

عنوان مقاله:

Nano-cubosomes as Bioactive Compounds Delivery System

محل انتشار:

اولین همایش بین المللی علوم و فناوری نانو (سال: 1399)

تعداد صفحات اصل مقاله: 17

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خلاصه مقاله:

Antioxidant activity of cornus mas extract (CME) is very important. Encapsulated is a good way to increase the stability of these compounds. In this study, we evaluated the antioxidant activity of the encapsulated bioactive compounds of cornus mas extract (CME) and its release in semi digestive condition via enteric coated nanocarriers (NCs) . Encapsulated into enteric coated nanocarriers (CME-NCs) and control sample, were studied to determine the effect of encapsulation on the stability of antioxidants. Then, their effect on cell cycle, cell viability and apoptosis of cancer cells were studied. The characterization analysis reported the mean particle size and zeta potential value of NCs equal to 22.7 ± 6.58 nm and -16 ± 5 mV. The results showed that CME-NCs could improve IC50 value 1.33 and 1.47 times more than the free CME after 24 and 48 h of incubation. These findings confirmed that CME-NCs could stop the cells proliferation in G1 phase, and caused apoptosis in cancer cell line HT-29.

کلمات کلیدی:

.Cornus mas; Antioxidant activity; Nano-cubosomes; Bioactive Compounds; Colorectal Cancer; Eudragit® S100

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