abcam

Product datasheet

Nuclear Apoptosis Assay Kit ab112151

1 Image

Overview

Product name	Nuclear Apoptosis Assay Kit
Sample type	Adherent cells, Suspension cells
Species reactivity	**Reacts with:** Human
Product overview	ab112151 is designed to monitor cell apoptosis by measuring the apoptotic chromatin condensation. The compacted chromatin of apoptotic cells binds higher amounts of nuclear dye compared to the healthy cells. The fluorometric assay is based on the detection of the DNA contents in cells using our proprietary non-fluorescent dye that becomes strongly fluorescent upon binding to cellular DNA. In normal cells, Nuclear Green DCS1 Dye is not cell permeable. However, in apoptotic cells, Nuclear Green DCS1 Dye can easily get into the cells with compromised plasma membranes. Once inside the cell, the dye binds to intracellular DNA producing highly fluorescent complexes which identify the cells as non-viable cells. The staining density with Nuclear Green DCS1 Dye can be measured with a flow cytometer at Ex/Em = 490/520 nm (FL1 channel) or a fluorescence microscope (FITC filter set). ab112151 can be used together with our other apoptosis reagents, such as our **ab112149 NIR Mitochondrial Membrane Potential Assay Kit**, for multi-parametric study of cell viability and apoptosis. The kit is optimized for screening apoptosis activators and inhibitors. Visit our **FAQs page** for tips and troubleshooting.
Notes	Store ab112151 dessicated.
Tested applications	**Suitable for:** FM, Flow Cyt

Properties

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

Components	100 tests
Assay Buffer	1 x 100ml
Nuclear Green DCS1 Dye	1 x 500µl

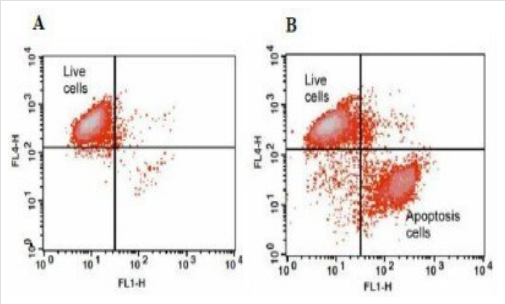
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab112151 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
FM		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.

Images



Flow Cytometry - Nuclear Apoptosis Assay Kit (ab112151)

The increase in fluorescence intensity of ab112151 DCS1 Dye with the addition of Camptothecin in Jurkat cells. Jurkat cells were untreated (A) or treated overnightwith 20 µM camptothecin (B) in a 37 ^{o}C, 5% CO_2 incubator, and then dye loaded with ab112151 DCS1 Dye for 60 minutes.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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