

# **FITC Annexin V Apoptosis Kit with PI**

### **TECHNICAL DATA SHEET**

**Application** Apoptosis

**Detection Method** Flow cytometry and Fluorescence microscopy

Sample Types Cell Samples

Reactivity All Mammalian Species

Storage 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 isothiocyante (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**

	NF024091450	NF0240914A1
Components	50 tests	100 tests
FITC Annexin V	250 μL	500 μL
Propidium Iodide Solution	500 μL	1 mL
Annexin V Binding Buffer	25 mL	50 mL

### **Precautions**

- This kit is for research use only.
- Propidium Iodide Solution is toxigenic 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 x 10<sup>6</sup> cells) to a 5 mL test tube.
- 3. Add 5 µL FITC Annexin V.
- **4.** Add 10 μL Propidium Iodide Solution.
- 5. Gently vortex the tube and incubate for 15 minutes at room temperature (25°C) in the dark.
- **6.** Add 400 μL 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.

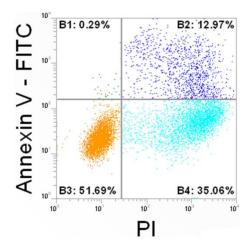


Figure 1. Cells are stained with Annexin V-FITC and Propidum Iodide for 15 minutes