Protocatechuic acid is a polyphenol found in many plants and foods; it exhibits anticancer chemotherapeutic, chemopreventive, antiviral, anti-anginal, cardioprotective, antioxidative, and neuroprotective activities. Protocatechuic acid decreases cell migration and invasion of melanoma cells through targeting of PKC/RhoB activation and resulting decreases in NF-κB activation and Matrix metalloproteinase 2 (MMP2) expression. Protocatechuic acid also induces apoptosis in gastric adenocarcinoma cells, increasing activation of JNK and p38 MAPK. Additionally, this compound inhibits topoisomerase II. In avian models of infectious bursal disease virus, protocatechuic acid increases lymphocyte proliferation and virus clearance. Protocatechuic acid also displays benefit in ischemic conditions, decreasing fatty acid oxidation in the rodent heart. This compound prevents oxidative stress-induced apoptosis in PC12 neurons as well, inhibiting changes in mitochondrial membrane potential, caspase 3 activation, and decreases in Bcl-2 and glutathione.

References


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