Datasheet for ABIN2669906

Annexin V Apoptosis Detection Kit PE

3 Publications

Go to Product page

Overview

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

Product Details

Purpose:	The kit can identify and quantitate apoptotic cells on a single-cell basis by flow cytometry.
Sample Type:	Blood, Cell Culture Cells
Detection Method:	Fluorometric
Characteristics:	Staining cells simultaneously with Annexin V-PE and the non-vital 7-Amino-Actinomycin D (far red fluorescence) allows (bivariate analysis) the discrimination of intact cells (Annexin V-PE negative, 7-AAD negative), early apoptotic (Annexin V-PE positive, 7-AAD negative) and late apoptotic or necrotic cells (Annexin V-PE positive, 7-AAD positive).
Components:	• 100 Tests of AnnexinV FITC • 100 Tests of PI • 10X Binding Buffer
Material not included:	• pipettes , • tubes , • flow cytometry machine

Target Details

Target:	Annexin V (ANXA5)
Alternative Name:	Annexin V (ANXA5 Products)
Molecular Weight:	35 kDa

Application Details

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 µM camptothecin for four hours.
Sample Volume:	5 µL
Assay Time:	< 1 h
Protocol:	Staining cells protocol with Annexin-PE. Flow Cytometry 1. Prepare Annexin V Binding Buffer: 10 mM Hepes/NaOH (pH 7,4) 140 mM NaCl, 2,5 mM CaCl2. . 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 106 cells/mL. 5. Add 5 µL of the Annexin V-PE and 5 µL of 7-AAD, to each 100 µL 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 µL of 1X Annexin-binding buffer. Analyze by flow cytometry within one hour.
Reagent Preparation:	• **AnnexinV PE** is ready to use. • **7AAD** is ready to use. • **Prepare Annexin V Binding Buffer** 10 mM Hepes/NaOH (pH 7,4) 140 mM NaCl, 2,5 mM CaCl2.
Restrictions:	For Research Use only

Handling

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

Product cited in:	Mazzeo, Calvo, Alonso, Mérida, Izquierdo: "Protein kinase D1/2 is involved in the maturation of multivesicular bodies and secretion of exosomes in T and B lymphocytes." in: **Cell death and differentiation**, (2015) (PubMed). De Miguel, Gallego-Lleyda, Galan-Malo, Rodriguez-Vigil, Marzo, Anel, Martinez-Lostao: " Immunotherapy with liposome-bound TRAIL overcomes partial protection to soluble TRAIL-induced apoptosis offered by down-regulation of Bim in leukemic cells." in: **Clinical & translational oncology : official publication of the Federation of Spanish Oncology Societies and of the National Cancer Institute of Mexico**, Vol. 17, Issue 8, pp. 657-67, (2015) (PubMed). Ramírez-Labrada, López-Royuela, Jarauta, Galán-Malo, Azaceta, Palomera, Pardo, Anel, Marzo, Naval: "Two death pathways induced by sorafenib in myeloma cells: Puma-mediated apoptosis and necroptosis." in: **Clinical & translational oncology : official publication of the Federation of Spanish Oncology Societies and of the National Cancer Institute of Mexico**, Vol. 17, Issue 2 , pp. 121-32, (2015) (PubMed).