

## Introduction

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The ScienCell™ Live/Dead Cell Staining Kit is a two-color fluorescence assay for convenient discrimination of live from dead animal cells, which can be applied to fluorescence microscope, fluorescent plate reader and flow cytometer. Due to changes in membrane integrity, live cells appear fluorescent green and dead cells, fluorescent red.

## Kit Components

Cat. No.	# of vials	Name	Quantity	Storage
8138	1	Live/Dead Cell Staining Solution (100×)	0.1 ml	-20°C, dark

## Product Use

This assay kit is used to evaluate Live/Dead cells *in vitro*. It is for research use only. Not for use in animals, humans, or diagnostic procedures.

## Quality Control

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The ScienCell™ Live/Dead Cell Staining Kit is applied to freshly harvested human endothelial cells by trypsin/EDTA, and resulting fluorescence micrograph is shown in Figure 1. Live cells appear fluorescent green and dead cells, fluorescent red.

## Procedures

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### A. Preparation of working staining solution:

1. Thaw and dilute appropriate volume of Live/Dead Cell Staining Solution Stock (100×) 100 times with PBS to make the working staining solution, which is stable for up to one month at 4°C.

### B. Staining of cells:

1. Collect cells ( $1\sim 2\times 10^6$ /ml) in PBS.
2. Add equal volume of working staining solution to cell suspension (e.g. 10  $\mu$ l), mix well.

### C. Observation:

1. Place the mixture on a microscope slide, and cover it with a glass cover slide.
2. Observe cells immediately under a fluorescence microscope. Live cells should stain fluorescing green (Ex495/Em518), while dead cells should appear red (Ex493/Em620).
3. Count cells and calculate the live to dead ratio.

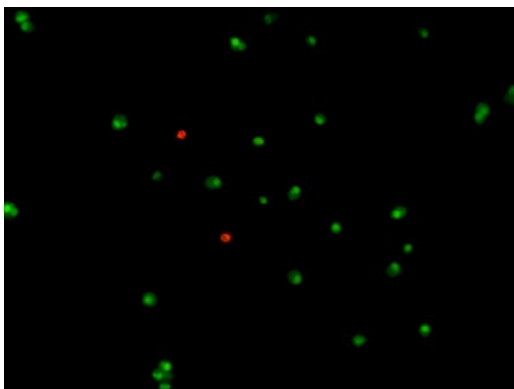


Figure 1. A fluorescence micrograph showing endothelial cells stained with Sciencell™ Live/Dead Cell Staining Kit, with 30 live cells appearing fluorescing green and 2 dead cells appearing red.