# PRODUCT INFORMATION



# **Glycitin**

Item No. 14161

CAS Registry No.: 40246-10-4

Formal Name: 7-(β-D-glucopyranosyloxy)-3-

(4-hydroxyphenyl)-6-methoxy-4H-

1-benzopyran-4-one

Synonym: Glycitein-7-β-O-glucoside

MF:  $C_{22}H_{22}O_{10}$ FW: 446.4 **Purity:** >98%

UV/Vis.:  $\lambda_{max}$ : 263, 319 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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

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Glycitin is supplied as a crystalline solid. A stock solution may be made by dissolving the glycitin in the solvent of choice, which should be purged with an inert gas. Glycitin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of glycitin in these solvents is approximately 20 mg/ml.

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

Glycitin is a natural isoflavone isolated from legumes, including soy and kudzu. Like other isoflavones, glycitin promotes the proliferation of bone marrow stromal cells and osteoblasts and suppresses bone turnover.1,2

# References

- 1. Uesugi, T., Toda, T., Tsuji, K., et al. Comparative study on reduction of bone loss and lipid metabolism abnormality in ovariectomized rats by soy isoflavones, daidzin, genistin, and glycitin. Biol. Pharm. Bull. 24(4), 368-372 (2001).
- 2. Li, X.h., Zhang, J.C., Sui, S.f., et al. Effect of daidzin, genistin, and glycitin on osteogenic and adipogenic differentiation of bone marrow stromal cells and adipocytic transdifferentiation of osteoblasts. Acta Pharmacol. Sin. 26(9), 1081-1086 (2005).

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

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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## **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM