LKT Laboratories, Inc.

Demethoxycurcumin

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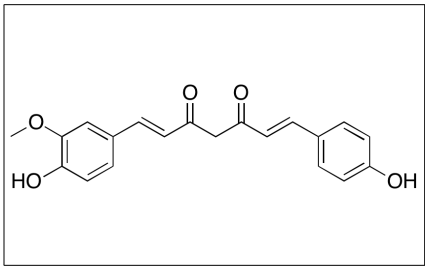
Product Information

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



Formula $C_{20}H_{18}O_5$
Formula Wt. 338.35
Melting Point
Purity ≥98%
Solubility

Bulk quanitites available upon request

Product ID	Size
D1850	5 mg
D1850	10 mg
D1850	25 mg

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

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