

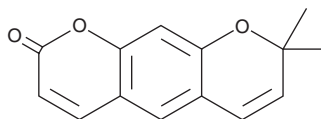
PRODUCT INFORMATION



Xanthyletin

Item No. 29929

CAS Registry No.: 553-19-5
Formal Name: 8,8-dimethyl-2H,8H-benzo[1,2-b:5,4-b']dipyran-2-one
Synonym: 2,2-Dimethylchromenocoumarin
MF: C₁₄H₁₂O₃
FW: 228.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years
Item Origin: Plant/*Flindersia pimenteliana*



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

Laboratory Procedures

Xanthyletin is supplied as a solid. A stock solution may be made by dissolving the xanthyletin in the solvent of choice, which should be purged with an inert gas. Xanthyletin is soluble in methanol.

Description

Xanthyletin is a coumarin that has been found in *Z. avicennae* and has diverse biological activities, including antifungal, antioxidant, and anticancer properties.¹⁻³ It is active against the fungi *R. solani*, *F. graminearum*, and *P. oryzae* (IC₅₀s = 49.1, 117.2, and 31.6 mg/L, respectively).¹ Xanthyletin (50 mg/L) is also active against *F. oxysporum*, *A. solani*, and *S. sclerotiorum*. It reduces LPS-induced production of nitric oxide (NO) in BV-2 microglial cells with an IC₅₀ value of 5.4 μM.² Xanthyletin inhibits proliferation of A549 lung, MCF-7 breast, and PC3 prostate cancer cells (IC₅₀s = 80.1, 19.3, and 97.2 μg/ml, respectively).³

References

1. Xiong, Y., Huang, G., Yao, Z., *et al.* Screening effective antifungal substances from the bark and leaves of *Zanthoxylum avicennae* by the bioactivity-guided isolation method. *Molecules* **24(23)**, E4207 (2019).
2. Chan, Y.-Y., Li, C.-H., Shen, Y.-C., *et al.* Anti-inflammatory principles from the stem and root barks of *Citrus medica*. *Chem. Pharm. Bull. (Tokyo)* **58(1)**, 61-65 (2010).
3. Tahsin, T., Wansi, J.D., Al-Groshi, A., *et al.* Cytotoxic properties of the stem bark of *Citrus reticulata* blanco (Rutaceae). *Phytother. Res.* **31(8)**, 1215-1219 (2017).

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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