

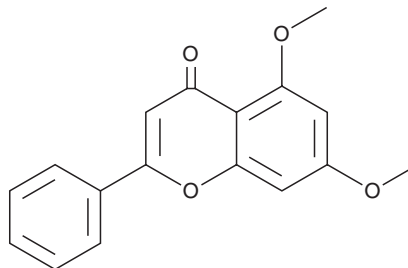
PRODUCT INFORMATION



5,7-Dimethoxyflavone

Item No. 37361

CAS Registry No.: 21392-57-4
Formal Name: 5,7-dimethoxy-2-phenyl-4H-1-benzopyran-4-one
Synonym: 5,7-DMF
MF: C₁₇H₁₄O₄
FW: 282.3
Purity: ≥98%
UV/Vis.: λ_{max}: 212, 264, 306 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Zingiber officinale*



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

Laboratory Procedures

5,7-Dimethoxyflavone (5,7-DMF) is supplied as a solid. A stock solution may be made by dissolving the 5,7-DMF in the solvent of choice, which should be purged with an inert gas. 5,7-DMF is soluble in DMSO and methanol.

Description

5,7-DMF is a flavonoid that has been found in *B. pandurata* and has diverse biological activities.¹⁻³ It induces the production of reactive oxygen species (ROS), cell cycle arrest at the G₁ phase, and apoptosis in HepG2 liver cancer cells when used at concentrations of 10, 25, and 50 μM.¹ *In vivo*, 5,7-DMF (75-150 mg/kg) reduces exudate volume and inhibits prostaglandin production in a rat model of carrageenan-induced pleurisy.² It reduces rectal temperature in a rat model of yeast-induced hyperthermia. 5,7-DMF also reduces serum triglyceride, total cholesterol, and LDL levels, as well as increases serum insulin levels and reduces blood glucose levels in a rat model of diabetes induced by streptozotocin (STZ; Item No. 13104).³

References

1. Li, H., Zhang, X., and Wang, W. Anticancer activity of 5, 7 dimethoxyflavone against liver cancer cell line HepG2 involves apoptosis, ROS generation and cell cycle arrest. *Afr. J. Tradit. Complement. Altern. Med.* **14(4)**, 213-220 (2017).
2. Panthong, A., Tassaneeyakul, W., Kanjanapothi, D., et al. Anti-inflammatory activity of 5,7-dimethoxyflavone. *Planta Med.* **55(2)**, 133-136 (1989).
3. Xie, Y., Zhang, Y., and Su, X. Antidiabetic and hypolipidemic effects of 5,7-dimethoxyflavone in streptozotocin-induced diabetic rats. *Med. Sci. Monit.* **25**, 9893-9901 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/26/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM