

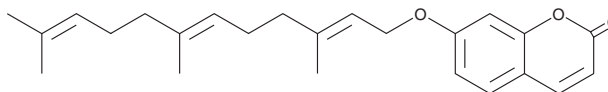
PRODUCT INFORMATION



Umbelliprenin

Item No. 27894

CAS Registry No.: 532-16-1
Formal Name: 7-[(3,7,11-trimethyl-2,6,10-dodecatrien-1-yl)oxy]-2H-1-benzopyran-2-one
Synonym: 7-Farnesyloxycoumarin
MF: $C_{24}H_{30}O_3$
FW: 366.5
Purity: $\geq 98\%$
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥ 2 years



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

Laboratory Procedures

Umbelliprenin is supplied as a crystalline solid. A stock solution may be made by dissolving the umbelliprenin in the solvent of choice, which should be purged with an inert gas. Umbelliprenin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of umbelliprenin in these solvents is approximately 5 and 30 mg/ml, respectively.

Description

Umbelliprenin is a prenylated coumarin that has been found in *Ferula* and has diverse biological activities.^{1,2} It inhibits 5-lipoxygenase (5-LO) in a cell-free assay ($\text{IC}_{50} = 72.5 \text{ nM}$).¹ Umbelliprenin is active against *L. major* promastigotes ($\text{IC}_{50} = 13.3 \text{ }\mu\text{M}$). It induces cell cycle arrest at the G_1 phase in, as well as inhibits the growth of ($\text{IC}_{50} = 12.5 \text{ }\mu\text{M}$), M4Beu metastatic pigmented melanoma cells and reduces tumor volume in a murine Lewis lung carcinoma model. It reduces tumor growth and the number of metastases in a 4T1 mouse allograft model.² Umbelliprenin (0.01 mmol/kg) reduces carrageenan-induced paw edema in mice.¹

References

1. Shakeri, A., Iranshahy, M., Iranshahi, M., *et al.* Biological properties and molecular targets of umbelliprenin: A mini-review. *J. Asian Nat. Prod. Res.* **16**(8), 884-889 (2014).
2. Rashidi, M., Khalilnezhad, A., Amani, D., *et al.* Umbelliprenin shows antitumor, antiangiogenesis, antimetastatic, anti-inflammatory, and immunostimulatory activities in 4T1 tumor-bearing Balb/c mice. *J. Cell Physiol.* **233**(11), 8908-8918 (2018).

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