

Alexa Fluor® 647 Annexin V

Catalog # / Size: 3804555 / 25 tests
 3804560 / 100 tests
 3804715 / 300 tests

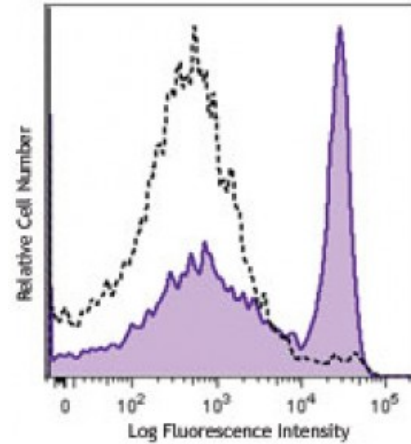
Isotype:

Reactivity: Human, Mouse, Non-human primate, Other, Rat

Preparation: The purified protein was conjugated with Alexa Fluor® 647 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human T-cell leukemia cell line, Jurkat, was stimulated (4 hours) with (filled histogram) or without (open histogram) LEAF™ purified anti-CD95 (clone EOS9.1), then stained with Annexin V Alexa Fluor® 647.

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this product is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per 100,000 - million cells in a 100 microL volume of Annexin V Binding Buffer (Cat No. 422201). It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

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 1x10⁶ cells/ml.
2. Transfer 100 microL of cell suspension in 5 ml test tube.
3. Add 5 microL of Alexa Fluor® 647 Annexin V.
4. Add 10 microL of PI solution (cat # 421301) or 7-AAD (cat # 420403/420404).
5. Gently vortex the cells and incubate for 15 min at RT (25°C) in the dark.
6. Add 400 microL 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. Lev S, *et al.* 2010. *J. Biol Chem.* 287:2771. [PubMed](#)
 5. Jin D, *et al.* 2010. *Cancer Res.* 70:2245. [PubMed](#)
 6. Santidrian AF, *et al.* 2010. *Blood* 116:3023. [PubMed](#)
 7. Zammarchi, F., *et al.* 2011. *PNAS.* 108:17779. [PubMed](#)
 8. Liu F, *et al.* 2011. *Cancer Res.* 71:6807. [PubMed](#)
 9. Wortmann A, *et al.* 2011. *J Biol Chem.* 286:42303. [PubMed](#)
 10. Yang D, *et al.* 2012. *J Immunol.* 188:4441. [PubMed](#)

11. Notake T, *et al.* 2012. *J Immunol.* 188:4838. [PubMed](#)
 12. Liu F, *et al.* 2012. *J. Biol Chem.* 287:25530. [PubMed](#)
 13. Schmid M, *et al.* 2012. *Immunobiology.* 217:610. [PubMed](#)
 14. Topalov NN, *et al.* 2012. *Arterioscler Thromb Vasc Biol.* 32:2475. [PubMed](#)
 15. Xu LS, *et al.* 2012. *J. Immunol.* 189:3347. [PubMed](#)
 16. Gobeil PA, *et al.* 2012. *MBio.* 16:267. [PubMed](#)
 17. Abaeva AA, *et al.* 2013. *J Biol Chem.* 288:29621. [PubMed](#)
 18. Ponzetta A, *et al.* 2013. *J. Immunol.* 191:5684. [PubMed](#)
 19. Beggs KM, *et al.* 2014. *Toxicol Sci.* 137:91. [PubMed](#)
 20. Yue D, *et al.* 2014. *Exp Cell Res.* 322:149. [PubMed](#)
 21. Schott J, *et al.* 2014. *PLoS Genet.* 10:1004368. [PubMed](#)
 22. Yasunaga M, *et al.* 2014. *Sci Rep.* 4:4852. [PubMed](#)
 23. Schogler A, *et al.* 2015. *Eur Respir J.* 45:428. [PubMed](#)
 24. Zakharova NV, *et al.* 2015. *PLoS One.* 10:116665. [PubMed](#)
 25. Ghalei H, *et al.* 2015. *J Cell Biol.* 208:745. [PubMed](#)
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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 staining. Annexin V binding alone cannot differentiate between apoptotic cells and necrotic. So, we recommend using our 7-AAD Viability Staining Solution (cat. no. 420403/420404) 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.