the plant Panax ginseng and plays important roles in cardiovascular diseases, including myocardial ischemia-reperfusion (I/R) injury, the protective effect of ginsenoside Rb3 on the OGD-Rep injury is attributed to the inhibition of JNK-mediated NF-κB activation, suggesting that ginsenoside Rb3 has the potential to serve as a novel therapeutic agent for myocardial I/R injury.[3]

Ginsenoside Rb3 may have antidepressant-like effects, brain-derived neurotrophic factor and the monoamine neurotransmitters 5-hydroxytryptamine, dopamine, and norepinephrine are involved in ginsenoside Rb3's antidepressant-like effects. [4]

Ginsenoside Rb3 significantly attenuates the changes of creatine kinase activity and lactate dehydrogenase activity.[5]

Ginsenoside Rb3 can exert a neuroprotective role on hippocampal neurons, a role which was partly mediated by the facilitation of Ca2+-dependent deactivation of NMDA receptors, and the resultant reduction of intracellular free Ca2+ level.[6]

Ginsenoside Rb3 reduces fasting blood glucose level, food intake, water intake, improved oral glucose tolerance, and repaired injured pancreas tissues of alloxan-induced diabetic mice, suggests that ginsenoside possesses the potential of the clinical use in preventing and treating diabetes.[7]

[Solvent]

Pyridine, DMSO, Ethanol, Methanol.
[ HPLC Method ]

Mobile phase: Acetonitrile-0.2% Phosphoric acid H2O, gradient elution;
Flow rate: 1.0 ml/min;
Column temperature: 40 ℃;
The wavelength of determination: 203 nm.

[ Storage ]

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

[ References ]


[ Contact ]

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