LKT Laboratories, Inc.

Bisdemethoxycurcumin

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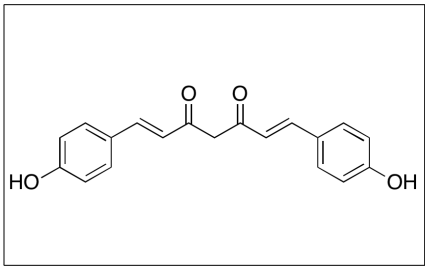
Product Information

Product ID B3573
CAS No. 24939-16-0
Chemical Name 1,6-Heptadiene-3,5-dione, 1,7-bis(4-hydroxyphenyl)-

Synonym

Formula $C_{19}H_{16}O_4$
Formula Wt. 308.33
Melting Point
Purity ≥98%
Solubility DMSO



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
B3573	5 mg	$145.80
B3573	10 mg	$194.70
B3573	25 mg	$292.00

Store Temp Ambient
Ship Temp Ambient

Description Bisdemethoxycurcumin, like its parent compound curcumin, exhibits anticancer, antioxidative, anti-diabetic, anti-inflammatory, and antibacterial activities. Bisdemethoxycurcumin inhibits Wnt signaling by inhibiting WIF-1 promoter demethylation and inhibits DNA methyltransferase 1 (DNMT1), inducing apoptosis in non-small cell lung cancer (NSCLC) cells. Bisdemethoxycurcumin also induces apoptosis in other in vitro cancer models through increases in reactive oxygen species (ROS) and increases in the expression of p53, p21, p16, and retinoblastoma (Rb) protein. This compound activates SIRT1 and AMPK signaling. Bisdemethoxycurcumin inhibits PDGF signaling in smooth muscle cells, preventing cell migration and proliferation. Bisdemethoxycurcumin may also display potential benefit in the treatment of type 2 diabetes, as it acts as a noncompetitive inhibitor of pancreatic α-amylase. Like other curcuminoids, this compound also displays phototoxic antibacterial activity, although it is active primarily against gram-positive bacteria only.

References

Li YB, Zhong ZF, Chen MW, et al. Bisdemethoxycurcumin Increases Sirt1 to Antagonize t-BHP-Induced Premature Senescence in WI38 Fibroblast Cells. Evid Based Complement Alternat Med. 2013;2013:851714. Epub 2013 Sep 2. PMID: 24078830.

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Hua Y, Dolence J, Ramanan S, et al. Bisdemethoxycurcumin inhibits PDGF-induced vascular smooth muscle cell motility and proliferation. Mol Nutr Food Res. 2013 Sep;57(9):1611-8. PMID: 23554078.

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