

International Conference on Oncology and Cancer Research (ICOOCR-2025)

Conference Proceedings

February 06, 2025 - Singapore

Novel QRN Substance Effect of Non Small Cell Lung Cancer Cells

Abdülkadir Geylani Şahan

Suleymaniye foundation Natural Medicine Institute, İstanbul, Turkey

Quantification of cell viability and proliferation form the fundamental for numerous in vitro assays in response to external factors. An MTT assay is a colorimetric assay based on assessing the cell metabolic activity [1]. A549 Lung adenocarcinoma cell line was used to see the cytotoxic potential of a new drug for initial screening of apoptosis or necrosis. The biochemical mechanism behind the MTT assay involves NAD(P)H-dependent cellular oxidoreductase enzyme that converts the yellow tetrazolium MTT [3-(4,5-dimethylthiazolyl-2)-2,5-diphenyltetrazolium bromide] into insoluble (E,Z)-5-(4,5-dimethylthiazol-2-yl)-1,3-diphenylformazan (formazan). The formed formazan can be dissolved with dimethyl sulfoxide (DMSO) to give a purple color with characteristic absorption at 540 nm. Intensity of purple color is directly proportional to the cell number and thus indicating the cell viability. We use MTT method evaluate QRN substance effect of A549 non-small cell lung cancer cell line.