Protopanaxadiol is a triterpene sapogenin originally found in species of Panax (ginseng) that exhibits anticancer, neuromodulatory, neuroprotective, and antioxidative activities. Protopanaxadiol prevents breakdown of vitamin D3 and acts as an antagonist at GABA-A receptors. Protopanaxadiol also inhibits proliferation of colorectal cancer cells and induces mitochondria- and caspase-dependent apoptosis in lung adenocarcinoma cells by decreasing the mitochondrial membrane potential and increasing release of cytochrome C, activation of caspases 3 and 9, and cleavage of PARP. In animal models of cerebral ischemia, protopanaxadiol increases activity of superoxide dismutase and Na+/K+ ATPases, stimulates expression of Bcl-2, and decreases infarct size and neurological deficits.

References


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