Ginsenoside Rg₂
Item No. 15331

CAS Registry No.: 52286-74-5
Formal Name: (6α)-3β,12β,20-trihydroxydammar-24-en-6-yl 2-O-(6-deoxy-α-L-mannopyranosyl)-β-D-glucopyranoside
Synonyms: Chikusetsusaponin I, Panaxoside Rg₂, Prosapogenin C₂
MF: C₄₂H₇₂O₁₃
FW: 785.0
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 Rg₂ is supplied as a crystalline solid. A stock solution may be made by dissolving the ginsenoside Rg₂ in the solvent of choice. Ginsenoside Rg₂ is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of ginsenoside Rg₂ in these solvents is approximately 10 mg/ml.

Ginsenoside Rg₂ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ginsenoside Rg₂ should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ginsenoside Rg₂ has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO: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 compounds from ginseng and other plants of the genus Panax. Structurally, they are steroid glycosides derived from the triterpene squalene. Ginsenoside Rg₂ is a protopanaxatriol that is more abundant in some Panax species (e.g., white and red P. ginseng) than others. This ginsenoside and its metabolites have diverse in vitro and in vivo effects, including neuroprotective, anti-inflammatory, and anti-diabetic actions. It also protects against DNA damage and apoptosis induced by ultraviolet light. Notably, this ginsenoside is increased by the metabolism of other bioactive ginsenosides during the steaming or heating of plant materials, particularly in P. quinquefolium.

References