

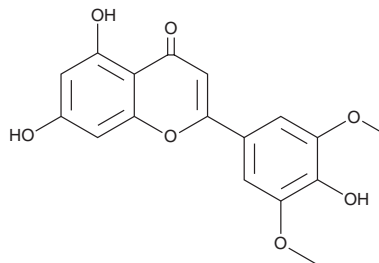
PRODUCT INFORMATION



Tricin

Item No. 35835

CAS Registry No.: 520-32-1
Formal Name: 5,7-dihydroxy-2-(4-hydroxy-3,5-dimethoxyphenyl)-4H-1-benzopyran-4-one
Synonyms: NSC 294579, 4',5,7-Trihydroxy-3',5'-dimethoxyflavone
MF: C₁₇H₁₄O₇
FW: 330.3
Purity: ≥98%
UV/Vis.: λ_{max}: 246, 271, 354 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

Tricin is supplied as a solid. A stock solution may be made by dissolving the triclin in the solvent of choice, which should be purged with an inert gas. Tricin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of triclin in these solvents is approximately 10 and 50 mg/ml, respectively.

Description

Tricin is a flavone that has been found in *O. sativa* and has diverse biological activities.¹⁻⁴ It scavenges ABTS (Item No. 27317) radicals in a cell-free assay (IC₅₀ = 0.312 mg/ml).³ Tricin (0.1-10 μM) reduces virus titer and expression of the human cytomegalovirus (HCMV) genes *IE1* and *UL54* in HCMV-infected human embryonic lung fibroblast (HEL) cells, an effect that can be reversed by overexpression of chemokine (C-C motif) ligand 2 (CCL2).¹ It inhibits IgE-induced degranulation of RBL-2H3 cells (IC₅₀ = 4.83 μM).² *In vivo*, triclin (37.5 mg/kg per day) reduces tumor growth and the number of lung metastases in a CT26 murine colon carcinoma model.⁴

References

1. Akai, Y., Sadanari, H., Takemoto, M., *et al.* Inhibition of human cytomegalovirus replication by triclin is associated with depressed CCL2 expression. *Antiviral Res.* **148**, 15-19 (2017).
2. Kuwabara, H., Mouri, K., Otsuka, H., *et al.* Tricin from a malagasy connaraceous plant with potent antihistaminic activity. *J. Nat. Prod.* **66(9)**, 1273-1275 (2003).
3. Quan, N.V., Thien, D.D., Khanh, T.D., *et al.* Momilactones A, B, and triclin in rice grain and by-products are potential skin aging inhibitors. *Foods* **8(12)**, 602 (2019).
4. Yue, G.G.-L., Gao, S., Lee, J.K.-M., *et al.* A natural flavone triclin from grains can alleviate tumor growth and lung metastasis in colorectal tumor mice. *Molecules* **25(16)**, 3730 (2020).

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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