ProLong® Gold Antifade Reagent with DAPI

10 ml

#8961

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

Applications: IF-IC, IF-F, All
Species Cross-Reactivity: All

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).

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:

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).

<table>
<thead>
<tr>
<th>Species Cross-Reactivity</th>
<th>Free dye</th>
<th>DNA complex</th>
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<tbody>
<tr>
<td>ex&lt;sup&gt;max&lt;/sup&gt;</td>
<td>340 nm</td>
<td>364 nm</td>
</tr>
<tr>
<td>em&lt;sup&gt;max&lt;/sup&gt;</td>
<td>488 nm</td>
<td>454 nm</td>
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Glycerol

ProLong® Gold

0 min

3.3 min

10 min

Confocal immunofluorescent analysis of COS-7 cells, mounted in either glycerol (upper panels) or ProLong® Gold Antifade Reagent #9071 (lower panels), using β-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; CldN—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; Nm—hamster; Mm—monkey; C—chicken; Dm—D. melanogaster; X—Xenopus; Z—zebrafish; B—bovine; Dp—dog; Pg—pig; Se—S. cerevisiae; Ce—C. elegans; Hr—Horse

All—all species expected. Species enclosed in parentheses are predicted to react based on 100% homology.

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