P11

Effects of cytotoxicity and Quinone reductase induced activity of Sedum sarmentosum on Human cancer cells

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Chemoprevention is one of the major strategies for cancer control. It is well estabilished that dietary factors play an important role in modulating the development of certain types of human cancer.

We investigated the cytotoxic effects of *sedum sarmentosum(SS)* on HepG2, HeLa, MCF-7 and C6 cell lines by the MTT assay. Among the five partition layers of methanol extract of SS(SSM), the ethylether partition layer of *sedum sarmentosum*(SSMEE) showed the strongest cytotoxic effects on all cell lines. We also investigated the cytotoxic effects of Sedoheptulose anhydride which is well-known main-component of SS. However, in all cell lines, sedoheptulose anhydride failed to show significant cytotoxic activities. Therefore we were able to conclude that Sedoheptulose anhydride does not include bioactive substances, but ehtylether partition layer, SSMEE might have potentially cytotoxic effect on the human cancer cells.

QR activity of SSMEE on HepG2 cells was 2.6 as control value was of 1.0. These results suggest that useful cancer chemoprevention chemicals could be isolated from SSMEE.