

## Annexin V

**Article number:** KF-YG0893

**specification:** 5  $\mu$ g

### Product description

Annexin V dye conjugates can stain the surface of apoptotic cells. Human anticoagulant Annexin V is a 35–36 kDa  $\text{Ca}^{2+}$ -dependent phospholipid-binding protein with a high affinity for phosphatidylserine (PS). In living cells, PS is mainly located on the inner leaflet of the plasma membrane. However, in the early stages of apoptosis, PS flips from the inner leaflet to the outer leaflet. At this time, fluorescently labeled Annexin V can bind to the PS on the outer leaflet to detect apoptotic cells.

- Conjugates are available in 24 bright and photostable fluorescent dyes, ranging from green to near-infrared.
- Among them, 7 CF<sup>®</sup> dyes are second-generation dyes specially designed by Biotium, offering advantages of good water solubility, high stability, and strong fluorescence brightness compared to other commercially available dyes.
- Azide-free, allowing for wash-free, real-time live cell imaging in culture media.
- Quickly and simply detect phosphatidylserine in apoptotic cells, suitable for



real-time live cell imaging, fluorescence microscopy, or flow cytometry.

Annexin V conjugates are typically provided as stock solutions with sodium azide as a preservative for end-point staining assays in Annexin V binding buffer. Our azide-free Annexin V dye conjugates are stored as lyophilized powders, free of sodium azide or other preservatives that may be incompatible with live-cell imaging. After reconstitution with buffer, the conjugates can be added directly to cell culture media for wash-free, real-time live-cell imaging.

Kefan also offers any-labeled Annexin V paired with commonly used dead/late apoptotic cell stains (Propidium Iodide-PI, SYTOX Green, EthD-III, 7-AAD, etc.) to customize the required apoptosis detection kits.

## **Product Nature**

Apoptosis/viability marker: Phosphatidylserine/Annexin V

Experimental subject: Intact/live cells

Detection method: Fluorescence microscopy, live-cell imaging, flow cytometry

Detection type: endpoint detection, homogeneous assay, continuous staining (24-72h), no-wash staining, real-time imaging

Color: blue, green, red, far-red

Fixation option: post-staining fixation (formaldehyde)

Morphology: lyophilized powder



### **Storage and transportation**

Storage conditions: Store at 4° C protected from light; valid for at least 6 months.

It is recommended to aliquot and store the solution after the first thaw and preparation to an appropriate concentration as needed, to avoid partial protein inactivation caused by repeated freeze-thaw cycles. The product is valid for 1 week when stored at 4° C protected from light after reconstitution; adding BSA to a final concentration of 1 mg/mL and storing at -20° C allows for long-term storage, but freezing will weaken the fluorescence effect.

