

# PRODUCT INFORMATION

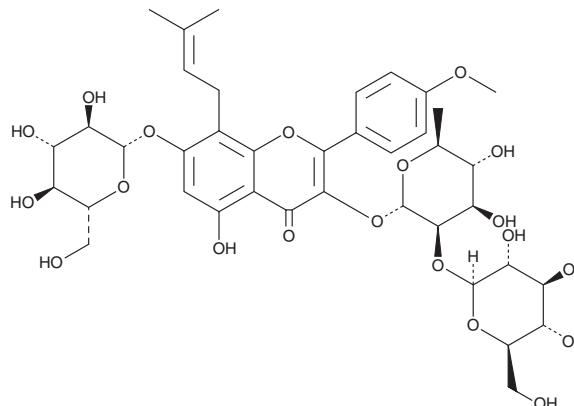


## Epimedin A

Item No. 27582

**CAS Registry No.:** 110623-72-8  
**Formal Name:** 3-[[6-deoxy-2-O-β-D-glucopyranosyl-α-L-mannopyranosyl]oxy]-7-(β-D-glucopyranosyloxy)-5-hydroxy-2-(4-methoxyphenyl)-8-(3-methyl-2-buten-1-yl)-4H-1-benzopyran-4-one

**MF:** C<sub>39</sub>H<sub>50</sub>O<sub>20</sub>  
**FW:** 838.8  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 273, 317 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/*Epimedium* sp.



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

### Laboratory Procedures

Epimedin A is supplied as a crystalline solid. A stock solution may be made by dissolving the epimedin A in the solvent of choice, which should be purged with an inert gas. Epimedin A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of epimedin A in these solvents is approximately 2, 10, and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of epimedin A can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of epimedin A in PBS, pH 7.2, is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Epimedin A is a flavonoid glycoside that has been found in *Epimedium*.<sup>1</sup> It inhibits ear edema induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) in mice (ED<sub>50</sub> = 252 nmol/ear). Epimedin A also prevents osteoporosis induced by prednisolone (Item No. 20866) in zebrafish.<sup>2</sup>

### References

1. Yasukawa, K., Ko, S.-K., and Whang, W.-K. Inhibitory effects of the aerial parts of *Epimedium koreanum* on TPA-induced inflammation and tumour promotion in two-stage carcinogenesis in mouse skin. *J. Pharm. Nutr. Sci.* **6(2)**, 38-42 (2016).
2. Zhan, Y., Wei, Y.J., Sun, E., *et al.* Two-dimensional zebrafish model combined with hyphenated chromatographic techniques for evaluation anti-osteoporosis activity of epimedin A and its metabolite baohuoside I. *Yao Xue Xue Bao* **49(6)**, 932-937 (2014).

#### 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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