



Product Information

Product ID G3454

CAS No. 41753-43-9

Chemical Name

Synonym Arasaponin E1, Gypenoside III, Sanchinoside E1

Formula C₅₄H₉₂O₂₃

Formula Wt. 1109.29

Melting Point

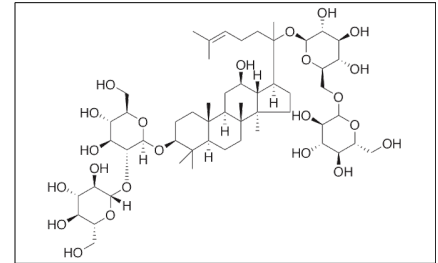
Purity ≥98%

Solubility Soluble in water.
Soluble in methanol or ethanol

Store Temp 4° C

Ship Temp Ambient

Description Ginsenoside Rb1 is a triterpene saponin originally found in species of *Panax* that exhibits antioxidative, anti-inflammatory, neuroprotective, orexigenic, and stimulatory activities. In animal models, ginsenoside Rb1 increases motor activity, food intake, and skeletal muscle ATP content, improving energy metabolism. Ginsenoside Rb1 also downregulates expression of toll-like receptor 4 (TLR4) and TNF-α in animal models of sepsis, protecting against liver and lung damage. Additionally, ginsenoside Rb1 inhibits glucose-induced neurotoxicity by preventing GSK-3β-stimulated CHOP induction. This compound also activates Nrf2 and increases expression of heme oxygenase 1 (HO-1), suppressing oxidative stress in vitro.



Bulk quantities available upon request

Product ID	Size
G3454	5 mg
G3454	10 mg
G3454	25 mg

References Tan SJ, Li N, Zhou F, et al. Ginsenoside Rb1 improves energy metabolism in the skeletal muscle of an animal model of postoperative fatigue syndrome. *J Surg Res*. 2014 May 2. [Epub ahead of print]. PMID: 24881470.

Wu LL, Jia BH, Sun J, et al. Protective effects of ginsenoside Rb1 on septic rats and its mechanism. *Biomed Environ Sci*. 2014 Apr;27(4):300-3. PMID: 24758759.

Liu D, Zhang H, Gu W, et al. Ginsenoside Rb1 protects hippocampal neurons from high glucose-induced neurotoxicity by inhibiting GSK3β-mediated CHOP induction. *Mol Med Rep*. 2014 Apr;9(4):1434-8. PMID: 24535619.

Ni N, Liu Q, Ren H, et al. Ginsenoside Rb1 protects rat neural progenitor cells against oxidative injury. *Molecules*. 2014 Mar 7;19(3):3012-24. PMID: 24662068.

Xiong Y, Shen L, Liu KJ, et al. Antiobesity and antihyperglycemic effects of ginsenoside Rb1 in rats. *Diabetes*. 2010 Oct;59(10):2505-2512. PMID: 20682695.

Shen L, Xiong Y, Wang DQ, et al. Ginsenoside Rb1 reduces fatty liver by activating AMP-activated protein kinase in obese rats. *J Lipid Res*. 2013 May;54(5):1430-1438. PMID: 23434611.

Lee JS, Song JH, Sohn NW, Shin JW. Inhibitory effects of ginsenoside Rb1 on neuroinflammation following systemic lipopolysaccharide treatment in mice. *Phytother Res*. 2013 Sep;27(9):1270-1276. PMID: 23042638.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.