

New ProLong Glass Antifade Mountant

Higher resolution and increased focal depth for sharper images

Invitrogen™ ProLong™ antifade mountants for fixed cells are hard-setting mountants that enhance resolution, increase focal depth, suppress photobleaching, and preserve the signals of your fluorescently labeled target molecules, enabling the sharpest and brightest images.

The new Invitrogen™ ProLong™ Glass Antifade Mountant is a glycerol-based, ready-to-use hard-set mountant that can be applied directly to fluorescently labeled cells or tissue samples on microscope slides or coverslips.

ProLong Glass mountant delivers better resolution and focal depth

- Refractive index (RI) of ~1.52, which is similar to that of cover glass, immersion oil, and oil objective optics
- Up to 75% improvement in axial resolution for sharp images
- 3–4 times more imageable focal depth compared to mountants with refractive index of 1.47, with sharp images for monolayers of cells, tissue slices, or 3D cell cultures up to 150 μm thickness/focal depth (Figures 1–3)

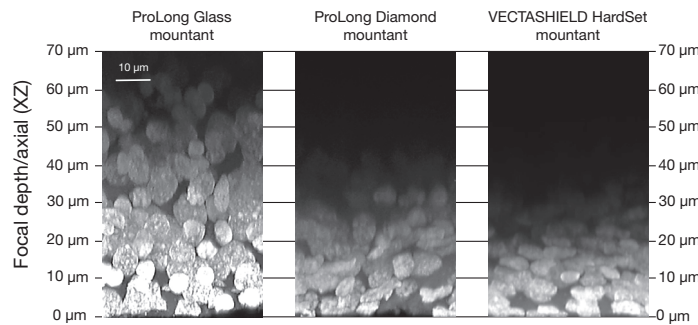


Figure 1. Axial (XZ) confocal image of FFPE pig brain sections, mounted with different commercial antifade formulations.

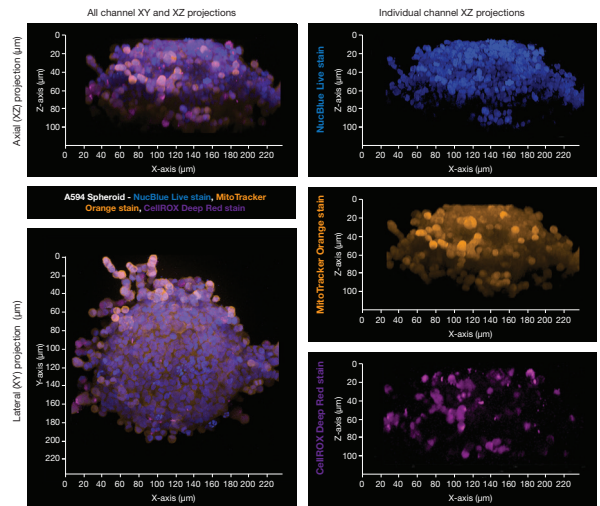


Figure 2. Axial and lateral confocal images of A549 spheroid mounted with ProLong Glass Antifade Mountant.

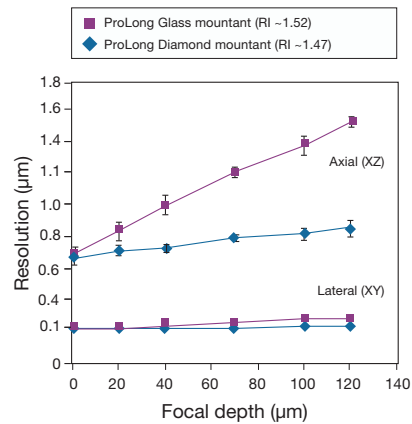


Figure 3. Lateral and axial resolution of 170 μm microspheres in two mountants, plotted as a point spread function (PSF) of images acquired at various focal depths. (Error bars: SD with n ≥ 3).

Higher signal-to-noise ratios and enhanced signal preservation for brighter images

The new ProLong™ Glass Antifade Mountant offers superior initial signal, signal-to-noise ratios, and photobleaching protection (Figures 4, 5).

To preserve signals for higher sensitivity and extended analysis, we have developed a series of antifade reagents that minimize photobleaching and increase the photostability of many popular fluorophores. These reagents offer the following benefits:

- Low background across the spectrum
- Preserved signals from inhibited photobleaching
- Ease of use
- Weeks to months of stability for slide-mounted samples
- Availability with or without DAPI in hard-set and immediate-use options

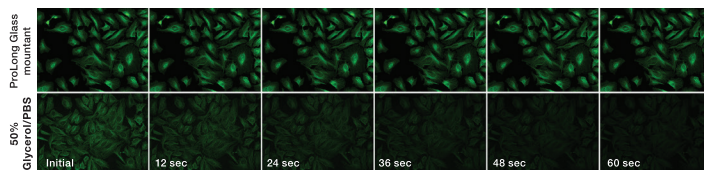


Figure 4. FITC-stained HeLa cells mounted in ProLong Glass Antifade Mountant or 50% glycerol/PBS, and imaged at various time points.

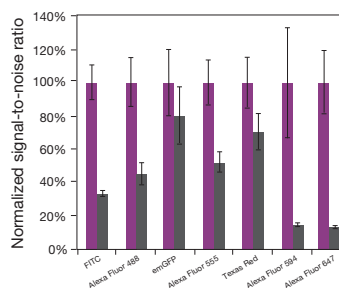


Figure 5. Comparison of fluorophore signals of stained HeLa cells mounted in ProLong Glass (blue) or VECTASHIELD™ HardSet mounting media (red). (Error bars: SD with n ≥ 3).

Select the Invitrogen™ ProLong™ or SlowFade™ antifade mountant that best matches your experimental needs.

Feature	ProLong Glass	ProLong Diamond	ProLong Gold	SlowFade Diamond	SlowFade Gold
Hard or soft setting	Hard-setting (curing)			Soft-setting, noncuring	
Refractive index	~1.52 after curing (same as crown glass)	~1.47 after curing	~1.47 after curing	~1.42	~1.42
Z-stacking, 3D reconstruction and deconvolution	Yes	Not recommended			
Recommended objective type	Oil-immersion for best results; other objective types are compatible	Glycerol-corrective objectives for best results; other objective types are compatible.			
Cell or tissue thickness	0–150 μm	Best results from 0–10 μm thickness; imaging up to 30 μm is possible under optimized conditions.			
Organic dye photobleach protection*	+++	+++	++	+++	+++
Fluorescent protein photobleach protection*	+++	+++	Not recommended	+++	Not recommended
Slide storage after mounting	Long term (weeks to months)			Short term (days to weeks)	
Cat. No.	P36980	P36961	P36934	S36963	S36937

* Key: ++ = good, +++ = best

Find out more at thermofisher.com/antifades

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