Curcumenol

Cat. No.: HY-N2259

CAS No.: 19431-84-6

Molecular Formula: $C_{15}H_{22}O_2$

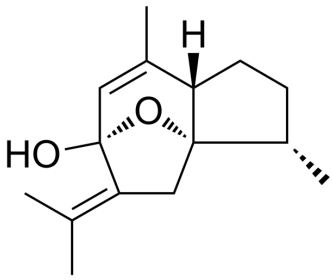
Molecular Weight: 234.33

Target: Cytochrome P450

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (533.44 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.2675 mL	21.3374 mL	42.6749 mL
	5 mM	0.8535 mL	4.2675 mL	8.5350 mL
	10 mM	0.4267 mL	2.1337 mL	4.2675 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 (8.88 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (8.88 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (8.88 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Curcumenol ((+)-Curcumenol) is a potent CYP3A4 inhibitor with an IC_{50} of 12.6 μM, which is one of constituents in the plants of medicinally important genus of Curcuma zedoaria, with neuroprotection, anti-inflammatory, anti-tumor and hepatoprotective activities. Curcumenol ((+)-Curcumenol) suppresses Akt-mediated NF-κB activation and p38 MAPK signaling pathway in LPS-stimulated BV-2 microglial cells[1][2].

IC_{50} & Target

CYP3

CUSTOMER VALIDATION

- Front Cell Dev Biol. 2021 Nov 10;9:763864.
- bioRxiv. 2023 Jun 3.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Sun DX, et al. Inhibitory effects of curcumenol on human liver cytochrome P450 enzymes. Phytother Res. 2010 Aug;24(8):1213-6.

[2]. Lo JY, et al. Curcumenol isolated from Curcuma zedoaria suppresses Akt-mediated NF-κB activation and p38 MAPK signaling pathway in LPS-stimulated BV-2 microglial cells. Food Funct. 2015 Nov;6(11):3550-9.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA