

**Annexin V-EGFP / PI Cell Apoptosis Detection Kit**

Catalogue No.: abx098247

Annexin V can be used as one of the most sensitive indicators to detect the early-stage apoptosis. In normal live cells, phosphatidylserine (PS) is located only on the inner face of plasma membrane. However, in the early-stage apoptosis, PS is translocated from the inner to the outer leaflet of the plasma membrane, thus exposing PS to cell surface. Annexin V is a  $Ca^{2+}$ -dependent phospholipid-binding protein that has a high affinity for PS. Therefore, Annexin V can identify early-stage apoptosis by binding to PS exposed on the outer leaflet. Annexin V can be labeled with green fluorophore (FITC), the labeled Annexin V-FITC is used as a probe to detect the occurrence of apoptosis by flow cytometry or by fluorescence microscopy. Propidium iodide (PI) is a nucleic acid binding dye, and it is impermeant to live cells with intact membrane and early apoptotic cells. However, PI can stain the nucleus through permeating to cell membrane of mid-stage or late-stage apoptotic cells and necrosis cells, which show red fluorescence under certain laser excitation.

**Target:** Annexin V-EGFP/PI Cell Apoptosis

**Storage:** Store at  $-20^{\circ}C$ . Stable for 12 months from date of receipt.

**Note:** This product is for research use only.