CF®488A Annexin V and 7-AAD Apoptosis Kit

This kit contains CF®488A Annexin V to stain apoptotic cells, and 7-AAD to stain necrotic cells for flow cytometry.

Product attributes

Apoptosis/viability marker	Phosphatidylserine/Annexin V, Dead cell stain, Apoptosis/necrosis assay
For live or fixed cells	For live/intact cells
Detection method/readout	Flow cytometry
Assay type/options	Endpoint assay
Colors	Green/Far-red
Product origin	Annexin V (human); recombinant, produced in E. coli
Storage Conditions	Store at 2 to 8 °C, Do not freeze, Protect from light

Product Description

This kit contains CF®488A Annexin V for staining apoptotic cells green, and 7-AAD for staining necrotic cells with far-red fluorescence, for detection by flow cytometry.

In apoptotic cells, the phospholipid phosphatidylserine (PS) is translocated from the inner to the outer surface of the plasma membrane, which targets the dying cells for phagocytosis. The human anticoagulant, Annexin V, is a 35 kDa Ca^2 -dependent phospholipid binding protein with a high affinity for PS. Annexin V labeled with CF®488A labels apoptotic cells with green fluorescence by binding to PS exposed on the outer leaflet. Our CF®488A dye is superior to fluorescein/FITC because it is not affected by pH and has far better photostability.

7-AAD is a membrane-impermeant nucleic acid dye that is excluded by live cells, but stains necrotic cells and late apoptotic cells. 7-AAD (Abs/Em with DNA = 543/655 nm) emits in the far-red spectrum and can be well separated from CF®488A and other green emitting dyes using the 488 nm line of a flow cytometer.

See our full selection of Cell Viability & Apoptosis Assays.

References

Download a list of curated CF® Dye references.