E MCE MedChemExpress

Micheliolide

Cat. No.: HY-N0847

CAS No.: 68370-47-8Molecular Formula: $C_{15}H_{20}O_3$ Molecular Weight: 248.32Target: NF- κ B

Pathway: NF- κ B

Storage: Powder -20°C

4°C 2 years

3 years

In solvent -80°C 2 years

-20°C 1 year

SOLVENT & SOLUBILITY

In Vitro

DMSO: 50 mg/mL (201.35 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.0271 mL	20.1353 mL	40.2706 mL
	5 mM	0.8054 mL	4.0271 mL	8.0541 mL
	10 mM	0.4027 mL	2.0135 mL	4.0271 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: ≥ 2.5 mg/mL (10.07 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline) Solubility: \geq 2.5 mg/mL (10.07 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.07 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Micheliolide could effectively attenuate the high glucose-stimulated activation of NF- κ B, the degradation of I κ B α , and the expression of MCP-1, TGF- β 1 and FN in rat mesangial cells (MCs).

CUSTOMER VALIDATION

- Carcinogenesis. 2020 Jul 10;41(6):723-733.
- J Biol Regul Homeost Agents. 2023 Jul 20, 37(7): 3911-3919.
- bioRxiv. 2023 Jun 3.

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REFERENCES

[1]. Jia QQ, et al. Sesquiterpene lactones and their derivatives inhibit high glucose-induced NF- κ B activation and MCP-1 and TGF- β 1 expression in rat mesangial cells. Molecules. 2013 Oct 21;18(10):13061-77.

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

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