



LKT Laboratories, Inc.

Cafestol Palmitate

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Product Information

Product ID C0022

CAS No. 81760-46-5

Chemical Name [3b,S-(3b α ,5a β ,7 β ,8 β ,10 α ,10b β)]-3b,4,5,6,7,8,9,10- 10a,10b,11,12-Dodecahydro-7-hydroxy-10b-methyl- 5a,8-methano-5aH-cyclohepta [5,6]naphtho[2,1-b]furan-7-methanol palmitate

Synonym Cafesterol palmitate

Formula C₃₆H₅₈O₄

Formula Wt. 554.43

Melting Point 43 °C

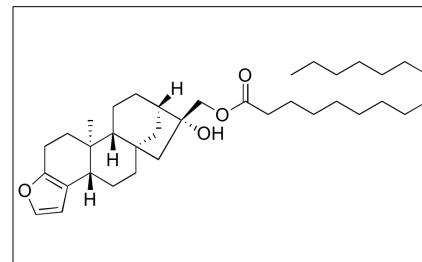
Purity ≥98%

Solubility Soluble in methanol, ethanol, ether. Insoluble in water.

Store Temp -20 °C

Ship Temp Ambient

Description Cafestol is a diterpene initially found in brewed, unfiltered coffee that exhibits anti-angiogenic, anticancer, chemopreventive, neuromodulatory, anti-inflammatory, and hyperlipidemic activities. Cafestol inhibits proliferation, migration, and tube formation in vitro, potentially through decreasing phosphorylation of FAK and Akt. In renal carcinoma cells, cafestol induces G1 phase cell cycle arrest and apoptosis, decreases the mitochondrial membrane potential, increases activation of caspase 3, downregulates expression of Bcl-2, Bcl-cl, Mcl-1, and FLIP, suppresses Akt pathway signaling, and inhibits cellular proliferation. In other cellular models, cafestol decreases aflatoxin B1-induced DNA adduct formation and increases levels of glutathione-S-transferase. Additionally, cafestol activates Nrf2 and displays protective benefit in models of Parkinson's disease. In LPS-stimulated macrophages, this compound inhibits ERK2 and MEK1 and decreases production of COX-2 and prostaglandin E2 (PGE2). In vivo, cafestol upregulates expression of genes involved in cholesterol homeostasis by acting as an agonist at the farnesoid X receptor (FXR) and pregnane X receptor (PXR).



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
C0022	50 mg	\$255.20
C0022	100 mg	\$398.40
C0022	500 mg	\$1372.50

References Wang S, Yoon YC, Sung MJ, et al. Antiangiogenic properties of cafestol, a coffee diterpene, in human umbilical vein endothelial cells. *Biochem Biophys Res Commun*. 2012 May 11;421(3):567-71. PMID: 22525673.

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Cavin C, Holzhäuser D, Constable A, et al. The coffee-specific diterpenes cafestol and kahweol protect against aflatoxin B1-induced genotoxicity through a dual mechanism. *Carcinogenesis*. 1998 Aug;19(8):1369-75. PMID: 9744531.

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