

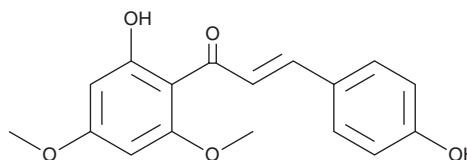
PRODUCT INFORMATION



Flavokawain C

Item No. 39393

CAS Registry No.: 37308-75-1
Formal Name: (2E)-1-(2-hydroxy-4,6-dimethoxyphenyl)-3-(4-hydroxyphenyl)-2-propen-1-one
Synonyms: Flavokavain C, 4-hydroxy Flavokawain B
MF: C₁₇H₁₆O₅
FW: 300.3
Purity: ≥98%
UV/Vis.: λ_{max}: 368 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

Flavokawain C is supplied as a solid. A stock solution may be made by dissolving the flavokawain C in the solvent of choice, which should be purged with an inert gas. Flavokawain C is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of flavokawain C in ethanol is approximately 5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Description

Flavokawain C is a chalcone that has been found in kava and has enzyme inhibitory and anticancer activities.¹⁻³ It inhibits collagenase and elastase in cell-free assays (IC₅₀s = 62.05 and 17.6 μM, respectively).¹ It is cytotoxic to HCT116, HT-29, MCF-7, A549, and Ca Ski cancer cells (IC₅₀s = 12.75, 39, 47.63, 40.28, and 39.88 μM, respectively).² Flavokawain C (20, 40, and 60 μM) induces apoptosis and cell cycle arrest at the G₁ phase in HCT116 cells. *In vivo*, flavokawain C (1 and 3 mg/kg) reduces tumor volume and induces intratumoral necrosis and apoptosis in an HCT116 mouse xenograft model.³

References

1. Wei, L., Liao, Z., Ma, H., *et al.* Antioxidant properties, anti- SARS-CoV-2 study, collagenase and elastase inhibition effects, anti-human lung cancer potential of some phenolic compounds. *J. Indian Chem. Soc.* **99(4)**, 100416 (2022).
2. Phang, C.-W., Karsani, S.A., Sethi, G., *et al.* Flavokawain C inhibits cell cycle and promotes apoptosis, associated with endoplasmic reticulum stress and regulation of MAPKs and Akt signaling pathways in HCT 116 human colon carcinoma cells. *PLoS One* **11(2)**, e0148775 (2016).
3. Phang, C.-W., Malek, S.N.A., and Karsani, S.A. Flavokawain C exhibits anti-tumor effects on *in vivo* HCT 116 xenograft and identification of its apoptosis-linked serum biomarkers *via* proteomic analysis. *Biomed. Pharmacother.* **137**, 110846 (2021).

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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