PRODUCT INFORMATION



Glabridin

Item No. 11843

CAS Registry No.: 59870-68-7

Formal Name: 4-[(3R)-3,4-dihydro-8,8-dimethyl-

> 2H,8H-benzo[1,2-b:3,4-b'] dipyran-3-yl]-3-benzenediol

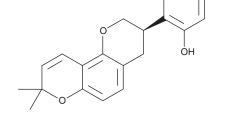
MF: $C_{20}H_{20}O_4$ FW: 324.4 ≥98% **Purity:**

UV/Vis.: λ_{max} : 228, 281 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Glycyrrhiza glabra

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



OH

Laboratory Procedures

Glabridin is supplied as a crystalline solid. A stock solution may be made by dissolving the glabridin in the solvent of choice, which should be purged with an inert gas. Glabridin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of glabridin in ethanol and DMSO is approximately 20 mg/ml and approximately 30 mg/ml in DMF.

Glabridin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, glabridin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Glabridin has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Glabridin is a prenylated isoflavonoid found in licorice root extract that is reported to possess antiviral, antimicrobial, anti-inflammatory, antidiabetic, antiatherogenic, antioxidant, antitumor, and estrogen-like properties.¹⁻³ These diverse biological activities are largely related to the capacity of glabridin to downregulate reactive oxygen species, bind to antioxidant effectors, and act as a selective estrogen receptor modulator.4

References

- 1. Wang, L., Yang, R., Yuan, B., et al. The antiviral and antimicrobial activities of licorice, a widely-used Chinese herb. Acta. Pharmac. Sin. B 5(4), 310-315 (2015).
- 2. Ming, L.J. and Yin, A.C. Therapeutic effects of glycyrrhizic acid. Nat. Prod. Commun. 8(3), 415-418 (2013).
- 3. Lee, K.J., Oh, Y.C., Cho, W.K., et al. Antioxidant and anti-inflammatory activity determination of one hundred kinds of pure chemical compounds using offline and online screening HPLC assay. Evid. Based Complement. Alternat. Med. 165457 (2015).
- 4. Simmler, C., Pauli, G.F., and Chen, S.-N. Phytochemistry and biological properties of glabridin. Fitoterapia 90, 160-184 (2013).

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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