

Annexin V-Fluor 488 Detection Kit

Annexin V-Fluor 488 Apoptosis Detection Kit

CATALOG #
AAA330132

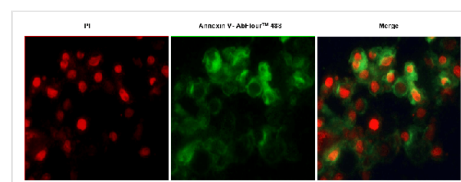
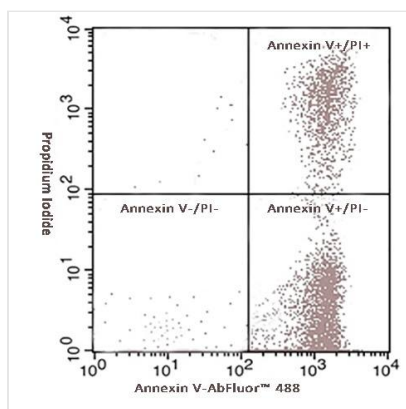
PRODUCT SYNONYMS

Annexin V-Fluor 488; Annexin V-Fluor 488 Apoptosis Detection Kit; Annexin 5; Annexin V; Fluor 488; Annexin V-Fluor 488 detection kit

PRODUCT SPECIFICATIONS

Features & Benefits	Fluor 488 dye is superior to FITC as it is brighter, not affected by pH, and has much better photostability Annexin V- Fluor 488: Abs/Em = 491/517 nm; PI: Abs/Em = 535/617 nm (with DNA) Suitable for flow cytometry or fluorescence microscopy
Preparation and Storage	Stable for at least 6 months at 4 degree C from date of shipment. Protect from light and do not freeze.

IMAGES



Application Data

Fig.1. HeLa cells were induced with camptothecin for 24 hours and stained with Annexin V-Fluor 488 Apoptosis Detection Kit. The cell is a late stage apoptotic/necrotic cell with both Annexin V- Fluor 488 and PI staining (green membrane with red fragmented nucleus).

Application Data

Fig.2. HeLa cells were induced with camptothecin for 24 hours and stained with Annexin V-Fluor 488 Apoptosis Detection Kit. The combination of Fluor 488 and propidium iodide allows for the distinction between early apoptotic cells (Annexin V- Fluor 488 positive), late apoptotic and/or necrotic cells (Annexin V- Fluor 488 and propidium iodide positive), and viable cells (unstained).

ADDITIONAL INFORMATION

Related Product Information for Annexin V-Fluor 488 detection kit	Description: Annexin V-Fluor 488 Apoptosis Detection Kit contains Annexin V labeled with proprietary green fluorescent dye Fluor 488, which allows the identification and quantitation of apoptotic cells by flow cytometry or fluorescence microscopy. Simultaneous staining of cells with Fluor 488 and propidium iodide (PI) allows the discrimination of intact cells, early apoptotic and late apoptotic or necrotic cells. Background: Apoptosis is a form of programmed cell death to remove unwanted, damaged, or senescent cells from tissues. In normal cells, the negative phospholipids reside on the inner side of the cellular membrane while the outer surface of the membrane is occupied by uncharged phospholipids (PS). After a cell has entered apoptosis, the negatively charged PS are transported from the inner to the outer leaflet of the plasma membrane, thus exposing PS to the external cellular environment. The human anticoagulant, Annexin V, is a 35-36 kDa Ca²⁺-dependent phospholipid-binding protein that has a high affinity for PS. Annexin V labeled with a fluorophore or biotin can identify apoptotic cells by binding to PS exposed on the outer leaflet. Propidium iodide (PI) is a membrane-impermeant DNA-binding dye that is commonly used to selectively stain dead cells in a cell population. PI is excluded by live cells and early apoptotic cells, but stains necrotic and late apoptotic cells with compromised membrane integrity. PI can be excited by the 488, 532, or 546 nm laser lines, and emits red fluorescence.
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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-fluor-488/330132>