# abcam

## Product datasheet

# NIR Mitochondrial Membrane Potential Assay Kit (Flow Cytometry) ab112149

1 References 画像数 2

#### 製品の概要

製品名 NIR Mitochondrial Membrane Potential Assay Kit (Flow Cytometry)

サンプルの種類 Adherent cells, Suspension cells

アッセイタイプ Direct

製品の概要 NIR Mitochondrial Membrane Potential Assay Kit (Flow Cytometry) ab112149 is designed to

detect cell apoptosis by measuring the loss of the mitochondrial membrane potential. The collapse of mitochondrial membrane potential coincides with the opening of the mitochondrial permeability transition pores, leading to the release of cytochrome C into the cytosol, which in turn

triggers other downstream events in the apoptotic cascade.

ab112149 uses our proprietary cationic NIR probe for the detection of apoptosis in cells with the loss of mitochondrial membrane potential. In normal cells, the red fluorescence intensity is increased when the MitoNIR Dye is accumulated in the mitochondria. However, in apoptotic cells, the NIR stain intensity is decreased following the collapse of MMP. Cells stained with NIR Dye can be visualized with a flow cytometer at red excitation and far red emission (FL4 channel).

ab112149 provides all the essential components. ab112149 can be used together with other reagents, such as blue laser excited propidium iodide and for studying cell vitality and apoptosis. ab112149 is optimized for screening apoptosis activators and inhibitors with a flow cytometer.

特記事項 Related assays

Review the <u>cell health assay guide</u> to learn about kits to perform a <u>cell viability</u> <u>assay</u>, <u>cytotoxicity assay</u> and <u>cell proliferation assay</u>.

Review the <u>metabolism assay guide</u> to learn about assays for metabolites, metabolic enzymes, mitochondrial function, and oxidative stress, and also about how to assay metabolic function in live cells using your plate reader.

試験プラットフォーム Flow cytometer

製品の特性

保存方法 Store at -20°C. Please refer to protocols.

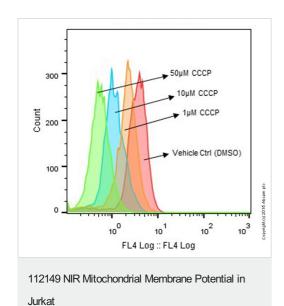
1

内容	100 tests
Assay Buffer	1 x 100ml
MitoNIR Dye	1 x 500µl

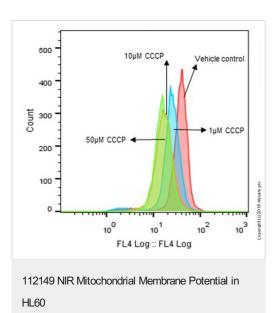
#### 関連性

Mitochondrial Membrane Potential is an important parameter of mitochondrial function used as an indicator of cell death. The collapse of the mitochondrial Membrane potential coincides with the opening of the mitochondrial permeability transition pores, leading to the release of cytochrome c into the cytosol, which in turn triggers other downstream events in the apoptotic cascade.

#### 画像



NIR Mitochondrial Membrane Potential in HL60 (ab112149). The decrease in fluorescence intensity of MitoNIR Dye with the addition of CCCP (ab141229) in Jurkat cells. Cells were loaded with MitoNIR Dye1x in the presence of DMSO alone (red),1 $\mu$ M CCCP (orange), 10 $\mu$ M CCCP(blue) and 50 $\mu$ M CCCP(green).



NIR Mitochondrial Membrane Potential in HL60 (ab112149). The decrease in fluorescence intensity of MitoNIR Dye with the addition of CCCP (ab141229) in HL60 cells. Cells were loaded with MitoNIR Dye1x in the presence of DMSO alone (red), 1 $\mu$ M CCCP (blue), 10 $\mu$ M CCCP (orange) and 50 $\mu$ M CCCP (green).

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