Methyl linoleate

Cat. No.: HY-N1481

CAS No.: 112-63-0

Molecular Formula: $C_{19}H_{34}O_2$

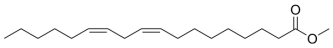
Molecular Weight: 294.47

Target: Tyrosinase

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 83.33 mg/mL (282.98 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.3959 mL	16.9797 mL	33.9593 mL
	5 mM	0.6792 mL	3.3959 mL	6.7919 mL
	10 mM	0.3396 mL	1.6980 mL	3.3959 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: ≥ 6.25 mg/mL (21.22 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 6.25 mg/mL (21.22 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 6.25 mg/mL (21.22 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Methyl linoleate, a major active constituent of Sageretia thea?fruit (HFSF), is a major anti-melanogenic compound. Methyl linoleate downregulates microphthalmia-associated transcription factor (MITF)?and tyrosinase-related proteins[1].

In Vitro

Sageretia thea?fruit extracts rich in Methyl linoleate downregulate melanogenesis via the Akt/GSK3β signaling pathway. The HFSF and Methyl linoleate inhibit β-catenin-mediated transcriptional activation of?MITF?through the Akt/GSK3β signaling pathway[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ko GA, et al. Sageretia thea fruit extracts rich in methyl linoleate and methyl linolenate downregulate melanogenesis via the Akt/GSK3β signaling pathway. Nutr Res Pract. 2018 Feb;12(1):3-12.

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