

# ProLong® Gold Antifade Reagent with DAPI



10 ml

**Support:** +1-978-867-2388 (U.S.)  
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#8961

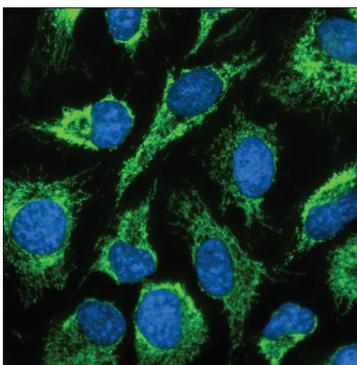
**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications | Species Cross-Reactivity | DAPI Fluorescent Properties: | ex <sup>Max</sup> | em <sup>Max</sup> |
|--------------|--------------------------|------------------------------|-------------------|-------------------|
| IF-IC, IF-F, | All                      | Free dye<br>DNA complex      | 340 nm<br>364 nm  | 488 nm<br>454 nm  |

**Background:** ProLong® Gold Antifade Reagent with DAPI offers enhanced resistance to photobleaching, is premixed and ready to use, and causes little or no quenching of the fluorescent signal. The reagent cures within 24 hours and samples can be saved for months after mounting. This reagent is compatible with most dyes and is appropriate for use in multi-color labeling assays.

The inclusion of DAPI within this mounting reagent eliminates the need for a separate nuclear counterstaining step. 4', 6-diamidino-2-phenylindole, dihydrochloride (DAPI) is a blue fluorescent DNA dye that targets double-stranded AT clusters in the DNA minor groove (1). One molecule of dye binds to each 3 base pairs of dsDNA and yields an approximate 20-fold fluorescent enhancement (2). The level of DAPI-DNA fluorescence is proportional to DNA content (3).

## HeLa



Epifluorescent analysis of HeLa cells using COX IV (3E11) Rabbit mAb (Alexa Fluor® 488 Conjugate) #4853 (green) and ProLong® Gold Antifade Reagent with DAPI (blue pseudocolor).

**Storage:** ProLong® Gold Antifade Reagent is stable for 12 months when stored protected from light, at or below -20°C.

**Directions for Use:** Following immunostaining, cover samples with ProLong® Gold Antifade Reagent with DAPI #8961 and coverslip.

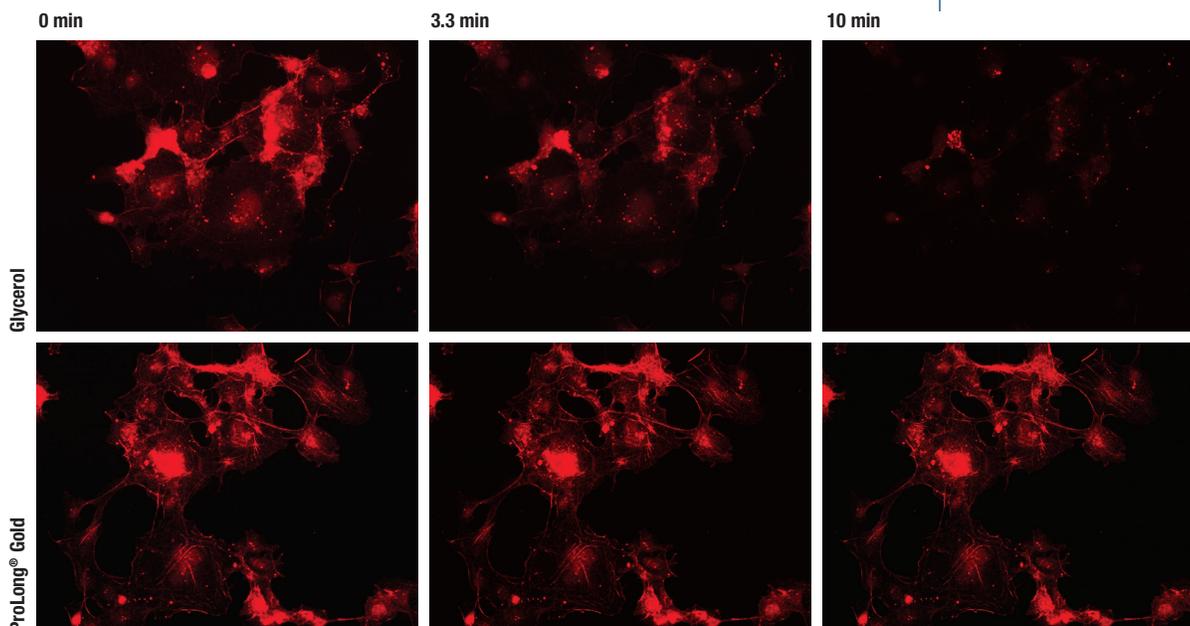
To prevent fading, allow slides to cure in the dark, at room temperature for 24 hours, then seal the coverslips with clear lacquer, such as nail polish.

Proceed with imaging.

Ensure product is brought to RT prior to use.

### Background References:

- (1) Portugal, J. and Waring, M.J. (1988) *Biochim Biophys Acta* 949, 158-68.
- (2) Kapuscinski, J. (1995) *Biotech Histochem* 70, 220-33.
- (3) Manzini, G. et al. (1983) *Nucleic Acids Res* 11, 8861-76.



Confocal immunofluorescent analysis of COS-7 cells, mounted in either glycerol (upper panels) or ProLong® Gold Antifade Reagent #9071 (lower panels), using  $\beta$ -Actin (8H10D10) Mouse mAb #3700 and Anti-mouse IgG (H+L), F(ab')<sub>2</sub> Fragment (Alexa Fluor® 555 Conjugate) #4409 (red) (0, 3.3, or 10 min of imaging).

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**Applications:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry CHIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry FC-FP—Flow cytometry-Fixed/Permeabilized FC-L—Flow cytometry-Live E-P—ELISA-Peptide  
**Species Cross-Reactivity:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse  
**All**—all species expected. Species enclosed in parentheses are predicted to react based on 100% homology.