

PRODUCT INFORMATION



Ginsenoside Rd

Item No. 15329

CAS Registry No.: 52705-93-8
Formal Name: 20-(β -D-glucopyranosyloxy)-12 β -hydroxydammar-24-en-3 β -yl 2-O- β -D-glucopyranosyl- β -D-glucopyranoside

MF: C₄₈H₈₂O₁₈

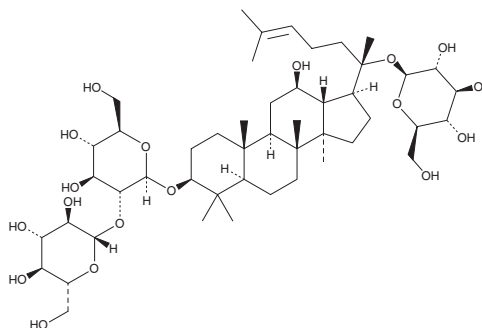
FW: 947.2

Purity: \geq 98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ginsenoside Rd is supplied as a crystalline solid. A stock solution may be made by dissolving the ginsenoside Rd in the solvent of choice. Ginsenoside Rd is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of ginsenoside Rd in these solvents is approximately 5, 15, and 20 mg/ml, respectively.

Ginsenoside Rd is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ginsenoside Rd should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Ginsenoside Rd has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ginsenosides are pharmacologically active natural constituents of ginseng and other plants of the genus *Panax*.¹ Structurally, they are steroid glycosides derived from the triterpene squalene.¹ Ginsenoside Rd is a protopanaxadiol which is more abundant in some *Panax* species (e.g., *P. quinquefolium*) than others.² This ginsenoside has diverse *in vitro* and *in vivo* effects, including cardioprotective, neuroprotective, and anti-inflammatory actions.³⁻⁵ Notably, ginsenoside Rd is converted to other ginsenosides in response to steaming or heating plant materials, leading to loss of these activities.²

References

1. Liang, Y. and Zhao, S. *Plant Biol. (Stuttg)* **10(4)**, 415-421 (2008).
2. Chen, C.-F., Chiou, W.-F., and Zhang, J.-T. *Acta. Pharmacol. Sin.* **29(9)**, 1103-1108 (2008).
3. Wang, Y., Li, X., Wang, X., et al. *PLoS One* **8(8)**, e70956 (2013).
4. Liu, X., Wang, L., Wen, A., et al. *Eur. J. Neurol.* **19(6)**, 855-863 (2012).
5. Song, S.B., Tung, N.H., Quang, T.H., et al. *J. Ginseng Res.* **36(2)**, 146-152 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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