

## Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

#### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien T. +43(0)1 489 3961-0 F. +43(0)1 489 3961-7 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

# **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	он
MF:	C <sub>17</sub> H <sub>16</sub> O <sub>5</sub>	
FW:	300.3	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 368 nm	
Supplied as:	A solid	.0. ~ .0. ~ .0H
Storage:	-20°C	
Stability:	≥3 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.<sup>1-3</sup> It inhibits collagenase and elastase in cell-free assays (IC<sub>50</sub>s = 62.05 and 17.6  $\mu$ M, respectively).<sup>1</sup> It is cytotoxic to HCT116, HT-29, MCF-7, A549, and Ca Ski cancer cells (IC<sub>50</sub>s = 12.75, 39, 47.63, 40.28, and 39.88  $\mu$ M, respectively).<sup>2</sup> Flavokawain C (20, 40, and 60  $\mu$ M) induces apoptosis and cell cycle arrest at the  $G_1$  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.<sup>3</sup>

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

uyer 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, 08/08/2023

#### 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