

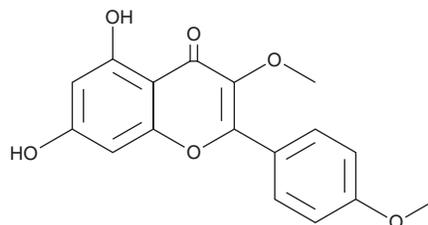
PRODUCT INFORMATION



Ermanin

Item No. 37535

CAS Registry No.: 20869-95-8
Formal Name: 5,7-dihydroxy-3-methoxy-2-(4-methoxyphenyl)-4H-1-benzopyran-4-one
Synonyms: 5,7-Dihydroxy-3,4'-dimethoxyflavone, Kaempferol 3,4'-di-O-methyl ether, NSC 31882
MF: C₁₇H₁₄O₆
FW: 314.3
Purity: ≥98%
UV/Vis.: λ_{max}: 269, 349 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/Grapes



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

Laboratory Procedures

Ermanin is supplied as a solid. A stock solution may be made by dissolving the ermanin in the solvent of choice, which should be purged with an inert gas. Ermanin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ermanin in these solvents is approximately 15 and 20 mg/ml, respectively.

Description

Ermanin is a methoxylated flavone that has been found in bee glue and has diverse biological activities.¹⁻³ It increases the levels of intracellular reactive oxygen species (ROS) and decreases the levels of glutathione (GSH) in B16/F10 mouse melanoma cells and primary mouse melanocytes when used at concentrations of 8 and 16 μM.¹ Ermanin reduces LPS-induced increases in inducible nitric oxide synthase (iNOS) and COX-2 levels in RAW 264.7 mouse macrophages (IC₅₀s = 6.7 and 1.68 μM, respectively).² It inhibits viral replication of poliovirus type 1 in Vero cells (ED₉₉ = 5 μg/ml).³ Ermanin (8 and 16 μM) induces melanogenesis in zebrafish larvae.¹

References

1. Ding, Q., Luo, L., Yu, L., *et al.* The critical role of glutathione redox homeostasis towards oxidation in ermanin-induced melanogenesis. *Free Radic. Biol. Med.* **176**, 392-405 (2021).
2. Guerra, J.A., Molina, M.F., Abad, M.J., *et al.* Inhibition of inducible nitric oxide synthase and cyclooxygenase-2 expression by flavonoids isolated from *Tanacetum microphyllum*. *Int. Immunopharmacol.* **6(11)**, 1723-1728 (2006).
3. De Meyer, N., Haemers, A., Mishra, L., *et al.* 4'-Hydroxy-3-methoxyflavones with potent anticoronavirus activity. *J. Med. Chem.* **34(2)**, 736-746 (1991).

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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