PRODUCT INFORMATION



Ginsenoside Re

Item No. 15330

| CAS Registry No.: | 52286-59-6 | |
|-------------------|---|----|
| Formal Name: | (6α)-20-(β-D-glucopyranosyloxy)- | ОН |
| | 3β,12β-dihydroxydammar-24-en-6-yl | |
| | 2-O-(6-deoxy-α-L-mannopyranosyl)-β-D- | |
| | glucopyranoside | ОН |
| Synonyms: | Chikusetsusaponin IVc, NSC 308877, | н |
| | Panaxoside Re, Sanchinoside Re | |
| MF: | C ₄₈ H ₈₂ O ₁₈ | ОН |
| FW: | 947.2 | OF |
| Purity: | ≥95% | но |
| Supplied as: | A crystalline solid | |
| Storage: | -20°C | HO |
| Stability: | ≥4 years | OH |
| | | |

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

Laboratory Procedures

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

Ginsenoside Re is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ginsenoside Re should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Ginsenoside Re 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 Panax¹ Structurally, they are steroid glycosides derived from the triterpene squalene.¹ Ginsenoside Re is a panaxatriol saponin that 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 vasorelaxant, antioxidant, antihyperlipidemic, and angiogenic actions.²⁻⁵ Ginsenoside Re improves the effectiveness of chemotherapeutic agents by decreasing the expression of Multidrug Resistance Protein 1 and inhibiting P-glycoprotein.⁶ Notably, this ginsenoside is converted to other forms in response to steaming or heating plant materials, leading to loss of activity.2

References

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- 2. Chen, C.-F., Chiou, W.-F., and Zhang, J.-T. Acta Pharmacol. Sin. 29(9), 1103-1108 (2008).
- 3. Peng, D., Wang, H., Qu, C., et al. Chin. Med. 7, 2 (2012).
- 4. Han, D.-H., Kim, S.H., Higashida, K., et al. Metabolism 61(11), 1615-1621 (2012).
- 5. Gao, Y., Yang, M.-F., Su, Y.-P., et al. J. Ethnopharmacol. 147(2), 509-516 (2013).
- 6. Helms, S. Altern. Med. Rev. 9(3), 259-274 (2004).

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

SAFFTY 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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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM