

General Annexin V/PI Assay Kit

Annexin V-Alexa Fluor 488/PI Apoptosis Detection Kit

CATALOG # AAA263959	REACTIVITY General	APPLICATIONS Functional Assay
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PRODUCT SYNONYMS

Annexin V/PI; Annexin V-Alexa Fluor 488/PI Apoptosis Detection Kit; Annexin V/PI assay kit

PRODUCT SPECIFICATIONS

Reactivity	General
Applicable Applications for Annexin V/PI assay kit	FA (Functional Assay)
Preparation and Storage	Store at 4 degree C for 6 months.

ADDITIONAL INFORMATION

Related Product Information for Annexin V/PI assay kit

Principle of the Assay: Annexin V exhibits anti-phospholipase activity and binds to phosphatidylserine. Alexa Fluor 488 labelling allows simple direct detection by FACS analysis. Counterstaining by propidium iodide allows the discrimination of apoptotic cells.

Background/Introduction: Annexins are a family of calcium-dependent phospholipid-binding proteins. They are abundant in eukaryotic organisms belonging to a family of ubiquitous cytoplasmic proteins involved in signal transduction. All annexins have been shown to have a putative binding site for protein kinase C (PKC) but only annexin V would possess a potential pseudosubstrate site. Thus annexin V seems to modulate the activity of some PKCs on their substrates. Annexin V was found to play a major role in matrix vesicle-initiated cartilage calcification as a collageregulated calcium channel. Annexin V binds to procoagulant phospholipids (Vascular anticoagulant alpha) with high affinity. Annexin V's preferential binding partner is phosphatidylserine (PS). PS is predominantly located in membrane leaflets, which face the cytosol. However, recent findings show that each cell type has the molecular machinery to expose PS at its cell surface. This machinery is activated during the execution of apoptosis. Once PS is exposed at the cell surface it exhibits procoagulant and proinflammatory activities. Annexin V will bind to the PS-exposing apoptotic cell and can inhibit the procoagulant and proinflammatory activities of the dying cell.

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.

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Online datasheet: <https://www.aaabiotech.com/general-assay-kits/annexin-v-pi/263959>