

عنوان مقاله:

Green synthesis, characterization and antioxidant activity of silver nanoparticles by *Lepidium sativum* extract and their cytotoxic effect on (MCF-7) cell line

محل انتشار:

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خلاصه مقاله:

This article reports the utilization of *Lepidium sativum* extract for the synthesis of silver nanoparticles (AgNPs) with cytotoxic activity against the (MCF-7) cell line as well as radical scavenging potential. The biosynthesized AgNPs were confirmed using various analytical characterization techniques. The cytotoxic effect of green synthesized AgNPs was studied by MTT assay and scavenging efficacy was assessed by DPPH assays. AgNPs were observed to be almost spherical in shape with an average diameter from 89.90 to 139.65 nm as assessed by TEM. AgNPs revealed the dose-dependent antioxidant activity. Also, in vitro studies revealed dose-dependent cytotoxic effects of AgNPs treated MCF-7 cell line. The data strongly suggest that the green synthesized AgNPs had a potential antioxidant, cytotoxicity activity.

کلمات کلیدی:

AgNPs, antioxidant, anticancer, green synthesis, extract

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