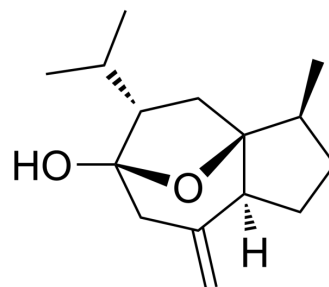


Curcumol

Cat. No.:	HY-N0104		
CAS No.:	4871-97-0		
Molecular Formula:	C ₁₅ H ₂₄ O ₂		
Molecular Weight:	236.35		
Target:	Apoptosis		
Pathway:	Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	1 year
		-20°C	6 months



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (423.10 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.2310 mL	21.1551 mL	42.3101 mL
	5 mM	0.8462 mL	4.2310 mL	8.4620 mL
	10 mM	0.4231 mL	2.1155 mL	4.2310 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (10.58 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Curcumol ((-)-Curcumol), a bioactive sesquiterpenoid, possesses numerous pharmacological activities like anticancer, antimicrobial, antifungal, antiviral, and antiinflammatory. Curcumol is a potent inducer of apoptosis in numerous cancer cells via targeting key signaling pathways as MAPK/ERK, PI3K/Akt and NF-κB which are generally deregulated in several cancers^[1].

In Vitro

Curcumol ((-)-Curcumol) is the major component extracted from root of Rhizoma Curcumae. Curcumol exerts anticancer effect in cholangiocarcinoma cells via down-regulating CDKL3^[2]
 . Curcumol induces cell cycle arrest in colon cancer cells via reactive oxygen species and Akt/ GSK3β/cyclin D1 pathway^[3]
 . Curcumol suppresses breast cancer cell metastasis by inhibiting MMP-9 via JNK1/2 and Akt-dependent NF-κB signaling pathways^[4].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Phytother Res. 2022 May 11.
- Phytother Res. 2021 Nov 8.
- Int Immunopharmacol. 2023 Jun 29;122:110527.
- Aging (Albany NY). 2021 Jul 27;13(14):18392-18403.
- Cell Cycle. 2022 Mar 6;1-18.

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- [1]. Wei W, et al. Curcumol: From Plant Roots to Cancer Roots. Int J Biol Sci. 2019;15(8):1600-1609. Published 2019 Jun 4.
- [2]. Zhang J, et al. Curcumol Exerts Anticancer Effect in Cholangiocarcinoma Cells via Down-Regulating CDKL3. Front Physiol. 2018;9:234. Published 2018 Mar 20.
- [3]. Wang J, et al. Curcumol induces cell cycle arrest in colon cancer cells via reactive oxygen species and Akt/ GSK3 β /cyclin D1 pathway. J Ethnopharmacol. 2018;210:1-9.
- [4]. Ning L, et al. Curcumol Suppresses Breast Cancer Cell Metastasis by Inhibiting MMP-9 Via JNK1/2 and Akt-Dependent NF- κ B Signaling Pathways. Integr Cancer Ther. 2016;15(2):216-225.
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Caution: Product has not been fully validated for medical applications. For research use only.

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