Yeast Live-or-Dye™ Fixable Live/Dead Staining Kit

A fixable, fluorescent assay to determine yeast viability. Contains two fluorescent components, Thiazole Orange and Live-or-Dye™ 568/583.



Product attributes

For live or fixed cells	For live/intact cells
Fixation options	Fix after staining (formaldehyde), Permeabilize after staining

Product Description

The Yeast Live-or-Dye™ Fixable Live/Dead Staining Kit is a fixable, fluorescent assay to determine yeast viability. The kit contains two fluorescent components, Thiazole Orange and Live-or-Dye™ 568/583.

The kit has been validated in the following species: *Saccharomyces cerevisiae*, *Candida albicans*, *Aspergillus niger*, and *Zygosaccharomyces bailii.*

How It Works

Live-or-Dye™ 568/583 is a cell membrane impermeable amine-reactive dye. It is able to enter into dead cells that have compromised membrane integrity and covalently label free amines on intracellular proteins. This dye labeling is extremely stable, allowing the cells to be fixed and permeabilized without loss of fluorescence or dye transfer between cells. It is suitable for detection by fluorescence microscopy or flow cytometry.

Thiazole Orange is a green fluorescent dye that localizes to the cytoplasm, with some nuclear accumulation. It is fixable, resulting in diffuse cytoplasmic staining in fixed cells.

After staining yeast with this kit, both living and dead cells will be stained with green fluorescence. Only dead cells will be stained with red fluorescence.

References

ACS Appl. Bio Mater. (2020) doi: 10.1021/acsabm.0c00985