

P46. DETERMINATION OF CYTOTOXIC EFFECTS OF FIVE PHENOLIC COMPOUNDS IN V79 CELL LINE

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Plant derived phenolic compounds in human diets can be found in significant amounts in many fruits and vegetables. According to the data obtained from previous studies, it is known that vegetables and fruits rich in phenolic compounds and other plant derived (like tea and wine) diet would be protective against cancer and various diseases. It is suggested that phenolic compounds in plants were the main protective compounds and due to their cytotoxic effects on cancer cells, phenolic compounds have been found to have protective effects against cancer. Galangin, limonene, naringin, puerarin and ursolic acid are commonly used plant phenolics because of their health preventing effects. The aim of this study was to evaluate the cytotoxic effects of five commonly using phenolic compounds (galangin, limonene, naringin, puerarin and ursolic acid) by neutral red uptake (NRU) assay in Chinese hamster fibroblast cell line (V79). It is found that all of the studied phenolics decreased the cell viability of V79 cells in a dose dependent manner. The IC₅₀ values of galangin, limonene, naringin, puerarin and ursolic acid were found to be 104,36 µM, 10574 µM, 1976,4 µM, 51,71 µM and 92,94 µM, respectively.