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Effects of Cytotoxicity and Quinone reductase induced activityof *Artemisia princeps* var. *orientalis* on Human cancer cells.

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In this study, *Artemisia princeps* var. *orientalis*(AP), the Compositae species, were extracted using methanol(APM) and the extracts was fractionated to five different types which are hexane(APMH), ethylether(APMEE), ethylacetate (APMEA), butanol(APMB) and aqueous(APMA) partition layers. The various partition layers were screened for the cytotoxic effects on HepG2, MCF-7 and C6 cells by MTT assay and for their ability induce quinone reductase(QR) in HepG2 cells.

Compared with the other partition layers of AP, the APMEE showed the strongest cytotoxic effects on HepG2, MCF-7 and C6 cells.

The quinone reductase(QR) induced activity in HepG2 cells, grown in the presence of APMEE and APMH, were 5.08 and 2.99 times more effective compared with the control value of 1.0 respectively.

Therefore, based on these results, the ethylether partition layer(APMEE) of the *Artemisia princeps* var. *orientalis* may have that potentially useful cancer chemoprevention effect on the human cancer cells, HepG2, MCF-7 and C6.