

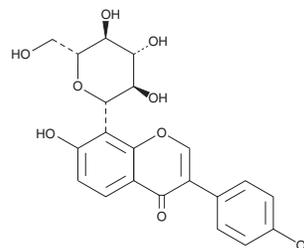
PRODUCT INFORMATION



Puerarin

Item No. 14175

CAS Registry No.: 3681-99-0
Formal Name: 8-β-D-glucopyranosyl-7-hydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonyms: Kakonein, NPI 031G
MF: C₂₁H₂₀O₉
FW: 416.4
Purity: ≥98%
UV/Vis.: λ_{max}: 250, 305 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Puerarin is supplied as a crystalline solid. A stock solution may be made by dissolving the puerarin in the solvent of choice. Puerarin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of puerarin in these solvents is approximately 5, 12.5, and 16 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 puerarin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of puerarin in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Puerarin is a natural isoflavone isolated from plants of the genus *Pueraria* used in traditional Chinese herbal medicine. It is biotransformed by intestinal bacteria to give the phytoestrogens daidzein (Item No. 10005166) and equol (Item No. 13184), resulting in antithrombotic, antiallergic, and other salutary effects.¹⁻³ When given intraperitoneally, puerarin evokes diverse responses by modulating serotonin receptors.^{4,5} This compound also suppresses lipopolysaccharide-mediated activation of NF-κB in rRAW 264.6 macrophages when given at 20-40 μM.⁶

References

1. Choo, M.-K., Park, E.-K., Yoon, H.-K., *et al. Biol. Pharm. Bull.* **25(10)**, 1328-1332 (2002).
2. Jin, J.-S., Nishihata, T., Kakiuchi, N., *et al. Biol. Pharm. Bull.* **31(8)**, 1621-1625 (2008).
3. Nakamura, K., Nishihata, T., Jin, J.-S., *et al. Chem. Pharm. Bull.* **59(1)**, 23-27 (2011).
4. Overstreet, D.H., Kralic, J.E., Morrow, A.L., *et al. Pharmacol. Biochem. Behav.* **75(3)**, 619-625 (2003).
5. Chueh, F.-S., Chang, C.-P., Chio, C.-C., *et al. J. Pharmacol. Sci.* **96**, 420-427 (2004).
6. Hu, W., Yang, X., Zhe, C., *et al. Pharmacol. Rep.* **63**, 781-789 (2011).

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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