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Cell apoptosis assay

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Abstract

Quantitative assessment of apoptotic cell populations by flow cytometry using fluorescein isothiocyanate (FITC)-conjugated annexin V and propidium iodide (PI) dual staining.

Cell apoptosis assay

1 The apoptosis of cells cultured on MWC-chips was assessed using Annexin V-FITC and propidium iodide (PI) double staining method (Vazyme). For cell lines, BRC cell lines (MDA-MB-231) or normal human foreskin fibroblasts (HFF) cell lines were seeded in the MWC-chips and cultured in Sel-Medium or normal cultural condition for 3 days. Subsequently, cells were harvested, trypsinized and stained with Annexin V-FITC and PI. For patient-derived cells, clinical BRC and adjacent tissues were dissociated into single cells which were then seeded onto MWC-chips for 2 days of culture in Sel-Medium followed by 3 days of culture in SG-Medium according to the MTSs generation protocol. The resulting MTSs and RCs were collected, trypsinized and stained with Annexin V-FITC and PI. Finally, the stained cells were analyzed by flow cytometry (CytoFLEX S, Coulter Beckman). Cells negative for PI but positive for Annexin V were considered apoptotic, while cells positive for both PI and Annexin V were classified as necrotic.