PRODUCT INFORMATION

Ginsenoside Re
Item No. 15330

CAS Registry No.: 52286-59-6
Formal Name: (6α)-20-(β-D-glucopyranosyloxy)-
3β,12β-dihydroxydammar-
24-en-6-yl 2-O-(6-deoxy-
α-L-mannopyranosyl)-β-D-
glucopyranoside
Synonyms: Chikusetsusaponin IVc, NSC
308877, Panaxoside Re,
Sanchinoside Re
MF: C₄₈H₈₂O₁₈
FW: 947.2
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

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. Ginsenoside Re 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 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 Panax.¹ 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