abcam

Product datasheet

Apoptosis/ Necrosis Assay Kit (blue, green, red) ab176749

6 Abreviews 67 References 3 Images

Overview

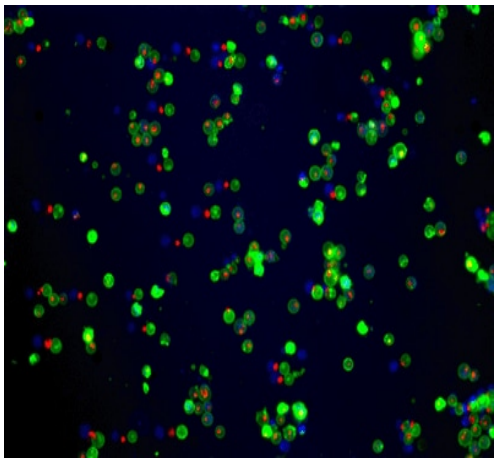
Product name	Apoptosis/ Necrosis Assay Kit (blue, green, red)
Sample type	Adherent cells, Suspension cells
Assay type	Cell-based
Assay time	1h 00m
Product overview	Apoptosis/ Necrosis Detection Kit (blue, green, red) (ab176749) is designed to simultaneously monitor apoptotic, necrotic and healthy cells. The PS sensor used in this kit has green fluorescence (Ex/Em = 490/525 nm) upon binding to membrane PS. Necrosis has been characterized as passive, accidental cell death resulting from environmental perturbations with uncontrolled release of inflammatory cellular contents. Loss of plasma membrane integrity, as demonstrated by the ability of a membrane-impermeable 7-AAD (Ex/Em = 546/647 nm) to label the nucleus, represents a straightforward approach to demonstrate late stage apoptosis and necrosis. In addition, this kit also provides a live cell cytoplasm labeling dye, CytoCalcein Violet 450 (Ex/Em = 405/450 nm), for labeling living cell cytoplasm. This kit is optimized to simultaneously detect cell apoptosis (green), necrosis (green and/or red) and healthy cells (blue) with a flow cytometer or fluorescence microscope. This product was previously called Apoptosis/ Necrosis Detection Kit.
Notes	For more apoptosis assays, review the **apoptosis assay and apoptosis marker guide**.
Platform	Flow cytometer, Fluorescence microscope

Properties

Storage instructions Store at -20°C. Please refer to protocols.

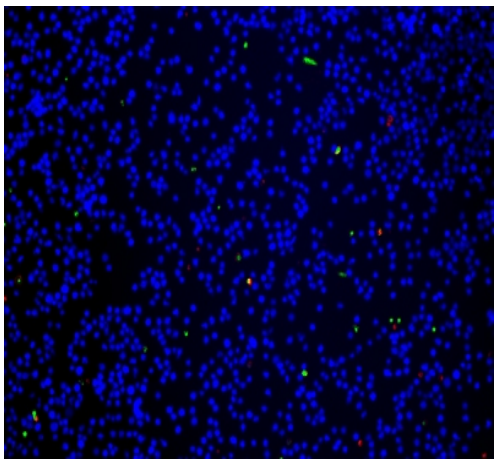
Components	100 tests
200X 7-AAD	1 x 100µl
Apopxin Green Indicator	1 x 200µl
Assay Buffer	1 x 50ml
CytoCalcein Violet 450	1 vial

Images



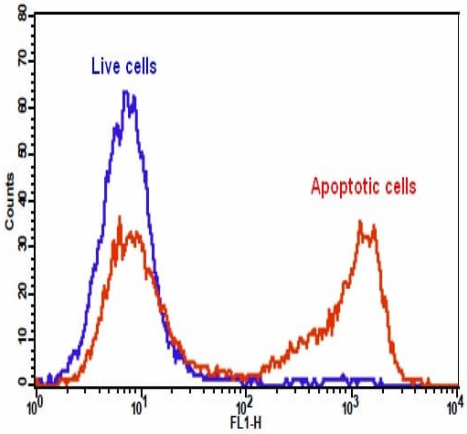
Jurkat cells analyzed with Apoptosis/Necrosis Detection Kit (ab176749)

Fluorescent analysis showing cells that are live (blue, stained by CytoCalcein Violet 450), apoptotic (green, Apopxin Green Indicator), and necrotic (red, indicated by 7-AAD staining) in Jurkat cells induced by 1µM staurosporine for 3 hours. The fluorescence images of the cells were taken with a fluorescent microscope through the Violet, FITC and TRITC channel respectively. Individual images taken from each channel from the same cell population were merged as shown.



Jurkat cells analyzed with Apoptosis/Necrosis Detection Kit (ab176749)

Fluorescent analysis of live non-induced Jurkat cells stained by CytoCalcein Violet 450.



Flow cytometric analysis of Jurkat cells

Jurkat cells were treated without (Blue) or with 1 µM staurosporine (Red) in a 37 ^{O}C, 5% CO2 incubator for 5 hours, and then loaded with Apopxin Green Indicator for 30 minutes. The fluorescence intensity of Apopxin Green Indicator was measured with a
flow cytometer using FL1 channel.

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