SouthernBiotech



ApoScreen[®] Annexin V

Cat. No.	Format	Size
10040-01	Purified (UNLB)	0.1 mg
10040-02	Fluorescein (FITC)	100 tests
10040-08	Biotin (BIOT)	100 tests
10040-09	R-phycoerythrin (PE)	100 tests
10040-11	Allophycocyanin (APC)	100 tests
10040-15	Cyanine 5 (CY5)	100 tests



Day old BALB/c mouse bone marrow cells were stained with Annexin V-CY5 (SB Cat. No. 10040-15) with and without Propidium Iodide (SB Cat. No. 10044-01).

Description

ApoScreen[®] Annexin V (SB Cat. No. 10040) is a recombinant protein that is expressed in *E. coli*. A number of changes in cell structure occur during apoptosis. One major change is the loss of membrane phospholipid asymmetry, with translocation of phosphatidylserine (PS) from the inner leaflet of the phospholipid bilayer to the external surface. Annexin V, a member of the annexin family of calcium-dependent phospholipid binding proteins, has a high affinity for phosphatidylserine (PS)-containing phospholipid bilayers. Conjugated Annexin V can be used to monitor changes in cell membrane phospholipid asymmetry, thereby providing a convenient tool for detection of apoptotic cells.

Applications

FC – Quality tested ¹⁻²⁵ IHC-WM – Reported in literature ²⁶ ICC – Reported in literature ^{6,27}

Working Dilutions

Flow Cytometry	FITC, BIOT, PE, APC, and CY5 conjugates For flow cytometry, the suggested use of these reagents is in a final Annexin Binding Buffer (SB Cat. No. 10045-01)	10 $\mu L/10^6$ cells volume of 100 μL of ApoScreen $^{\ensuremath{\mathbb{B}}}$
Other Applications	Since applications vary, you should determine the optimum working appropriate for your specific need.	dilution for the product that is

Suggested Staining Protocol

- Wash cells twice in cold PBS
- Resuspend cells in cold 1X ApoScreen[®] Annexin Binding Buffer (SB Cat. No. 10045-01) to a concentration of 1 x 10⁶ cells/mL
- Add 100 μ L of cell suspension to 5 mL polystyrene round bottom tubes
- Add 10 μL of conjugated ApoScreen[®] Annexin V
- Gently vortex each tube and incubate for 15 minutes at 2-8°C and protected from light
- Without washing, add ~380 μL of cold 1X ApoScreen[®] Annexin Binding Buffer to each tube
- Add 10 μL of ApoScreen[®] 7-Aminoactinomycin D (7-AAD; SB Cat. No. 10042-01) or ApoScreen[®] Propidium Iodide (PI; SB Cat. No. 10044-01)
- Analyze by flow cytometry immediately

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) ApoScreen[®] Annexin V is supplied as 0.1 mg of purified recombinant protein lyophilized from PBS. Store material at -20°C prior to reconstitution. Reconstitute with 1.0 mL of dH₂O. Store reconstituted material at 2-8°C.
- The fluorescein (FITC), biotin (BIOT), and Cyanine 5 (CY5) ApoScreen[®] Annexin V conjugates are supplied as 100 tests in 1.0 mL of ApoScreen[®] Annexin V Binding Buffer. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) ApoScreen[®] Annexin V conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

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