Farnesol is a sesquiterpene alcohol produced from isoprene units; it is found in many essential plant oils as it regulates the volatility of odorants in perfumes. Farnesol exhibits anticancer, chemopreventive, and antifungal activities. In pancreatic adenocarcinoma cells, farnesol induces G0/G1 phase cell cycle arrest, downregulates expression of cyclin A, cyclin B1, and CDK2, and increases expression of p21 and p27. Farnesol also increases latency to tumor formation and decreases tumor incidence in TPA-induced skin carcinogenesis models. Additionally, this compound induces apoptosis and increases ROS formation, inhibiting growth of Aspergillus and Candida.

References


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