Dehydrodiisoeugenol

Cat. No.: HY-N0589

CAS No.: 2680-81-1

Molecular Formula: $C_{20}H_{22}O_4$

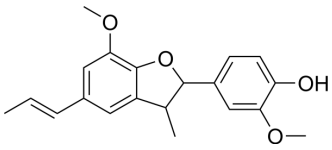
Molecular Weight: 326.39

Target: NF-κB; COX; Bacterial

Pathway: NF-κB; Immunology/Inflammation; Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (306.38 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.0638 mL	15.3191 mL	30.6382 mL
5 mM	0.6128 mL	3.0638 mL	6.1276 mL
10 mM	0.3064 mL	1.5319 mL	3.0638 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 (6.37 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (6.37 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (6.37 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Dehydrodiisoeugenol is isolated from Myristica fragrans Houtt, shows anti-inflammatory and anti-bacterial actions[1]. Dehydrodiisoeugenol inhibits LPS- stimulated NF-κB activation and cyclooxygenase (COX)-2 gene expression in murine macrophages[2].

IC_{50} & Target

NF-κB; COX-2[2]

CUSTOMER VALIDATION

- Front Cell Dev Biol. 2021 Jun 11;9:684393.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Murakami Y, et al. Dehydrodiisoeugenol, an isoeugenol dimer, inhibits lipopolysaccharide-stimulated nuclear factor kappa B activation and cyclooxygenase-2 expression in macrophages. Arch Biochem Biophys. 2005 Feb 15;434(2):326-32.

[2]. Lv QQ, et al. Metabolic profiling of dehydrodiisoeugenol using xenobiotic metabolomics. J Pharm Biomed Anal. 2017 Oct 25;145:725-733.

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