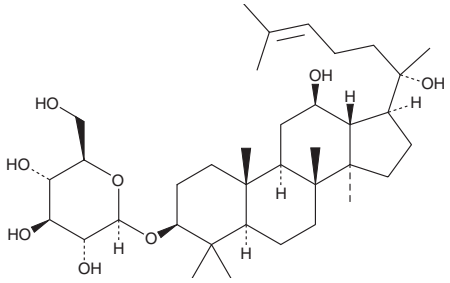
PRODUCT INFORMATION

20(S)-Ginsenoside Rh_2

Item No. 23390

CAS Registry No.:	78214-33-2
Formal Name:	12β,20-dihydroxydammar-24-en-3β-yl, β-D-glucopyranoside
Synonym:	20(S)-Ginsenoside Rh_2
MF:	$C_{36}H_{62}O_8$
FW:	622.9
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Ginsenoside Rh_2 is supplied as a crystalline solid. A stock solution may be made by dissolving the ginsenoside Rh_2 in the solvent of choice, which should be purged with an inert gas. Ginsenoside Rh_2 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ginsenoside Rh_2 in these solvents is approximately 10 mg/ml.

Ginsenoside Rh_2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ginsenoside Rh_2 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ginsenoside Rh_2 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

Ginsenoside Rh_2 is a steroid glycoside found in plants of the genus *Panax* that has diverse biological activities.[1-5] It inhibits release of β-hexosaminidase from RBL-2H3 cells (IC_{50} = 100 µM) and inhibits the IgE-dependent passive cutaneous anaphylaxis reaction in mice at a dose of 25 mg/kg.[1] It inhibits growth of HRA ovarian and BxPC-3 pancreatic cancer cells in a dose-dependent manner.[3,4] *In vivo*, ginsenoside Rh_2 decreases immobility time in the forced swim test in a mouse model of colorectal carcinoma.[5] Ginsenoside Rh_2 also reduces infarct volume in a rat model of ischemia-reperfusion-induced brain injury.[2]

References

1. Park, E.-K., Choo, M.-K., Kim, E.-J., *et al.* Antiallergic activity of ginsenoside Rh2. *Biol. Pharm. Bull.* **26(11)**, 1581-1584 (2003).
2. Park, E.-K., Choo, M.-K., Oh, J.K., *et al.* Ginsenoside Rh2 reduces ischemic brain injury in rats. *Biol. Pharm. Bull.* **27(3)**, 433-436 (2004).
3. Kikuchi, Y., Sasa, H., Kita, T., *et al.* Inhibition of human ovarian cancer cell proliferation *in vitro* by ginsenoside Rh2 and adjuvant effects to cisplatin *in vivo*. *Anticancer Drugs* **2(1)**, 63-67 (1991).
4. Tang, X.-P., Tang, G.-D., Fang, C.-Y., *et al.* Effects of ginsenoside Rh2 on growth and migration of pancreatic cancer cells. *World J. Gastroenterol.* **19(10)**, 1582-1592 (2013).
5. Wang, J., Chen, Y., Dai, C.L., *et al.* Ginsenoside Rh2 alleviates tumor-associated depression in a mouse model of colorectal carcinoma. *Am. J. Transl. Res.* **8(5)**, 2189-2195 (2016).

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