

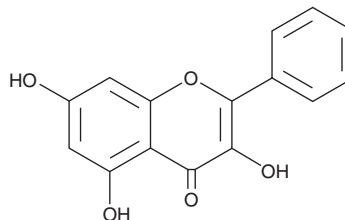
PRODUCT INFORMATION



Galangin

Item No. 15948

CAS Registry No.: 548-83-4
Formal Name: 3,5,7-trihydroxy-2-phenyl-4H-1-benzopyran-4-one
Synonyms: NSC 407229, 3,5,7-Trihydroxyflavone
MF: C₁₅H₁₀O₅
FW: 270.2
Purity: ≥98%
UV/Vis.: λ_{max}: 267, 302, 348, 361 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

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

Galangin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, galangin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Galangin has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Galangin is a flavonoid naturally found in herbs used in traditional medicine. Like many flavonoids, it has potent antioxidant properties.¹ It also has anti-inflammatory actions related to suppression of signaling through NF-κB in mice.² Galangin acts as an antagonist of the aryl hydrocarbon receptor, inducing apoptosis in cancer cells.³⁻⁵ It also inhibits cytochrome P450 isoform 1A1 with an IC₅₀ value of less than 1 μM.⁶

References

1. Duthie, G. and Morrice, P. Antioxidant capacity of flavonoids in hepatic microsomes is not reflected by antioxidant effects *in vivo*. *Oxid. Med. Cell. Longev.* **2012**, 1-7 (2012).
2. Zha, W.J., Qian, Y., Shen, Y., *et al.* Galangin abrogates ovalbumin-induced airway inflammation via negative regulation of NF-κB. *Evid. Based Complementary Altern. Med.* **2013**, 1-15 (2013).
3. Quadri, S.A., Qadri, A.N., Hahn, M.E., *et al.* The bioflavonoid galangin blocks aryl hydrocarbon receptor activation and polycyclic aromatic hydrocarbon-induced pre-B cell apoptosis. *Mol. Pharmacol.* **58**(3), 515-525 (2000).
4. Zhang, W., Lan, Y., Huang, Q., *et al.* Galangin induces B16F10 melanoma cell apoptosis via mitochondrial pathway and sustained activation of p38 MAPK. *Cytotechnology* **65**(3), 447-455 (2013).
5. Forbes, A.M., Lin, H., Meadows, G.G., *et al.* Synthesis and anticancer activity of new flavonoid analogs and inconsistencies in assays related to proliferation and viability measurements. *Int. J. Oncol.* **45**(2), 831-842 (2014).
6. Ciolino, H.P. and Yeh, G.C. The flavonoid galangin is an inhibitor of CYP1A1 activity and an agonist/antagonist of the aryl hydrocarbon receptor. *Br. J. Cancer* **79**(9-10), 1340-1346 (1999).

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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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