



## **Live-Dead Cell Staining Kit**

Catalog #: ALX-850-249

~100 tests

**FOR RESEARCH USE ONLY.  
NOT FOR USE IN DIAGNOSTIC PROCEDURES.**



Please read entire booklet before proceeding with the assay.



Carefully note the handling and storage conditions of each kit component.



Please contact Enzo Life Sciences Technical Support if necessary.

## DESCRIPTION

Distinguishing between live and dead cells is very important for investigation of growth control and cell death. The **Live-Dead Cell Staining Kit** provides ready-to-use staining reagents to conveniently discriminate between live and dead cells. The kit utilizes Live-Dye™, a cell-permeable green fluorescent dye (Ex/Em = 488/518nm), to stain live cells. Dead cells can be easily stained by propidium iodide (PI), a cell non-permeable red fluorescent dye (Ex/Em = 488/515nm). Stained live and dead cells can be visualized by fluorescence microscopy using a band-pass filter (detects FITC and rhodamine). The kit provides sufficient reagents for 100 stainings using 24-well plate.

## KIT CONTENTS

Components	ALX-850-249 100 tests	Part Number
Solution A (1 mM Live-Dye™)	50 µL	ALX-K501-100-1
Solution B (1.0 mg/ml PI)	50 µL	ALX-K501-100-2
Staining Buffer	50 mL	ALX-K501-100-3

## DOUBLE STAINING PROTOCOL

1. Prepare enough Staining Solution for your assay (0.5 mL per well in 24 well dish): mix 1 µL of Solution A and 1 µL of Solution B in 1 mL of Staining Buffer. Scale up accordingly for a larger number of assays.
2. Collect cells ( $1 \times 10^6$  cells) by centrifugation at 500 x g for 5 min.
3. Resuspend to 0.5ml Staining Solution.
4. Incubate for 15 minutes at 37°C.
5. Place the cell suspension on a glass slide. Cover the cells with a glass coverslip. For analyzing adherent cells, grow cells directly on a coverslip. Following incubation with the Staining Solution, invert coverslip on a glass slide and visualize cells.
6. Observe cells immediately under a fluorescence microscope using a band-pass filter (detects fluorescein and rhodamine). Healthy cells stain only the cell-permeable Live-Dye™, fluorescing green. Dead cells can stain both the cell-permeable Live-Dye™ and the cell non-permeable PI (red), the overlay of green and red appears to be yellow-red.



Handle  
with care

### CAUTION

As the optimal staining conditions may vary among different cells types, we recommend that a suitable concentration of Solution A and B be determined individually.

Please note that PI is suspected to be highly carcinogenic, so careful handling of the reagent is required.



Store kit at  
-20°C.

### STORAGE AND STABILITY

- Store kit at -20°C. PROTECT FROM LIGHT!
- Store Staining Buffer at 4°C after opening.
- All reagents are stable until expiry under proper storage conditions.



Protect  
from light

## **USE FOR RESEARCH PURPOSES ONLY**

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## **TRADEMARKS AND PATENTS**

Several Enzo Life Sciences products and product applications are covered by US and foreign patents and patents pending.

**Global Headquarters**  
**Enzo Life Sciences Inc.**  
10 Executive Blvd  
Farmingdale, NY 11735  
(p) 1-800-942-0430  
(f) 1-631-694-7501  
(e) [info-usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

**Enzo Life Sciences (ELS) AG**  
Industriestrasse 17, Postfach  
CH-4415 Lause / Switzerland  
(p) +41/0 61 926 89 89  
(f) +41/0 61 926 89 79  
(e) [info-ch@enzolifesciences.com](mailto:info-ch@enzolifesciences.com)

For local distributors and detailed product information visit us online:  
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