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.

References


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