

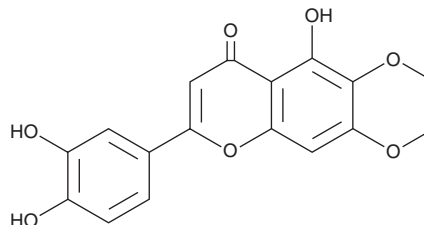
PRODUCT INFORMATION



Cirsiliol

Item No. 30874

CAS Registry No.: 34334-69-5
Formal Name: 2-(3,4-dihydroxyphenyl)-5-hydroxy-6,7-dimethoxy-4H-1-benzopyran-4-one
Synonym: Cirsiliol
MF: C₁₇H₁₄O₇
FW: 330.3
Purity: ≥90%
UV/Vis.: λ_{max}: 213, 273, 346 nm
Supplied as: A crystalline 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

Cirsiliol is supplied as a crystalline solid. A stock solution may be made by dissolving the cirsiliol in the solvent of choice, which should be purged with an inert gas. Cirsiliol is soluble in chloroform, DMSO, and acetone.

Description

Cirsiliol is a flavonoid that has been found in *S. indicum* and has diverse biological activities.¹ It inhibits 5-lipoxygenase (5-LO) and 12-LO (IC₅₀s = 0.1 and 1 μM, respectively).¹ Cirsiliol inhibits the release of slow-reacting substance of anaphylaxis (SRS-A) in passively sensitized isolated guinea pig lung (IC₅₀ = 0.4 μM). It induces relaxation of precontracted isolated rat uterus, urinary bladder, proximal aorta, and trachea in a concentration-dependent manner.² Cirsiliol inhibits colony formation and migration of B16/F10 murine melanoma cells.³ *In vivo*, cirsiliol (200 μg/kg) enhances radiation-induced inhibition of tumor growth in an H1299 non-small cell lung cancer (NSCLC) mouse xenograft model.⁴

References

1. Yoshimoto, T., Furukawa, M., Yamamoto, S., *et al.* Flavonoids: Potent inhibitors of arachidonate 5-lipoxygenase. *Biochem. Biophys. Res. Commun.* **116(2)**, 612-618 (1983).
2. Mustafa, E.H., Zarga, M.A., Sabri, S., *et al.* Effects of cirsiliol, a flavone isolated from *Achillea fragrantissima*, on rat isolated smooth muscle. *Int. J. Pharm.* **33(3)**, 204-209 (1995).
3. Prasad, P., Vasas, A., Hohmann, J., *et al.* Cirsiliol suppressed epithelial to mesenchymal transition in B16F10 malignant melanoma cells through alteration of the PI3K/Akt/NF-κB signaling pathway. *Int. J. Mol. Sci.* **20(3)**, 608 (2019).
4. Kang, J., Kim, E., Kim, W., *et al.* Rhamnetin and cirsiliol induce radiosensitization and inhibition of epithelial-mesenchymal transition (EMT) by miR-34a-mediated suppression of Notch-1 expression in non-small cell lung cancer cell lines. *J. Biol. Chem.* **288(38)**, 27343-27357 (2013).

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, 11/14/2022

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