

Yeast Stains

Fluorescent dyes for viability analysis, cell periphery, vacuoles, bud scars, and more

Viability Dyes and Kits

Dyes to distinguish live from dead cells, or identify cells that are metabolically active. The dyes have been validated with *S. cerevisiae*, *C. albicans*, *Z. bailii*, and *Aspergillus*.

- Yeast Live-or-Dye[™] Fixable Live/Dead Staining Kit: Thiazole Orange live cell stain and Live-or-Dye[™] 568/583 dead cell stain (Fig. 1).
- Yeast Viability Staining Kits: Rapid and selective two-color assay to determine yeast viability. Includes Live-or-Dye[™] dead cell stain and CF[®] Dye ConA for staining all cells (Fig. 2).
- ViaVac[™] Red/Green: A cell vitality dye that stains metabolically active cell vacuoles red, and the cytoplasm of all cells green.
- Yeast Vitality Staining Kit: ViaVac[™] Red/Green vitality stain and Calcofluor White for staining all cells (Fig. 3).

Cell Periphery Stains

Dyes that label the yeast cell periphery, with a large selection of colors and binding mechanisms.

- CellBrite[®] Fix & MemBrite[®] Fix Surface Stains: Fixable, covalent staining of cell surface proteins.
- **Calcofluor White**: A classic blue fluorescent dye that binds to cellulose and chitin in the cell walls of yeast (Fig. 4), fungi, algae and plants.
- **CF**[®] **Dye WGA Lectin**: Stains bud scars in budding yeast (Fig. 5).
- CF[®] Dye ConA Lectin: Stains the cell wall of yeast and fungi (Fig. 5).

Organelle Stains

Dyes validated in S. cerevisiae yeast.

- MitoView[™] 633: Membrane potential-dependent mitochondrial dye.
- LysoView[™] 633 & LysoView[™] 540: Accumulate in the yeast vacuole.
- **CF**[®] **Dye Phalloidin**: Stains F-actin cables and patches in fixed and permeabilized yeast (Fig. 6).

Live Cell Nuclear Staining

• **Thiazole Orange**: A green dye with predominantly nuclear localization (Fig. 7). Staining pattern becomes diffuse after fixation.





Figure 1. Yeast Fixable Live/Dead Staining Kit, Thiazole Orange (green) and Live-or-Dye[™] 568/583 (red), overlay in yellow.



Figure 2. Yeast Viability Staining Kit, CF®594 ConA (red) and Live-or-Dye™ 488/515 (green).



Figure 3. Yeast Vitality Staining Kit, ViaVac™ Red/Green (red) and Calcofluor White (blue).



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Figure 4. *S. cerevisiae* stained with Calcofluor White.

Yeast Viability Stains & Kits



Figure 5. *S. cerevisiae* stained with CF®594 ConA (red) and CF®488A WGA (green), overlay in yellow.



Figure 6. Fixed and permeabilized *S. cerevisiae* stained with CF[®]640R conjugated phalloidin.



Figure 7. *S. cerevisiae* stained with Thiazole Orange.

Cat. No.	Product	Ex/Em (nm)	Features
32002- 32018	Live-or-Dye™ Fixable Viability Kits	Blue to Near-IR	• Dead cell specific stains with a wide color selection
29068	ViaVac™ Red/Green, 10 mM in DMSO	485/620 (red); 485/530 (green)	• Yeast vitality dye
31062	Yeast Vitality Staining Kit	ViaVac™ Red/Green: 485/620 (red); 485/530 (green) Calcofluor White: 360/430 nm	• ViaVac Red/Green and Calcofluor White
31063-1	Yeast Viability Staining Kit (Green/Red)	CF®488A Con A: 490/515 (green) Live-or-Dye™ 594/614 (red)	
31063-2	Yeast Viability Staining Kit (Red/Blue)	CF®594 Con A: 593/614 (red) Live-or-Dye™ 405/452 (blue)	 CF[®] Dye ConA and Live-or-Dye[™] combinations
31063-3	Yeast Viability Staining Kit (Red/Far-red)	CF®640R Con A: 642/662 (red) Live-or-Dye™ 568/583 (far-red)	
31064	Yeast Live-or-Dye™ Fixable Live/Dead Staining Kit	Live-or-Dye™ 568/583 (red) Thiazole Orange: 512/533 (green)	• Thiazole Orange and Live-or-Dye™ 568/583
40051	Ethidium Homodimer III (EthD-III)	279, 522/593 (with DNA) • Red nuclear dead cell stain	
40061	RedDot™2 Far-Red Nuclear Stain	665 (broad)/695 (with DNA)	• Far-red nuclear dead cell stain

Stains for Cell Periphery, Vacuoles, Nucleus, Bud Scars, & More

Cat. No.	Product	Ex/Em (nm)	Features
00027 00064	CF® Dye Phalloidin Conjugates	Blue to Near-IR	Actin filament stain for fixed and permeabilized cells
29015 29058	CF® Dye Concanavalin A (ConA)	Blue to Near-IR	Cell wall stain with a wide selection of dyes
29021 29064	CF® Dye Wheat Germ Agglutinin (WGA)	Blue to Near-IR	• Cell wall bud scar stain with a variety of dye conjugates
29067	Calcofluor White, 5 mM in Water	360/430	Blue cell wall/bud scar stain
40077	Thiazole Orange, 10 mM in DMSO	512/533	Fixable green cytoplasmic/nuclear stain
30050	ViaFluor® CFSE Cell Proliferation Kit	495/519	• Fixable green cytoplasmic stain
30088-30090	CellBrite® Fix Membrane Stains	Green to Far-Red	• Fixable membrane stains, available in green, red, and far-red
30092-30104	MemBrite [®] Fix Cell Surface Staining Kits	Blue to Near-IR	• Fixable membrane stains, available with a wide color selection
70061 70086	LysoView™ Dyes	Blue to Near-IR	Lysosome/vacuole stain, available with a wide color selection
70054 70075	MitoView™ Dyes	Blue to Near-IR	Stain mitochondria in yeast



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