



## FITC Annexin V Apoptosis Kit with PI

### TECHNICAL DATA SHEET

<b>Application</b>	Apoptosis
<b>Detection Method</b>	Flow cytometry and Fluorescence microscopy
<b>Sample Types</b>	Cell Samples
<b>Reactivity</b>	All Mammalian Species
<b>Storage</b>	2-8°C, Do not freeze

### Product Information

FITC Annexin V Apoptosis Kit has been specifically designed for the identification of apoptotic and necrotic cells and allows fluorescent detection by flow cytometry. FITC Annexin V Apoptosis Kit uses Annexin V conjugated with fluorescein isothiocyanate (FITC) to label phosphatidylserine sites on the membrane surface. The kit includes propidium iodide (PI) to label the cellular DNA in necrotic cells where the cell membrane has been totally compromised. This combination allows the differentiation among early apoptotic cells (Annexin V positive, PI negative), necrotic cells (Annexin V positive, PI positive), and viable cells (Annexin V negative, PI negative).

- Fast and easy
- Basic one step staining protocol
- Allows the differentiation apoptosis and necrosis when using both Annexin V-FITC and PI staining

### Reagent Provided

FITC Annexin V	: 5 µL / test
Propidium Iodide Solution	: 10 µL / test
Annexin V Binding Buffer	: 500 µL / test

## Precautions

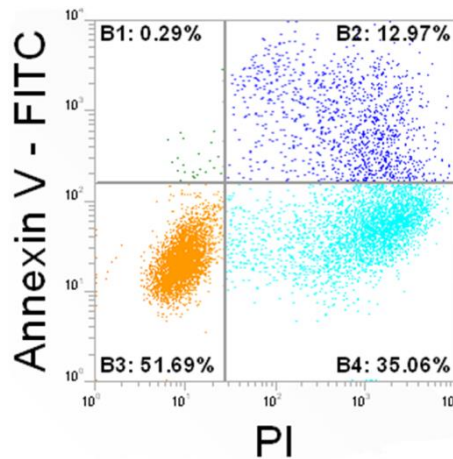
- This kit is for research use only.
- Propidium Iodide Solution is toxic and mutagenic; handle with care.
- Please take safety precautions and follow the procedures of laboratory reagent operation. Wear laboratory clothes and disposable gloves during the experiment, and avoid direct contact with the human body or inhalation of the body.
- Do not freeze any component in this kit.
- This kit must be used before the shelf life for the best assay performance.

## Flow Cytometry Staining Protocol

1. Wash the cells twice with cold PBS and resuspend cells in Annexin V Binding Buffer at a concentration of maximum  $1.0 \times 10^7$  cells/mL.
2. Transfer 100  $\mu$ L of cell suspension (maximum  $1.0 \times 10^6$  cells) to a 5 mL test tube.
3. Add 5  $\mu$ L FITC Annexin V.
4. Add 10  $\mu$ L Propidium Iodide Solution.
5. Gently vortex the tube and incubate for 15 minutes at room temperature (25°C) in the dark.
6. Add 400  $\mu$ L Annexin V Binding Buffer to tube.
7. Analyze by flow cytometry with proper machine settings.

## Typical Data

An example of the data is shown in Figure 1 (below) worked with this kit. User data will vary depending samples and working conditions.



**Figure 1.** Cells are stained with Annexin V-FITC and Propidium Iodide for 15 minutes