8-Prenylnaringenin

Cat. No.: HY-N2787

CAS No.: 53846-50-7

Molecular Formula: $C_{20}H_{20}O_5$

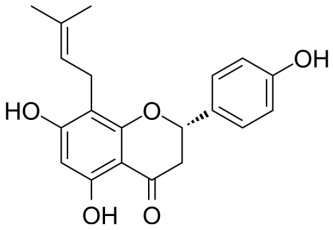
Molecular Weight: 340

Target: Apoptosis

Pathway: Apoptosis

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (735.29 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9412 mL	14.7059 mL	29.4118 mL
	5 mM	0.5882 mL	2.9412 mL	5.8824 mL
	10 mM	0.2941 mL	1.4706 mL	2.9412 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (6.12 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (6.12 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (6.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

8-prenylnaringenin is a prenylflavonoid isolated from hop cones Humulus lupulus, with cytotoxicity. 8-prenylnaringenin has anti-proliferative activity against HCT-116 colon cancer cells via induction of intrinsic and extrinsic pathway-mediated apoptosis. 8-Prenylnaringenin also promotes recovery from immobilization-induced disuse muscle atrophy through activation of the Akt phosphorylation pathway in mice[1] [2] [3].

REFERENCES

[1]. Koosha S, et al. Antiproliferative and apoptotic activities of 8-prenylnaringenin against human colon cancer cells. Life Sci. 2019 Jul 3:116633.

[2]. Mukai R, et al. 8-Prenylnaringenin promotes recovery from immobilization-induced disuse muscle atrophy through activation of the Akt phosphorylation pathway in mice. Am J Physiol Regul Integr Comp Physiol. 2016 Dec 1;311(6):R1022-R1031.

[3]. Stompor M, et al. In Vitro Effect of 8-Prenylnaringenin and Naringenin on Fibroblasts and Glioblastoma Cells-Cellular Accumulation and Cytotoxicity. Molecules. 2017 Jun 30;22(7).

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

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