Diosgenin is a steroidal saponin found in *Dioscorea* that exhibits anticancer, anti-inflammatory, neuroprotective, cognition enhancing, and anti-hyperlipidemic activities. In breast cancer cells, diosgenin inhibits cell migration, actin polymerization, Vav2 phosphorylation, and Cdc42 activation. In macrophages, diosgenin inhibits production of NO and ROS, expression of iNOS, IL-6, and IL-1β, and activation of JNK. Additionally, diosgenin improves performance on object recognition memory tasks and decreases amyloid-β (Aβ) plaque formation in the cortex and hippocampus of animal models of Alzheimer's disease. In diabetic mice, this compound decreases levels of triglycerides and inhibits activation of LXRα, ameliorating dyslipidemia.

References


