

## **Product Data Sheet**

## **FITC Annexin V**

Catalog # / Size: 640905 / 25 tests

640906 / 100 tests

Reactivity: All mammalian species

Preparation: The purified protein was conjugated with FITC under optimal conditions. The

solution is free of unconjugated FITC.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Storage: The Annexin V solution should be stored undiluted at 4°C, and protected from

prolonged exposure to light. Do not freeze.

## **Applications:**

Applications: FC - Quality tested

Recommended Usage: Each lot of this product is quality control tested by staining of apoptotic cells and analyzing by flow cytometry. The suggested use of this reagent is  $5 \mu l$ 

per 1X10<sup>5</sup> cells in a 100 μl volume of Annexin V Binding Buffer (cat. no. 422201). It is recommended that the reagent be titrated for optimal

performance for each application.

Application Notes: Annexin V Staining

1. Wash cells twice with cold BioLegend cell staining buffer (cat # 420201) and then resuspend cells in Annexin V Binding Buffer (cat # 422201) at a concentration of 1x10e6 cells/ml.

2. Transfer 100 µl of cell suspension in 5 ml test tube.

3. Add 5 µl of FITC Annexin V.

4. Add 10 µl of PI solution (cat # 421301) or 7-AAD (cat # 420401).

5. Gently vortex the cells and incubate for 15 min at RT (25 °C) in the dark. 6. Add 400 µl of Annexin V Binding Buffer (cat # 422201) to each tube.

Analyze by flow cytometry.

**Application References:** 1. Koopman G, et al. 1994. Blood 84:1415.

2. Vermes I, et al. 1995. J. Immunol. Methods 184:39.

3. Dachary-Prigent J, et al. 1993. Blood 81:2554.

4. Sekine C, et al. 2009. Int Immunol. PubMed 5. Grujic M, et al. 2010. J. Immunol. 185:1730. PubMed

6. Speth C, 2013. J Infect Dis. PubMed.

7. Wang Q, et al. 2013. Genes Dev. 27:615. PubMed.

8. Gill K, et al. 2013. Biocheim Biophys Acta. 830:2763. PubMed.

9. Juel HB, et al. 2013. PLoS One. 8:64619. PubMed.

**Description:** Annexin V (or Annexin A5) is a member of the annexin family of intracellular

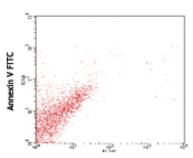
proteins that binds to phosphatidylserine (PS) in a calcium-dependent manner. PS is normally only found on the intracellular leaflet of the plasma membrane in healthy cells, but during early apoptosis, membrane asymmetry is lost and PS translocates to the external leaflet. Fluorochrome-labeled Annexin V can then be used to specifically target and identify apoptotic cells. Annexin V Binding Buffer (cat. no. 422201) is recommended for use with Annexin V binding Burier (cat. 110. 422201) is recommended for dise with Annexin V staining. Annexin V binding alone cannot differentiate between apoptotic cells and necrotic. So, we recommend using our 7-AAD Viability Staining Solution (cat. no. 420401/420402) or Propidium Iodide Solution (cat. no. 421301). Early apoptotic cells will exclude 7-AAD and PI, while late stage apoptotic cells and necrotic cells will stain positively, due to the passage of

these dyes into the nucleus where they bind to DNA.

Related Products: Product

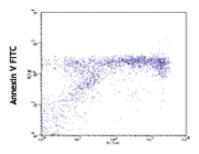
Annexin V Binding Buffer Propidium Iodide Solution 7-AAD Viability Staining Solution Clone

Application



Propidium Iodide (PI)

Human T leukemia cell line, Jurkat, non-treated (top) or treated (bottom) with BioLegend's anti-human CD95 (EOS9.1) mAb (cat. 305704) for 6 hours, then stained with Annexin V-FITC and Propidium Iodide (PI) (cat. 421301)



Propidium Iodide (PI)



