Ginkgolic acids are found in *Ginkgo biloba* and exhibit antiviral, antibiotic, and anticancer chemotherapeutic activities. In vitro, ginkgolic acids inhibit HIV protease and suppress HIV infection. Ginkgolic acids also exhibit antibacterial efficacy against both gram positive and gram negative bacteria, including *Staphylococcus*, *Escherichia*, and *Bacillus*. Ginkgolic acids also inhibit fatty acid synthase and exhibit cytotoxicity in breast cancer, lung cancer, and leukemia cells. Additionally, ginkgolic acids induce apoptosis in cancer cells through downregulation of Bcl-2 and upregulation of Bax. Ginkgolic acids may also be neurotoxic, as they increase activity of protein phosphatase 2C (PP2C) in neurons.

References


