

Annexin V-FITC Apoptosis Detection Kit

Annexin V-FITC Apoptosis Detection Kit

CATALOG # AAA78385	APPLICATIONS Flow Cytometry, Functional Assay
------------------------------	---

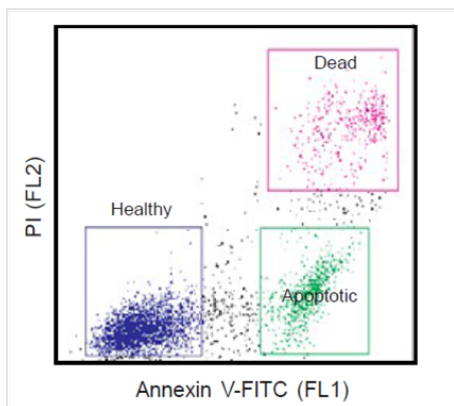
PRODUCT SYNONYMS

Annexin V-FITC Apoptosis; Annexin V-FITC Apoptosis Detection Kit; Annexin V-FITC Apoptosis detection kit

PRODUCT SPECIFICATIONS

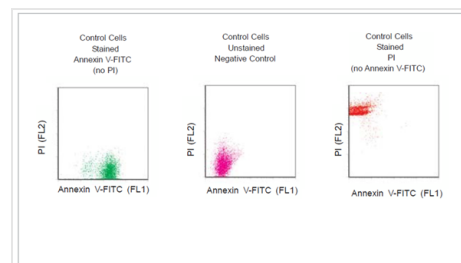
Applicable Applications for Annexin V-FITC Apoptosis detection kit	FCM/FACS (Flow Cytometry)
Preparation and Storage	Store all kit components at 4 degree C.

IMAGES



Application Data

Fig.2: Adherent RAW cells were treated with 0.05 µg/ml actinomycin-D for 17 hours to induce apoptosis. Cells were detached with Celltase and stained with the Annexin V-FITC Apoptosis Detection Kit.



Application Data

Fig.1: Control Cells were stained or unstained as indicated using the Annexin V-FITC Apoptosis Detection Kit.

ADDITIONAL INFORMATION

Related Product Information for Annexin V-FITC Apoptosis detection kit	Principle of the Assay: Apoptosis or programmed cell death is an evolutionary conserved, intrinsic program of cell death that occurs in various physiological and pathological situations. It is a key regulator of physiological growth control and regulation of tissue homeostasis. Apoptosis is considered a vital component of various processes including normal cell turnover, proper development and functioning of the immune system, hormone-dependent atrophy, embryonic development and chemicalinduced cell death. The term apoptosis (a-po-toe-sis) was first used in a now-classic paper by Kerr, Wyllie, and Currie in 1972 to describe a morphologically distinct form of cell death, although certain components of the apoptosis concept had been explicitly described many years previously. Apoptosis is characterized by specific morphological changes of the dying cells; namely, loss of membrane asymmetry, cytoskeleton remodeling, plasma membrane blebbing, loss of the mitochondrial membrane potential, caspase activation, chromatin condensation, and DNA fragmentation. During apoptosis, the asymmetric distribution of phospholipids of the plasma membrane gets lost and phosphatidylserine (PS) is translocated to the outer leaflet of the plasma membrane. There, PS acts as one major "eat me" signal that ensures efficient recognition and uptake of apoptotic cells by phagocytes. Once on the cell surface, PS can be easily detected by staining with a fluorescent conjugate of Annexin V, a 35-36 kDa Ca2+ dependent phospholipid-binding protein that has a high affinity for PS, and binds to cells with exposed PS. The one-step staining procedure takes only 10 minutes. Detection can be analyzed by flow cytometry or by fluorescence microscopy. Annexin V may be conjugated to fluorochromes including FITC. This format retains its high affinity for PS and thus serves as a sensitive probe for flow cytometric analysis of cells that are undergoing apoptosis.
Product Categories/Family for Annexin V-FITC Apoptosis detection kit	Kits and Reagents ; Apoptosis Detection Kits

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/detection-kits/annexin-v-fitc-apoptosis/78385>