

## Product datasheet

# Fixable Cell Viability Assay Kit (Fluorometric - Deep Red) - Cytopainter ab176745

3 Images

### Overview

<b>Product name</b>	Fixable Cell Viability Assay Kit (Fluorometric - Deep Red) - Cytopainter
<b>Detection method</b>	Fluorescent
<b>Sample type</b>	Adherent cells, Suspension cells
<b>Assay type</b>	Cell-based (quantitative)
<b>Species reactivity</b>	<b>Reacts with:</b> Mammals, Other species
<b>Product overview</b>	<p>Fixable Cell Viability Assay Kit (Fluorometric - Deep Red)   Cytopainter (ab176745) is used to evaluate the viability of mammalian cells by flow cytometry. The fluorescent dye provided in the kit is retained in cells by reacting with cellular components. For viable cells, only the cell-surface amines are available to react with the dye while for the necrotic cells or the other cells with compromised membranes, the reactive dye reacts with cell surface amines and intracellular amines, resulting in more intense fluorescent staining. The difference in fluorescence intensity between the live and dead cell populations is ~100-500 fold and can be completely preserved after fixation. The approximate fluorescence excitation is 649 nm and emission maximum is 660 nm. The Excitation source is 633 nm.</p>

The dye is designed to label cells at Ex/ Em = 649/660 nm. The Excitation source is 633 nm.

### Notes

#### Related assays

Review the [cell health assay guide](#) to learn about kits to perform a [cell viability assay](#), [cytotoxicity assay](#) and [cell proliferation assay](#).

### Platform

Flow cytometer

### Properties

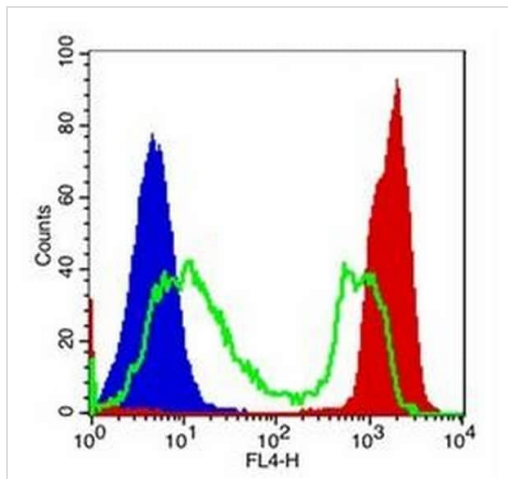
**Storage instructions** Store at -20°C. Please refer to protocols.

Components	200 tests
DMSO	1 x 200µl
Tracking dye Deep Red	1 vial

## Relevance

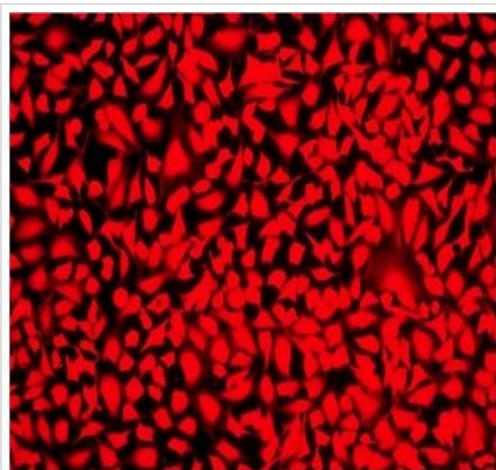
Cell viability is a determination of living or dead cells, based on a total cell population. Cell viability assess healthy cells in a sample, with no distinction between dividing or quiescent cells. An increase in cell viability indicates cell growth, while a decrease in viability can generally be interpreted as the result of either toxic effects of compounds/agents or suboptimal culture conditions.

## Images



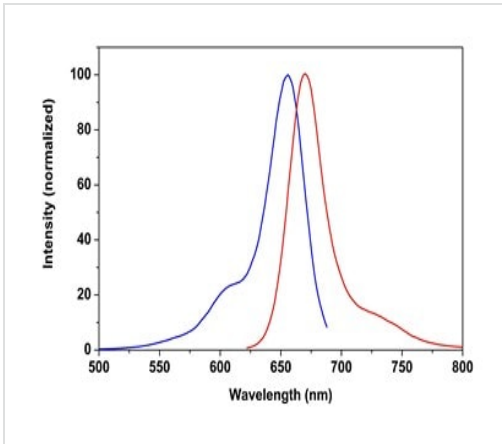
Detection of Jurkat cell viability using CytoPainter Fixable Cell Viability Assay Kit (Fluorometric -Deep Red) (ab176745)

Jurkat cells were treated and stained with Tracking Dye Deep Red. The cells were fixed in 3.7% formaldehyde and analyzed by flow cytometry. Live (Blue solid peak), staurosporine treated (green line) and heat-treated (red solid peak) cells were distinguished with Ex/Em = 630 nm / 660 nm (FL4). The live cell population is easily distinguished from the dead cell population, and nearly identical results were obtained using unfixed cells



HeLa stained with CytoPainter Fixable Cell Viability Assay Kit (Fluorometric - Deep Red) (ab176745)

Fluorescent imaging of HeLa cells fixed with formaldehyde and labeled with ab176745 in a black wall/ clear bottom 96 well plate



Excitation and Emission Spectra of CytoPainter  
Fixable Cell Viability Assay Kit (Fluorometric - Deep  
Red) (ab176745)

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

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