LKT Laboratories, Inc.

Dimethoxycurcumin

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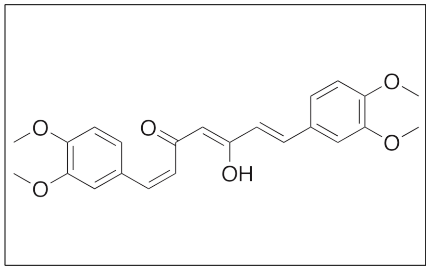
Product Information

Product ID D3449
CAS No. 160096-59-3
Chemical Name

Synonym

Formula $C_{23}H_{24}O_6$
Formula Wt. 396.43
Melting Point
Purity ≥98%
Solubility



Bulk quanitites available upon request

Product ID	Size
D3449	5 mg
D3449	10 mg
D3449	25 mg

Store Temp Ambient
Ship Temp Ambient

Description Like its parent compound, curcumin, this curcuminoid exhibits anticancer, antioxidative, anti-inflammatory, and antibacterial activities. In breast cancer cells, dimethoxycurcumin alters mitochondrial membrane potential, decreases ATP synthase activity, and induces DNA damage and apoptosis. In comparison to curcumin, dimethoxycurcumin is more stable and displays greater apoptosis-inducing activity in vitro. Additionally, dimethoxycurcumin is more effective in inhibition of NO production, iNOS expression, and NF-κB activation than curcumin. Dimethoxycurcumin exhibits pro-oxidative activity in cancer cells, increasing reactive oxygen species (ROS), but does not do so in normal cultured cells. This compound also inhibits the expression of pro-inflammatory cytokines such as IL-2, IL-6, and IFN-γ in vitro. Dimethoxycurcumin has phototoxic antibacterial activity against both gram-positive and gram-negative bacteria and binds the minor groove of DNA without intercalation.

References

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