

Cytotoxicity studies of tetraprenyltoluquinone, a prenilated hydroquinone from *Garcinia cowa* Roxb on H-460, MCF-7 and DU-145

ABSTRACT

Objective: The aim of the present study was to examine the cytotoxicity of a new ring-reduced tetra prenyltoluquinone (TPTQ), [2*E*,6*E*,10*E*]-(+)-4b-hydroxy-3-methyl-5b-(3,7,11,15-tetramethyl-2,6,10,14-hexadecatetraenyl-2-cyclohexen-1-one against H-460, MCF-7 and DU-145 cell lines. **Methods:** Different concentrations of TPTQ were subjected to cytotoxicity study by using MTT method and calculate the percentage of cell viability. **Results:** The results of this study showed that this compound has IC₅₀ value 16.3 ± 3.0 μM in H-460 cancer cell lines without any activities towards another two type of cell lines. **Conclusion:** TPTQ had selective activity against H-460 cancer cell lines.

Keyword: *Garcinia cowa*; TPTQ; H-460; MCF-7; DU-145; Cell viability; Cytotoxicity