[ **Product Information** ]

**Name:** Ginsenoside Rb2  
**Catalog No.:** CFN99965  
**Cas No.:** 11021-13-9  
**Purity:** > 98%  
**M.F:** C_{53}H_{90}O_{22}  
**M.W:** 1079.27  

**Physical Description:** White powder  

**Synonyms:** (3β,12β)-20-[(6-O-α-L-Arabinopyranosyl-β-D-glucopyranosyl)oxy]-12-hydroxy dammar-24-en-3-yl 2-O-β-D-glucopyranosyl-β-D-glucopyranoside.

[ **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. Others.

[ **Source** ]

The root and rhizome of *Panax ginseng C. A. Mey.*
**[Biological Activity or Inhibitors]**

Ginsenosides, which are active compounds found in ginseng (Panax ginseng), are used as antidiabetic treatments; ginsenoside Rb2 may inhibit palmitate-induced gluconeogenesis via AMPK-induced SHP by relieving ER stress, a cause of gluconeogenesis.\(^1\)

Ginsenoside Rb2 is a inducer of the SOD1 gene, the SOD1 gene is greatly activated by ginsenoside Rb2 through transcription factor AP2 binding sites and its induction.\(^2\)

The intra-tumoral or oral administration of ginsenoside-Rb2 causes a marked inhibition of both neovascularization and tumor growth, the inhibition of tumor-associated angiogenesis by ginsenoside-Rb2 may partly contribute to the inhibition of lung tumor metastasis.\(^3\)

Ginsenoside-Rb2 has hypoglycemic activity in streptozotocin-diabetic rat, one of the mechanisms probably is the changes of glucokinase and glucose-6-phosphatase levels.

Ginsenoside-Rb2 has anti-oxidant activity, has hydroxyl radical scavenging activity changes by heat processing.\(^4\)

Ginsenoside Rb2 can enhance the expression of the sterol regulated element binding protein (SREBP) mRNA whereas treatment with cholesterol and FBS led to a reduction in the abundance of this transcript, suggests that it might be a valuable component capable of lowering the levels of lipids.\(^5\)

Ginsenoside-Rb2 is the most effective among ginsenosides from red ginseng to prevent the lethal infection of HVJ, so that this ginsenoside is a promising candidate as a mucosal immunoadjuvant to enhance antiviral activity.\(^6\)

**[Solvent]**

Pyridine, DMSO, Ethanol, Methanol.

**[HPLC Method]**\(^7\)

Mobile phase: Acetonitrile-0.2% Phosphoric acid H2O, gradient elution;

Flow rate: 1.0 ml/min;
Column temperature: 40 °C;
The wavelength of determination: 203 nm.

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

[ References ]

[ Contact ]
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