**Product Information**

**Synonym** 20S-GinsenosideRh2, 20S-protopanaxdiol-3-O-β-D-glucopyranoside, β-D-Glucopyranoside

**Formula** \( C_{36}H_{62}O_8 \cdot H_2O \)

**Formula Wt.** 640.89

**Purity** ≥98%

**Solubility** Soluble in ethanol to 10 mM. Insoluble in water.

**Melting Point** 4°C

**Family**

Ginsenoside Rh2 is a triterpene saponin found in *Panax* and exhibits anticancer chemotherapeutic, anti-metastatic, neuroprotective, cognition enhancing, anti-inflammatory, anti-osteoporotic, antioxidative, and anti-diabetic activities. Ginsenoside Rh2 inhibits aldose reductase and also decreases levels of ROS in keratinocytes. Ginsenoside Rh2 inhibits cell migration, decreases levels of matrix metalloproteinase 3 (MMP3), and increases recruitment of HDAC4 in liver carcinoma cells. In cellular and animal models of glioblastoma, ginsenoside Rh2 inhibits cell and tumor growth. Additionally, ginsenoside Rh2 improves learning and memory by decreasing levels of amyloid-β (Aβ) in animal models of Alzheimer’s disease. In LPS-stimulated macrophages, this compound decreases the release of IL-1β, TNF-α, IL-6, PGE2, and NO and suppresses phosphorylation of p38 MAPK, ERK1/2, JAK, and NF-κB. Ginsenoside Rh2 inhibits osteoclastogenesis by suppressing RANKL-induced osteoclast differentiation in vitro and in vivo. This compound also induces B-cell proliferation by activating Akt and PDX-1, improves glucose tolerance, and increases insulin levels in animal models.

**References**


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