

Datasheet for ABIN2669907

**Annexin V Apoptosis Detection Kit DY-634****3** Publications[Go to Product page](#)

## Overview

Quantity:	200 tests
Target:	Annexin V (ANXA5)
Reactivity:	Chemical
Conjugate:	DY647
Application:	Flow Cytometry (FACS)

## Product Details

Purpose:	The kit can identify and quantitate apoptotic cells on a single-cell basis by flow cytometry. DY-634 is an alternative fluorochrome to APC
Sample Type:	Blood, Cell Culture Cells
Detection Method:	Fluorometric
Characteristics:	DY-634 is an alternative fluorochrome to APC. Staining cells simultaneously with Annexin V - DY634 and the non-vital dye propidium iodide (orange fluorescence) allows (bivariate analysis) the discrimination of intact cells (Annexin V-DY-634 negative, PI negative), early apoptotic (Annexin V-DY-634 positive, PI negative) and late apoptotic or necrotic cells (Annexin V-DY-634 positive, PI positive).
Components:	<ul style="list-style-type: none"><li>• 100 Tests of AnnexinV DY-634</li><li>• 100 Tests of PI</li><li>• 10X Binding Buffer</li></ul>
Material not included:	<ul style="list-style-type: none"><li>• pipettes</li><li>,</li><li>• tubes</li></ul>

## Product Details

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- flow cytometry machine

## Target Details

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Target: Annexin V (ANXA5)

Alternative Name: Annexin V ([ANXA5 Products](#))

Molecular Weight: 35 kDa

## Application Details

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Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Samples were tested on Flow Cytometry Induce apoptosis in cells using the desired method is not included in this time. For instance, Jurkat cells (T-cell leukemia, human) treated with 6  $\mu$ M camptothecin for four hours.

Sample Volume: 5  $\mu$ L

Assay Time: < 1 h

Protocol: Staining cells protocol with Annexin-DY634. Flow Cytometry

1. Prepare Annexin V Binding Buffer: 10 mM Hepes/NaOH ( pH 7,4) 140 mM NaCl, 25 mM CaCl<sub>2</sub>. .
2. Induce apoptosis in cells using the desired method. A negative control should be prepared by untreated cells, that is used to define the basal level of apoptotic and necrotic or dead cells.
3. Harvest the cells after the apoptosis induction and wash in temperate phosphate-buffered saline (PBS).
4. Wash cells twice with temperate PBS and resuspend cells in 1 X Annexin-binding buffer at a concentration 1 x 10<sup>6</sup> cells/mL.
5. Add 5  $\mu$ L of the Annexin V-DY634 and 5  $\mu$ L of PI, to each 100  $\mu$ L of cell suspension.
6. Incubate the cells at room temperature for 15 minutes at room temperature (25 °C) in the dark.
7. After incubation period, add 400  $\mu$ L of 1X Annexin-binding buffer. Analyze by flow cytometry within one hour.

Reagent Preparation:

- **AnnexinV DY-634** is ready to use.
- **PI** is ready to use.
- **Prepare Annexin V Binding Buffer**

## Application Details

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10 mM Hepes/NaOH (pH 7,4) 140 mM NaCl, 2,5 mM CaCl<sub>2</sub>.

Restrictions: For Research Use only

## Handling

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Preservative: Sodium azide

Precaution of Use: Reagents contain sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be diluted with running water before being discarded. These conditions are recommended to avoid deposits in plumbing where explosive conditions may develop.

Do not pipet by mouth.

Samples should be handled as if capable of transmitting infection. Appropriate disposal methods should be used.

The sample preparation procedure employs a fixative (formaldehyde). Contact is to be avoided with skin or mucous membranes

Handling Advice: Light exposure should be avoided. Use dim light during handling, incubation with cells and prior to analysis.

Storage: 4 °C

## Publications

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Product cited in: Hoek, Ruuls, Murphy, Wright, Goddard, Zurawski, Blom, Homola, Streit, Brown, Barclay, Sedgwick: "Down-regulation of the macrophage lineage through interaction with OX2 (CD200)." in: **Science (New York, N.Y.)**, Vol. 290, Issue 5497, pp. 1768-71, (2000) ([PubMed](#)).

Gorczynski, Chen, Hu, Kai, Lei, Ramakrishna, Gorczynski: "Evidence that an OX-2-positive cell can inhibit the stimulation of type 1 cytokine production by bone marrow-derived B7-1 (and B7-2)-positive dendritic cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 162, Issue 2, pp. 774-81, (1999) ([PubMed](#)).

Preston, Wright, Starr, Barclay, Brown: "The leukocyte/neuron cell surface antigen OX2 binds to a ligand on macrophages." in: **European journal of immunology**, Vol. 27, Issue 8, pp. 1911-8, (1997) ([PubMed](#)).