



LKT Laboratories, Inc.

Isobavachalcone

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Product Information

Product ID I7256

CAS No. 20784-50-3

Chemical Name (E)-1-[2,4-Dihydroxy-3-(3-methyl-2-butenyl)phenyl]-3-(4-hydroxyphenyl)-2-propen-1-one

Synonym

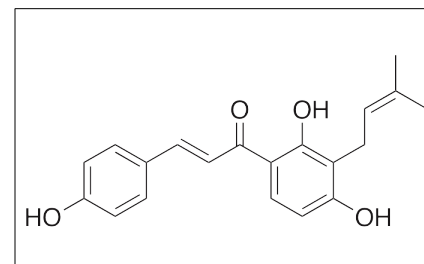
Formula $C_{20}H_{20}O_4$

Formula Wt. 324.37

Melting Point

Purity $\geq 97\%$

Solubility



Bulk quantities available upon request

Product ID	Size
I7256	1 mg
I7256	5 mg

Store Temp -20°C

Ship Temp Ambient

Description Isobavachalcone is a prenylated chalcone flavonoid found in several species of *Psoraleae*; it exhibits neuroprotective, antithrombotic, antifungal, anticancer chemotherapeutic, and chemopreventive activities. In separate in vitro experiments, isobavachalcone inhibits platelet aggregation and displays activity against several fungi, including *Candida albicans* and *Cryptococcus neoformans*. Isobavachalcone also displays potential benefit as a treatment for Alzheimer's disease, inhibiting oligomerization and fibrillization of amyloid-B (AB), decreasing neurotoxicity in cellular models. This compound inhibits skin tumor promotion induced by DMBA and TPA in animal models and increases caspase-3, caspase-9, and Bax levels, inducing both mitochondrial-mediated and caspase-mediated apoptosis in neuroblastoma cells. Additionally, isobavachalcone exhibits strand scission activity, relaxing supercoiled DNA to nicked DNA in cells. Isobavachalcone also non-competitively inhibits cholesterol acyltransferase, an enzyme that plays a significant role in intestinal absorption of cholesterol and hepatic production of lipoproteins.

References Chen X, Yang Y, Zhang Y. Isobavachalcone and bavachinin from *Psoraleae* Fructus modulate AB42 aggregation process through different mechanisms in vitro. *FEBS Lett.* 2013 Sep 17;587(18):2930-5. PMID: 23907009.

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