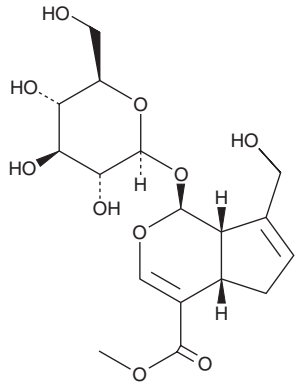
PRODUCT INFORMATION

Geniposide

Item No. 28281

CAS Registry No.:	24512-63-8
Formal Name:	(1S,4aS,7aS)-1-(β-D-glucopyranosyloxy)-1,4a,5,7a-tetrahydro-7-(hydroxymethyl)-cyclopenta[c]pyran-4-carboxylic acid, methyl ester
MF:	$C_{17}H_{24}O_{10}$
FW:	388.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 238 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Synthetic



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

Laboratory Procedures

Geniposide is supplied as a crystalline solid. A stock solution may be made by dissolving the geniposide in the solvent of choice, which should be purged with an inert gas. Geniposide is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of geniposide in these solvents is approximately 30 and 15 mg/ml, respectively.

Geniposide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, geniposide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Geniposide has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Geniposide is an iridoid glycoside that has been found in *G. jasmonoides* fruit and has diverse biological activities.[1-3] It reduces exudate volume and nitrite levels in a rat model of carrageenan-induced air pouch inflammation when administered at a dose of 0.1 mg/pouch.[1] Geniposide (100 mg/kg, p.o.) prevents carrageenan-induced paw edema in rats. It reduces serum levels of alanine transaminase (ALT) and aspartate aminotransferase (AST) and hepatic levels of malondialdehyde (MDA), as well as increases hepatic levels of superoxide dismutase (SOD) and glutathione peroxidase (GPX) in a rat model of high-fat diet-induced nonalcoholic steatohepatitis (NASH) when administered at doses of 50 and 100 mg/kg.[2] Geniposide (100 mg/kg) prevents increases in apoptosis and decreases in the number of dopaminergic neurons in the substantia nigra in a mouse model of MPTP-induced Parkinson's disease.[3] It also improves motor coordination in the rotarod and swim tests in a rat model of Parkinson's disease.

References

1. Koo, H.-J., Lim, K.-H., Jung, H.-J., *et al. J. Ethnopharmacol.* **103(3)**, 496-500 (2006).
2. Ma, T., Huang, C., Zong, G., *et al. J. Pharm. Pharmacol.* **63(4)**, 587-593 (2011).
3. Chen, Y., Zhang, Y., Li, L., *et al. Eur. J. Pharmacol.* **768**, 21-27 (2015).

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