Glycyrrhizin is a triterpene glycoside found in Glycyrrhiza that exhibits antiviral, anti-inflammatory, nephroprotective, neuroprotective, anticancer, chemopreventive, and antioxidative activities. Glycyrrhizin is commercially used as a flavorant and emulsifier. This compound inhibits 11β-hydroxysteroid dehydrogenase. Glycyrrhizin is occasionally clinically used to treat herpes virus infections, as it inhibits viral entry to host cells. Glycyrrhizin also inhibits renal ischemia/reperfusion injury in vivo by downregulating signaling of p38 MAPK and decreasing expression of IL-6, IL-1β, IFN-γ, and TNF-α. In vitro, glycyrrhizin decreases levels of ROS and malondialdehyde and increases levels of superoxide dismutase. In other in vitro models, glycyrrhizin prevents glial inflammation and kainic acid-induced neuronal death. This compound prevents the development of DMH-induced cancerous lesions in the colon, induces apoptosis and expression of p53, and decreases levels of inflammatory cytokines, COX-2, and VEGF; it also inhibits cellular proliferation and growth in prostate cancer cells.

References


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