LKT Laboratories, Inc.

Ginsenoside Rd

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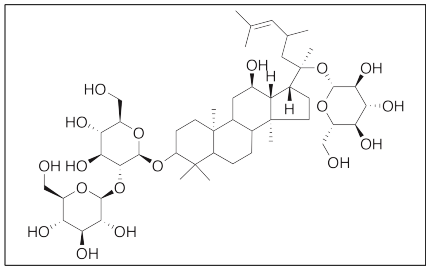
Product Information

Product ID G3456
CAS No. 52705-93-8
Chemical Name

Synonym Gypenoside VIII

Formula $C_{48}H_{82}O_{18}$
Formula Wt. 947.16
Melting Point
Purity ≥98%
Solubility



Bulk quanitites available upon request

Product ID	Size
G3456	1 mg
G3456	5 mg
G3456	10 mg

Store Temp 4°C
Ship Temp Ambient

Description Ginsenoside Rd is a triterpene saponin originally found in species of *Panax* that exhibits antioxidative, anti-inflammatory, neuroprotective, anticancer, anti-metastatic, cardioprotective, and immunomodulatory activities. Ginsenoside Rd regulates secretion of IFNγ and IL-4, shifts cytokine production toward Th2 phenotype, and increases expression of BDNF and NGF in animal models of experimental autoimmune encephalitis (EAE). In other animal models, ginsenoside Rd prevents paw edema by decreasing myeloperoxidase activity and malondialdehyde levels, increasing expression of superoxide dismutase, glutathione peroxidase, and catalase, and inhibiting expression of NO, PGE2, iNOS, COX-2, and NF-κB. Ginsenoside Rd decreases infarct size, cell apoptosis, and levels of creatine kinase and lactate dehydrogenase in animal models of myocardial ischemia/reperfusion. This compound also prevents phosphorylation of tau in animal models by decreasing amyloid-β (Aβ)-induced expression and activity of GSK-3β and stimulating activity of protein phosphatase 2A (PP2A). In hepatocellular carcinoma cells, ginsenoside Rd inhibits invasion and migration by decreasing expression of matrix metalloproteinases 1, 2, and 7 (MMP1/2/7) and preventing activation of ERK, p38 MAPK, and AP-1. Additionally, ginsenoside Rd inhibits the 26S proteasome and transient receptor potential melastatin-like 7 (TRPM7) channels, inhibiting proliferation of breast cancer and gastric cancer cells.

References

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