

Product Data Sheet

Product Name: Umbelliprenin

Cat. No.: GC48659

Chemical Properties

Cas. No. 532-16-1; 23838-17-7

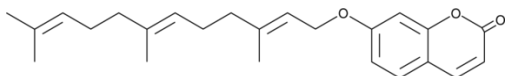
SMILES C/C(C)=C/CC/C(C)=C/CC/C(C)=C/COC1=CC=C(C=CC(O2)=O)C2=C1

Formula $C_{24}H_{30}O_3$ M.Wt 366.5

Solubility DMSO : 100 mg/mL (272.86 mM; Need ultrasonic) Storage -20°C , protect from light

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure 

Background

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 ($\text{IC}_{50} = 13.3 \mu\text{M}$) and lethal to *A. albopictus* fourth instar larvae ($\text{LC}_{50} = 194.96 \text{ ppm}$). It induces cell cycle arrest at the G_1 phase in, as well as inhibits the growth of ($\text{IC}_{50} = 12.5 \mu\text{M}$), M4Beu metastatic pigmented melanoma cells and reduces tumor volume in a mouse 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

1. Shakeri, A., Iranshahy, M., and Iranshahi, M. 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.*

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Physiol.233(11)8908-8918(2018)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA