PRODUCT INFORMATION



Poncirin

Item No. 31706

CAS Registry No.: 14941-08-3

Formal Name: (2S)-7-[[2-O-(6-deoxy- α -L-mannopyranosyl)-

> β-D-glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(4-methoxyphenyl)-4H-1-

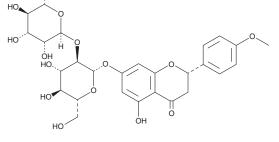
benzopyran-4-one

MF: $C_{28}H_{34}O_{14}$ FW: 594.6 **Purity:** ≥98%

λ_{max}: 212, 225, 283 nm UV/Vis.:

Supplied as: A solid -20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

Poncirin is supplied as a solid. A stock solution may be made by dissolving the poncirin in water. The solubility of poncirin in water is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Poncirin is a flavonoid glycoside that has been found in P. trifoliata and has diverse biological activities. $^{1-4}$ It inhibits the growth of SGC-7901 gastric cancer cells when used at concentrations ranging from 5 to 25 μg/ml.² Poncirin (25-100 μM) inhibits LPS-induced NF-κB DNA-binding activity, as well as production of nitric oxide (NO) and prostaglandin E2 (PGE2; Item No. 14010) in RAW 264.7 cells.3 It reduces the gastric ulcer lesion index in a rat model of HCI/ethanol-induced gastritis when administered at doses of 50 and 100 mg/kg.4

References

- 1. Mouly, P., Gaydou, E.M., and Auffray, A. Simultaneous separation of flavanone glycosides and polymethoxylated flavones in citrus juices using liquid chromatography. J. Chromatogr. A 800(2), 171-179
- 2. Zhu, X., Luo, F., Zheng, Y., et al. Characterization, purification of Poncirin from edible Citrus Ougan (Citrus reticulate cv. Suavissima) and its growth inhibitory effect on human gastric cancer cells SGC-7901. Int. J. Mol. Sci. 14(5), 8684-8697 (2013).
- 3. Kim, J.-B., Han, A.-R., Park, E.-Y., et al. Inhibition of LPS-induced iNOS, COX-2 and cytokines expression by poncirin through the NF-kB inactivation in RAW 264.7 macrophage cells. Biol. Pharm. Bull. 30(12),
- 4. Lee, J.-H., Lee, S.-H., Kim, Y.S., et al. Protective effects of neohesperidin and poncirin isolated from the fruits of Poncirus trifoliata on potential gastric disease. Phytother. Res. 23(12), 1748-1753 (2009).

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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