

## Product datasheet

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

★★★★★ 5 Abreviews 47 References 3 Images

### Overview

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<b>Product name</b>	Apoptosis/ Necrosis Assay Kit (blue, green, red)
<b>Sample type</b>	Adherent cells, Suspension cells
<b>Assay type</b>	Cell-based
<b>Assay time</b>	1h 00m
<b>Product overview</b>	<p>Apoptosis/ Necrosis Detection Kit (blue, green, red) (ab176749) is designed to simultaneously monitor apoptotic, necrotic and healthy cells.</p> <p>The PS sensor used in this kit has green fluorescence (Ex/Em = 490/525 nm) upon binding to membrane PS.</p> <p>Necrosis has been characterized as passive, accidental cell death resulting from environmental perturbations with uncontrolled release of inflammatory cellular contents.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product was previously called Apoptosis/ Necrosis Detection Kit.</p>
<b>Notes</b>	For more apoptosis assays, review the <a href="#">apoptosis assay and apoptosis marker guide</a> .
<b>Platform</b>	Flow cytometer, Fluorescence microscope

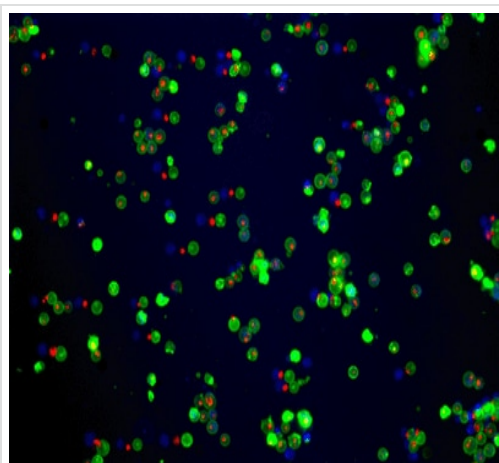
## Properties

### Storage instructions

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

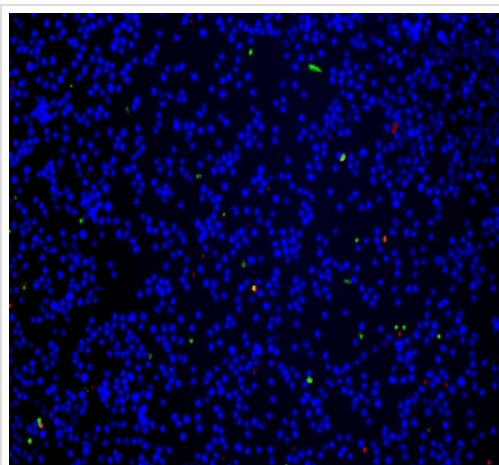
Components	100 tests
200X 7-AAD	1 x 100µl
Apopxin Green Indicator	1 x 200µl
Assay Buffer	1 x 50ml
CytoCalcein Violet 450	1 vial

## Images



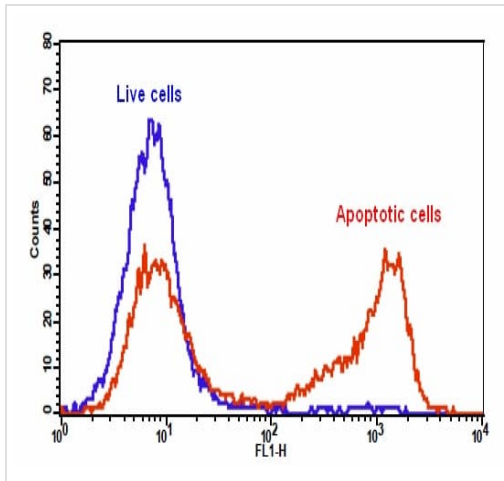
Jurkat cells analyzed with Apoptosis/Necrosis Detection Kit (ab176749)

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  $\mu$ M staurosporine (Red) in a 37 °C, 5% CO<sub>2</sub> 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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