Tetraprenyltoluquinone, an anticancer compound from Garcinia cowa Roxb induce cell cycle arrest on H460 non small lung cancer cell line

ABSTRACT

Tetraprenyltoluquinone (TPTQ), isolated compound from stem bark of Garcinia cowa Roxb showed selective cytotoxicity towards H460 lung cancer cell line. We further investigated the ability of this compound in inducing cell cycle arrest by flow cytometry. Cell cycle analysis revealed that TPTQ caused cell cycle arrest in G0/G1 phase. Our results indicate that TPTQ induces cell cycle arrest and apoptosis in H-460 cells, suggesting that it might represent a potential new chemotherapeutic agent.

Keyword: Tetraprenyltoluquinone; Garcinia cowa Roxb; Cell cycle analysis; Lung cancer; Flowcytometry