## Abstract

Many pharmacological activities have already been ascribed to the genus of *Teucrium* plant. The recent investigation aimed to characterize and estimate the chemical composition, anti-inflammatory, antioxidant and anticancer potentials of the essential oil (EO) isolated, by the microwave-ultrasonic apparatus from the traditional medicinal *Teucrium pruinosum* plant. The EO was analyzed by Gas Chromatography-Mass Spectrometry (GC-MS). The anticancer activity was evaluated against hela cervical adenocarcinoma cells. However, the anti-inflammatory effect was determined using cyclooxygenase (COX) inhibitor screening assay. In addition, its antioxidant activity was evaluated using 2,2-diphenyl-1-picrylhydrazyl (DPPH) assay.