# PRODUCT INFORMATION

## Glabridin

*Item No. 11843*

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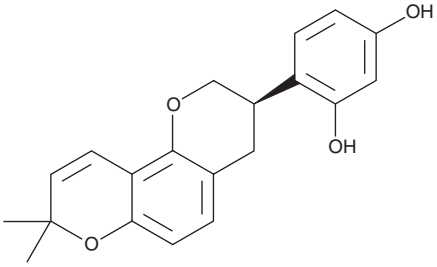
| **CAS Registry No.:** | 59870-68-7 |
| **Formal Name:** | 4-[(3R)-3,4-dihydro-8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyran-3-yl]-3-benzenediol |
| **MF:** | $C_{20}H_{20}O_4$ |
| **FW:** | 324.4 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 228, 281 nm |
| **Supplied as:** | A crystalline 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.*

### 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 down-regulate 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).





**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