

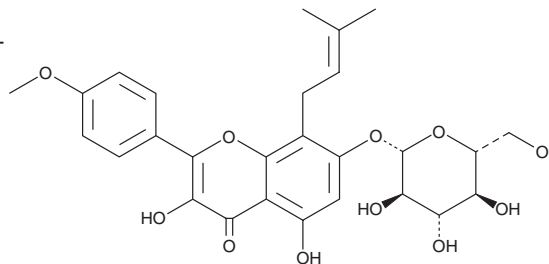
PRODUCT INFORMATION



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: C₂₇H₃₀O₁₁
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 IC₅₀ 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 *Epimedium 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).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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