

Product Information

Calcofluor White Stain, 5 mM in water

Catalog Number: 29067

Unit Size: 20 mL

Storage and Handling

Store at -20°C, protected from light. Product is stable for at least 12 months from date of receipt when stored as recommended.

Spectral Properties

Ex/Em: 360/430

Product Description

Calcofluor White is a blue fluorescent dye that binds to cellulose and chitin, which can be found in the cell walls of fungi, algae, and plants. In budding yeast Calcofluor White stains bud scars more strongly than the rest of the cell wall, because they have a higher concentration of chitin. Calcofluor White is sometimes used to identify fungal infections in medical samples.

Calcofluor White is also sold together with ViaVac Red/Green as part of the Yeast Vitality Staining Kit (31062).

Protocol for staining cells in liquid culture

This staining protocol was optimized using *Saccharomyces cerevisiae* yeast in pure culture. The optimal dye concentration may need to be determined experimentally for other organisms.

1. Culture cells in the appropriate growth medium. Optional: spin down and resuspend in a clear buffer suitable for imaging, such as PBS or HBSS.
2. Add dye directly to cells in growth medium or buffer, at a final concentration of 5-25 μ M.
3. Incubate for 20 min at room temperature or 30°C, rocking, protected from light. Optional: wash once before imaging.
4. Image on a fluorescence microscope using a DAPI emission filter.

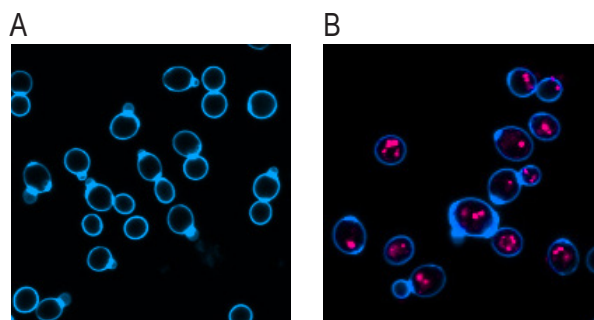


Figure 1. A) *Saccharomyces cerevisiae* stained with 25 μ M Calcofluor White for 20 minutes, then imaged on a Zeiss LSM700 confocal microscope using DAPI imaging settings. B) *Saccharomyces cerevisiae* stained sequentially with 1 μ M ViaVac Red/Green and 25 μ M Calcofluor White in PBS, 20 minutes. Imaged on a Zeiss LSM700 confocal microscope using DAPI and Texas Red® imaging settings.

Related Products

Catalog number	Product	Function
29068	ViaVac Red/Green, 10 mM in DMSO	Yeast vital dye
40077	Thiazole Orange, 10 mM in DMSO	Live cell fixable cytoplasmic stain
31062	Yeast Vitality Staining Kit	Calcofluor White to stain the cell wall, ViaVac Red/Green as a vital dye
31063	Yeast Viability Staining Kit	ConA to stain cell walls, Live-or-Dye to stain dead cells
31064	Yeast Fixable Live/Dead Staining Kit	Thiazole Orange to stain all cells, Live-or-Dye to stain dead cells
29015-29020; 29058	CF™ Dye Concanavalin A (Con A)	Cell wall stain in a variety of dye conjugates
29021-29029; 29059; 29064	CF™ Dye Wheat Germ Agglutinin (WGA)	Cell wall bud scar stain in a variety of dye conjugates
32002-32009	Live-or-Dye Fixable Viability Staining Kits	Dead-cell-specific viability stains in a variety of dye colors
23001	EverBrite™ Mounting Medium	Wet set mounting medium for microscopy
23002	EverBrite™ Mounting Medium with DAPI	Wet set mounting medium for microscopy containing DAPI

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