

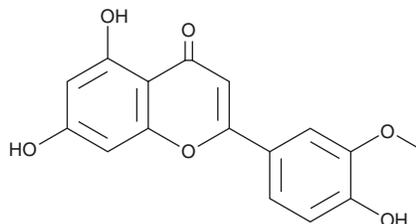
PRODUCT INFORMATION



Chrysoeriol

Item No. 33395

CAS Registry No.: 491-71-4
Formal Name: 5,7-dihydroxy-2-(4-hydroxy-3-methoxyphenyl)-4H-1-benzopyran-4-one
Synonyms: 3'-methoxy Apigenin, Luteolin 3'-methyl ether
MF: C₁₆H₁₂O₆
FW: 300.3
Purity: ≥90%
UV/Vis.: λ_{max}: 244, 269, 345 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Suaeda salsa* (L.) Pall. Illustr.



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

Laboratory Procedures

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

Description

Chrysoeriol is a flavonoid that has been found in *Capsicum* and has diverse biological activities.¹⁻⁴ It is active against the Gram-positive bacteria *E. faecalis*, *B. subtilis*, and *S. aureus* (MICs = 1, 1, and 0.25 µg/ml, respectively) and the Gram-negative bacteria *P. aeruginosa*, *K. pneumoniae*, and *E. coli* (MICs = 0.12, 0.25, and 0.06 µg/ml, respectively).¹ Chrysoeriol (7.5, 15, and 30 µM) induces cell cycle arrest at the G₁ phase and autophagy in A549 lung cancer cells.² It reduces LPS-induced production of IL-6, IL-1β, and TNF-α in RAW 264.7 cells when used at a concentration of 20 µM.³ Chrysoeriol (20 mg/kg) reduces plasma glucose, total cholesterol, free fatty acid, and phospholipid levels in a rat model of diabetes induced by streptozotocin (STZ; Item No. 13104).⁴

References

1. Nascimento, P.L.A., Nascimento, T.C.E.S., Ramos, N.S.M., *et al.* Quantification, antioxidant and antimicrobial activity of phenolics isolated from different extracts of *Capsicum frutescens* (pimenta malagueta). *Molecules* **19**(4), 5434-5447 (2014).
2. Wei, W., He, J., Ruan, H., *et al.* *In vitro* cytotoxic effects of chrysoeriol in human lung carcinoma are facilitated through activation of autophagy, sub-G₁/G₀ cell cycle arrest, cell migration and invasion inhibition and modulation of MAPK/ERK signalling pathway. *J. BUON* **24**(3), 936-942 (2019).
3. Wu, J.-Y., Chen, Y.-J., Bai, L., *et al.* Chrysoeriol ameliorates TPA-induced acute skin inflammation in mice and inhibits NF-κB and STAT3 pathways. *Phytomedicine* **68**, 153173 (2020).
4. Baskaran, K., Pugalendi, K.V., and Saravanan, R. Antidiabetic and antihyperlipidemic activity of chrysoeriol in diabetic rats, role of HMG CoA reductase, LCAT and LPL: *In vivo* and *in silico* approaches. *J. Pharm. Res.* **9**(9), 597-605 (2015).

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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