



Annexin V-FITC Kit

Description:

Immunological Sciences Annexin V-FITC allows for fluorescent detection of Annexin V bound to apoptotic cells and quantitative determination by flow cytometry. The process needs only a 15-minute incubation procedure.

Annexin V has a high affinity in a Ca^{2+} -dependent manner to negatively charged phospholipid phosphatidylserine, which is found on the outer cell membrane early during apoptosis. The Annexin V-FITC employs FITC conjugated Annexin V in concert with propidium iodide (PI). As the cell membrane becomes increasingly permeable during the later stage of apoptosis, propidium iodide can readily move across the cell membrane and bind to DNA. This combination allows the differentiation among 3 populations of cells in two-color flow cytometry:

- Normal cells: Annexin V negative and PI negative;
- Early apoptotic cells: Annexin V positive and PI negative;
- Necrotic cells or late apoptotic cells: Annexin V positive and PI positive;

Alternatively, the cell can be examined with a fluorescence microscope equipped with FITC and rhodamine filter sets.

Highlights:

Detects apoptosis earlier in the process than DNA-based assays such as TUNEL.

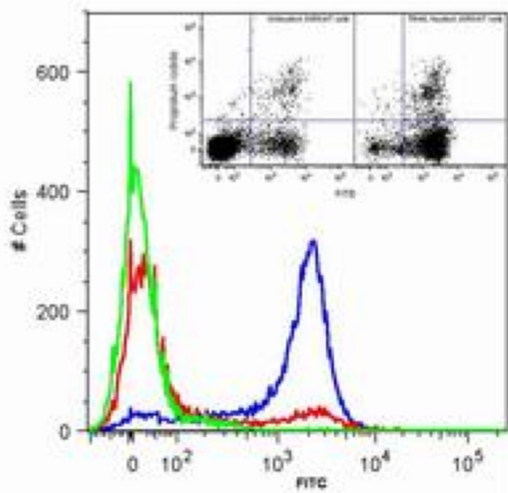
Rapid labeling of cells. Cell staining takes only 10 minutes.

No cell fixation or processing required, reducing the detection time and allowing the cells to be used for further study.

Propidium iodide secondary dye differentiate apoptotic cells from viable and necrotic cells.

Annexin V Fitc Kit

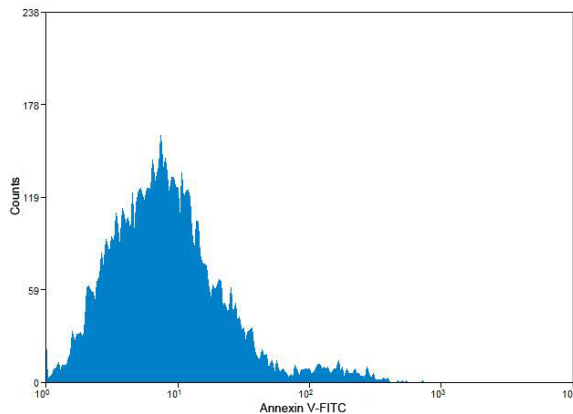
IK-11120	100 tests	€ 200
IK-11130	250 tests	€ 330



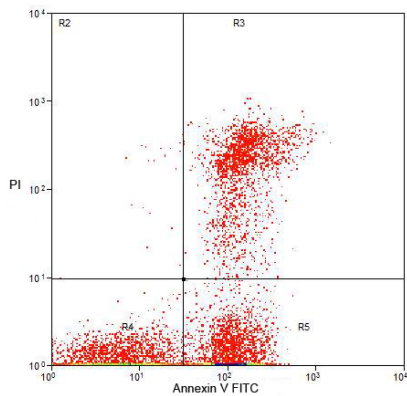
- JURKAT cells (human T cell leukemia) were treated with 200 ng/ml TRAIL/Apo2L (bacterially expressed extracellular domain of human TRAIL, corresponding to amino acids 95-281) for 6 hours or left untreated. Detection of apoptotic cells was preformed by flow cytometry using Apoptosis Assay Kit (Cat. No. IK-11120).

Green line - untreated and unstained cells.
Red line - untreated and stained cells.
Blue line - TRAIL-treated and stained cells.

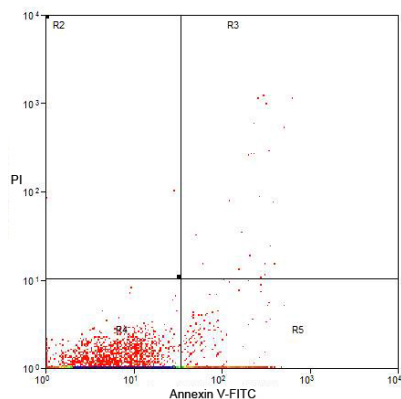
Annexin V-FITC Kits



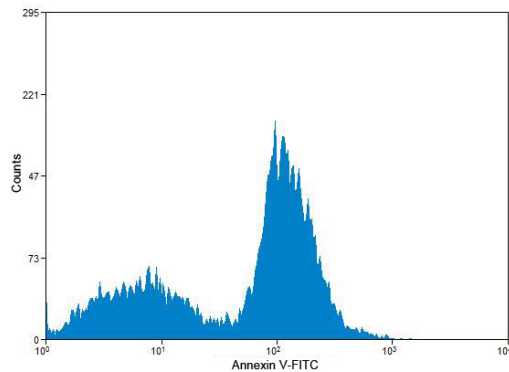
Normal cell-AvF flour.



Normal cell-AvF flour.



Normal cell-AvF & PI



Apoptotic cell-AvF flour.

• Figure legend

Jurkat cells were left untreated (left panels) or treated with 0.5 μ M staurosporine (right panels) at 37°C for 4 hours.

Cells were incubated with Annexin V-FITC & PI in binding buffer and analyzed by flow cytometry.

The X & Y-axis reflect log Annexin V-FITC and PI fluorescence, respectively.

Untreated cells (left panels) appeared in quadrant 3, indicating they were viable and not undergoing apoptosis.

After treated with staurosporine (right panels), the cells appeared in quadrant 2, 3 and 4, indicating they were in late stage apoptosis or dead (Annexin V-FITC & PI positive), viable (Annexin V-FITC & PI negative) or undergoing apoptosis (Annexin V-FITC positive and PI negative), respectively.

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