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-β (Aβ), 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


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