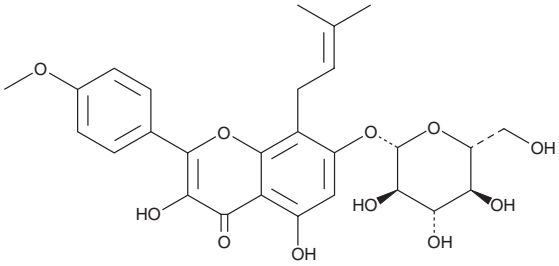
PRODUCT INFORMATION

Icariside I

Item No. 33209

CAS Registry No.:	56725-99-6
Formal Name:	7-(β-D-glucopyranosyloxy)-3,5-dihydroxy-2-(4-methoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyran-4-one
MF:	$C_{27}H_{30}O_{11}$
FW:	530.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 271 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Euphorbia lathyris*



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

Laboratory Procedures

Icariside I is supplied as a crystalline solid. A stock solution may be made by dissolving the icariside I in the solvent of choice, which should be purged with an inert gas. Icariside I is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of icariside I in these solvents is approximately 1 mg/ml.

Icariside I is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, icariside I should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Icariside I has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Icariside I is a flavonoid glycoside and an active metabolite of icariin (Item No. 13624) that has been found in *Epimedium* and has osteogenic and anticancer activities.[1-3] It is formed from icariin in rats by intestinal microbiota.[3] It stimulates the proliferation and differentiation of isolated rat osteoblasts in a concentration-dependent manner.[1] Icariside I increases the cytotoxicity of adriamycin in multidrug-resistant MCF-7/adr breast cancer cells with an IC_{50} value of 60.78 µM.[2]

References

1. Liu, M., Xu, H., Ma, Y., *et al*. Osteoblasts proliferation and differentiation stimulating activities of the main components of Epimedii folium. *Pharmacogn. Mag.* **13(49)**, 90-94 (2017).
2. Liu, D.-F., Li, Y.-P., Ou, T.-M., *et al*. Synthesis and antimultidrug resistance evaluation of icariin and its derivatives. *Bioorg. Med. Chem. Lett.* **19(15)**, 4237-4240 (2009).
3. Angeloni, C., Barbalace, M.C., Hrelia, S., *et al*. Icariin and its metabolites as potential protective phytochemicals against alzheimer's disease. *Front. Pharmacol.* **10**, 271 (2019).

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