

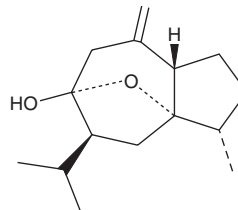
PRODUCT INFORMATION



Curcumol

Item No. 26849

CAS Registry No.: 4871-97-0
Formal Name: (3S,3aS,5S,6R,8aS)-octahydro-3-methyl-8-methylene-5-(1-methylethyl)-6H-3a,6-epoxyazulen-6-ol
Synonym: (-)-Curcumol
MF: C₁₅H₂₄O₂
FW: 236.4
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Curcuma zedoaria*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Curcumol is supplied as a solid. A stock solution may be made by dissolving the curcumol in the solvent of choice, which should be purged with an inert gas. Curcumol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of curcumol in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Description

Curcumol is a sesquiterpene alcohol that has been found in *Curcumae* oil and has diverse biological activities.¹⁻⁴ It is a positive allosteric modulator (PAM) of GABA_A receptors that potentiates GABA-induced currents in the presence of the benzodiazepine GABA agonist diazepam, but not the GABA_A PAM (-)-menthol, in mouse hippocampal neurons.¹ Curcumol (1-200 µg/ml) reduces activation of proinflammatory NF-κB and profibrotic TGF-β1/SMAD signaling pathways in RAW 264.7 cells stimulated with cigarette smoke extract.² It inhibits proliferation of and induces apoptosis in LoVo and SW480 colorectal cancer cells in a concentration-dependent manner.³ *In vivo*, curcumol (20-80 mg/kg) reduces tumor volume in a LoVo mouse xenograft model. Curcumol also increases the rate of wound closure in rats with diabetes induced by streptozotocin (Item No. 13104).⁴

References

1. Liu, Y.-M., Fan, H.-R., Ding, J., *et al.* Curcumol allosterically modulates GABA(A) receptors in a manner distinct from benzodiazepines. *Sci. Rep.* **7:46654** (2017).
2. Li, N., Liu, T.-H., Yu, J.-Z., *et al.* Curcumin and curcumol inhibit NF-κB and TGF-β1/Smads signaling pathways in CSE-treated RAW246.7 cells. *Evid. Based Complement. Alternat. Med.* 3035125 (2019).
3. Wang, J., Huang, F., Bai, Z., *et al.* Curcumol inhibits growth and induces apoptosis of colorectal cancer LoVo cell line via IGF-1R and p38 MAPK pathway. *Int. J. Mol. Sci.* **16(8)**, 19851-19867 (2015).
4. Zhou, J., Ni, M., Liu, X., *et al.* Curcumol promotes vascular endothelial growth factor (VEGF)-mediated diabetic wound healing in streptozotocin-induced hyperglycemic rats. *Med. Sci. Monit.* **23**, 555-562 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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