



Product Information

Product ID K0031
CAS No. 81760-47-6
Chemical Name

Synonym

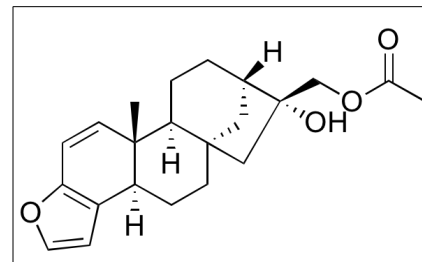
Formula $C_{22}H_{28}O_4$
Formula Wt. 356.47
Melting Point 133.5-136 °C
Purity ≥98%

Solubility Soluble in ethyl acetate,
acetone, DMSO.

Store Temp -20 °C

Ship Temp Blue Ice

Description Kahweol is a diterpene found in coffee beans that exhibits neuromodulatory, anti-osteoporotic, anti-resorptive, anti-inflammatory, antioxidative, anti-angiogenic, anticancer, and chemopreventive activities. Like other coffee compounds, kahweol may also display hyperlipidemic properties. In vitro, kahweol inhibits RANKL-induced osteoclast generation and bone resorbing activity. In other cellular and animal models, kahweol inhibits cell proliferation, migration, invasion, and tube formation, and suppresses expression of MCP-1 and COX-2. Additionally, kahweol activates Nrf2. In oral squamous cell carcinoma cells, this compound induces G1 phase cell cycle arrest and apoptosis and downregulates expression of Sp1. In vitro, kahweol inhibits aflatoxin B1-induced DNA adduct formation and increases levels of glutathione-S-transferase. This compound also inhibits H2O2-induced DNA damage and oxidative stress and decreases superoxide anion formation in vitro.



Bulk quantities available upon request

Product ID	Size
K0031	10 mg
K0031	25 mg
K0031	100 mg
K0031	500 mg

References Chae JI, Jeon YJ, Shim JH. Anti-Proliferative Properties of Kahweol in Oral Squamous Cancer Through the Regulation Specificity Protein 1. *Phytother Res.* 2014 Sep 8. [Epub ahead of print]. PMID: 25196544.

Wu KC, McDonald PR, Liu J, et al. Screening of natural compounds as activators of the keap1-nrf2 pathway. *Planta Med.* 2014 Jan;80(1):97-104. PMID: 24310212.

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Cavin C, Mace K, Offord EA, et al. Protective effects of coffee diterpenes against aflatoxin B1-induced genotoxicity: mechanisms in rat and human cells. *Food Chem Toxicol.* 2001 Jun;39(6):549-56. PMID: 11346484.

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