

Annexin V, FITC Apoptosis Detection Kit

[Code#: AD10-10] 50 tests
[Code#: AD10-12] 2 x 50 tests

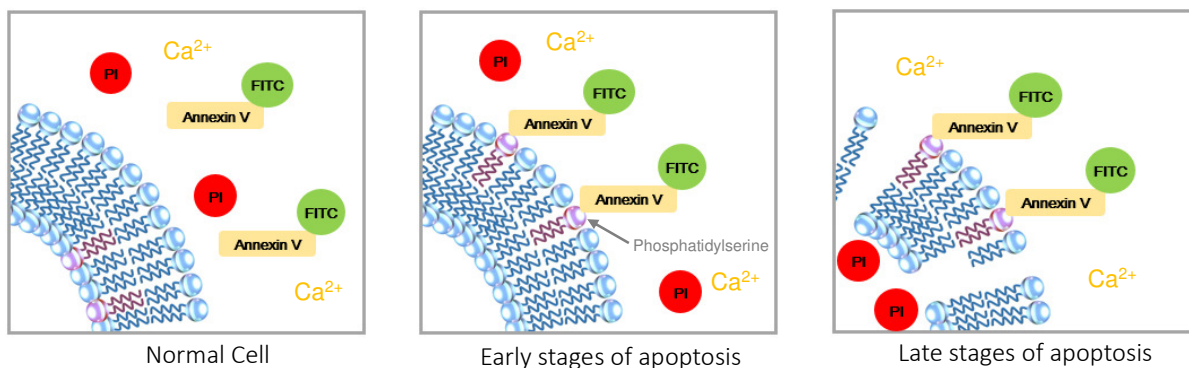


PRODUCT DESCRIPTION

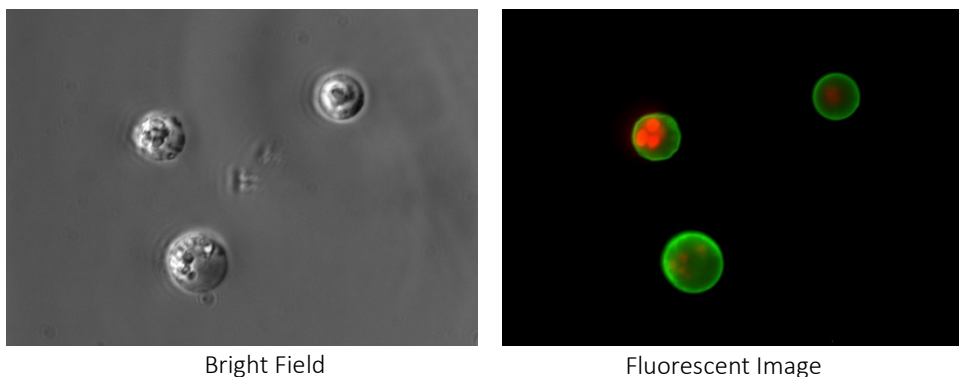
Apoptosis is one of the programmed cell death, that plays an important role in maintaining the homeostasis and developmental processes in both plants and animals. Any abnormal cells during the cytogenesis are eliminated by apoptosis. For instance, tumor growth from cancer cells occurred in vivo is inhibited by induction of apoptosis. However, apoptosis is not induced when the error occurs in tumor suppressor gene p53. Thus, the growth of cancer cells has been found to proceed. Apoptotic cells can be identified based on the alteration of cellular morphology as well as the alternation of biomedical changes.

As of today, various indicators have been established such as caspase activity variation, DNA fragmentation and phosphatidylserine transition on the cell surface-chromosomal. Annexin V stained cells are used to indicate cell membrane changes that occur in the early stage of apoptosis. Once apoptosis is initiated, the phosphatidylserine presents in the inner cell membrane migrates through the cell membrane of the lipid bilayer. Annexin V specifically binds to phosphatidylserine in the presence of protein-dependent Ca ion. By using fluorescent-labeled Annexin V, the apoptotic cells can be identified by flow cytometry or fluorescence microscopy.

PRINCIPLE

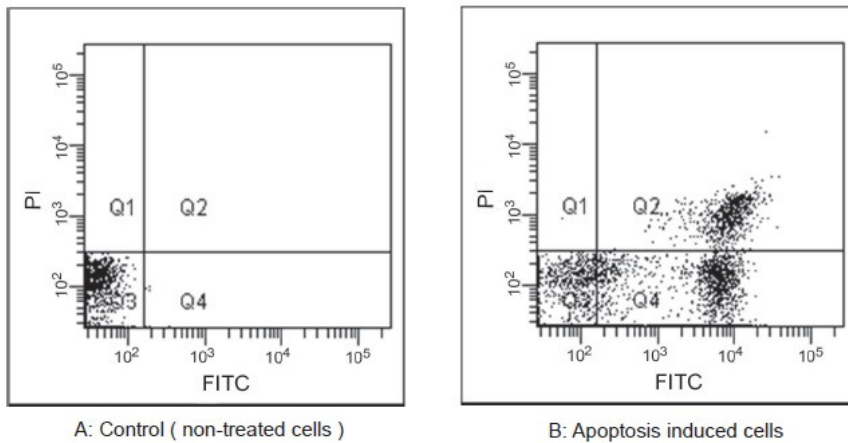


FLUORESCENT IMAGING OF APOPTOSIS INDUCED CELLS



Jurkat cells were apoptosis induced with staurosporine with its concentration of 1 $\mu\text{g}/\text{ml}$ at 37°C for 3.5 hours and then observed under a fluorescent microscope.

FLOW CYTOMETRIC ANALYSIS OF APOPTOSIS INDUCED CELLS



Jurkat cells were apoptosis induced with staurosporine with its concentration of 1µg/ml at 37°C for 3.5 hours and then analyzed with a flow cytometer.

KIT CONTENTS

	AD10-10 (50 tests)	AD10-12 (2 x 50 tests)
Annexin V, FITC Conjugate	50 assay x 1 bottle	50 assay x 2 bottles
PI Solution	50 assay x 1 bottle	50 assay x 2 bottles
Annexin V Binding Buffer	50 assay x 1 bottle	50 assay x 2 bottles

