

Product Data Sheet

2-Methoxycinnamaldehyde

Cat. No.:HY-W046353CAS No.:1504-74-1Molecular Formula: $C_{10}H_{10}O_2$ Molecular Weight:162.19Target:ApoptosisPathway:Apoptosis

Storage: -20°C, stored under nitrogen

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

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (616.56 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	6.1656 mL	30.8280 mL	61.6561 mL
	5 mM	1.2331 mL	6.1656 mL	12.3312 mL
	10 mM	0.6166 mL	3.0828 mL	6.1656 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 (15.41 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (15.41 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

2-Methoxycinnamaldehyde (o-Methoxycinnamaldehyde) is a natural compound of Cinnamomum cassia, with antitumor activity $^{[1][2][3]}$. 2-Methoxycinnamaldehyde inhibits proliferation and induces apoptosis by mitochondrial membrane potential ($\Delta \Psi m$) loss, activation of both caspase-3 and caspase-9 $^{[2]}$. 2-Methoxycinnamaldehyde effectively inhibits platelet-derived growth factor (PDGF)-induced HASMC migration $^{[3]}$.

REFERENCES

[1]. Wong HY, et al. Cinnamomum verum Component 2-Methoxycinnamaldehyde: A Novel Anticancer Agent with Both Anti-Topoisomerase I and II Activities in Human Lung Adenocarcinoma A549 Cells In Vitro and In Vivo. Phytother Res. 2016 Feb;30(2):331-40.

[2]. Liu YH, et al. Cinnamomum verum ingredient 2-methoxycinnamaldehyde: a new antiproliferative drug targeting topoisomerase I and II in human lung squamous cell



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