



LKT Laboratories, Inc.

Demethoxycurcumin

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Product Information

Product ID D1850

CAS No. 24939-17-1

Chemical Name 1,6-Heptadiene-3,5-dione, 1-(4-hydroxy-3-methoxyphenyl)-7-(4-hydroxyphenyl)- (VAN)

Synonym monodemethoxycurcumin, BHC FM

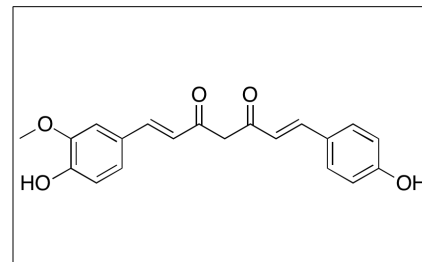
Formula C₂₀H₁₈O₅

Formula Wt. 338.35

Melting Point

Purity ≥98%

Solubility



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
D1850	5 mg	\$183.60
D1850	10 mg	\$326.70
D1850	25 mg	\$653.30

Store Temp Ambient

Ship Temp Ambient

Description Demethoxycurcumin displays anticancer, antioxidative, anti-inflammatory, antibacterial, and neuroprotective activities. Demethoxycurcumin activates AMPK, inhibiting eukaryotic initiation factor 4E binding protein 1 (eIF4E-bp3) and downregulating HSP70 and EGFR in vitro. Like other similar compounds, demethoxycurcumin may indirectly inhibit EGFR activation. Demethoxycurcumin also inhibits STAT3 activation and increases activity of caspase 3 in vitro, inhibiting cell proliferation, migration, and invasion in several cancer cell lines. Demethoxycurcumin downregulates reactive oxygen species (ROS)-related signaling in vitro as well. This compound inhibits phosphorylation of tau proteins and may inhibit acetylcholinesterase (AChE) activity in vitro, suggesting potential benefit in the treatment of Alzheimer's disease. Demethoxycurcumin may also be a potential treatment for vascular injury, as it decreases expression of matrix metalloproteinase 2/9 and downregulates PI3K/Akt and ERK1/2 signaling, preventing migration of vascular smooth muscle cells in vitro. This compound also displays antibacterial activity against *Mycobacterium tuberculosis*.

References Sheu MJ, Lin HY, Yang YH, et al. Demethoxycurcumin, a major active curcuminoid from *Curcuma longa*, suppresses balloon injury induced vascular smooth muscle cell migration and neointima formation: an in vitro and in vivo study. *Mol Nutr Food Res*. 2013 Sep;57(9):1586-97. PMID: 23520190.

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Ni X, Zhang A, Zhao Z, et al. Demethoxycurcumin inhibits cell proliferation, migration and invasion in prostate cancer cells. *Oncol Rep*. 2012 Jul;28(1):85-90. PMID: 22552297.

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Caution: This product is intended for laboratory and research use only. It is not for human or drug use.