

Annexin V-FITC Apoptosis Detection Kit

100 reactions

Cat. No: CV0001 (Annexin V-FITC)

Cat. No: CV0002 (Annexin V-APC)

Cat. No: CV0003 (Annexin V-Biotin)

Cat. No: CV0004 (Annexin V-PE)

Introduction

Annexins are a family of calcium-dependent phospholipid-binding proteins, which bind to phosphatidylserine (PS).

Externalization of phosphatidylserine residues on the outer plasma membrane of apoptotic cells allows detection via Annexin V. Once the apoptotic cells are bound with labelled Annexin V, they can be visualized with fluorescent microscopy or cytometry.

Since loss of membrane integrity is a pathognomonic feature of necrotic cell death, necrotic cells will stain with specific membrane-impermeant nucleic acid dyes such as propidium iodide, the membrane integrity of apoptotic cells can be demonstrated by the exclusion of these dyes.

Applications

Detect early/middle stages of apoptosis; differentiate apoptosis from necrosis.

Storage

The components within the Annexin V Apoptosis Detection Kit are stable for 1 year at 4°C. Protect from light. **Do not freeze.**

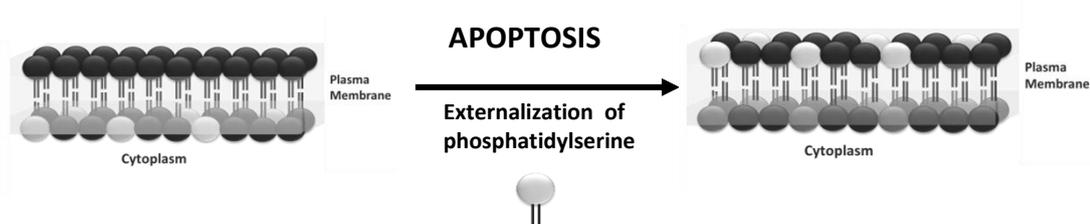
Kit Contents

| Components | 100 assays |
|--------------------------------------|------------|
| Labelled Annexin V | 1 x 500µl |
| Binding Buffer 10X | 1 x 50ml |
| Propidium iodide solution (100µg/ml) | 1 x 1 ml |

Recommended Assay Procedure

1. Dilute the 10X Annexin V Binding Buffer with dH₂O to 1X and keep on ice.
2. Collect cells of interest by centrifugation. Wash cells with ice-cold culture medium or PBS.
3. Resuspend cells in Annexin V Binding Buffer at a concentration of 1x 10⁶ cells/ml.
4. Transfer 500 µl of cell suspension in a 5 ml test tube.
5. Add 5 µl of labelled- Annexin V.
6. Add 10 µl of Propidium Iodide Solution.
7. Gently vortex the cells and incubate for 15 min at room temperature (25°C) in the dark.
8. Wash cells in 1X Binding Buffer and resuspend in 400 µl of 1X Binding Buffer.
9. Analyze by flow cytometry with proper machine settings.

Caution: Propidium iodide is a suspected carcinogen; contact with eyes, skin, and mucous membranes should be avoided. Always wear proper protective clothing and gloves when handling the solution.



PRODUCT USE LIMITATION

This product is developed, designed, and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development and is not suitable for administration to humans or animals. Please refer to www.assaygenie.com for the Material Safety Data Sheet for the product.