**Rapid Antibody Labeling Kits**

**Mix-n-Stain™ Antibody Labeling Kits**

Revolutionary labeling technology:
- As fast as 30 minutes, with minimal hands-on time
- 100% yield, post-labeling purification not needed
- Labeling tolerates BSA, gelatin, ascites fluid, and Tris

Large selection of labels and kit sizes for greater flexibility:
- Choice of ~30 fluorescent CF® dyes, fluorescent proteins, biotin, enzymes, & haptens
- Multiple sizes for labeling ≤5 ug to 1 mg antibody
Mix-n-Stain™ Antibody Labeling Kits

Mix-n-Stain™ Antibody Labeling Kits dramatically simplify the process of preparing fluorescently labeled antibodies, particularly primary antibodies. Simply mix your antibody with the dye or protein of your choice. After 30 minutes and without a separation step, you will have a covalently labeled antibody conjugate that is as good as a commercial pre-labeled fluorescent antibody (Figure 1). The simple labeling protocol is optimized so there’s no need to calculate how much dye to use. Moreover, unlike other antibody labeling kits, the Mix-n-Stain™ labeling reaction can tolerate the presence of common stabilizers, such as sodium azide, Tris, low levels of glycerol, BSA, gelatin, and even ascites fluid.

Mix-n-Stain™ Antibody Labeling Kits are superior to Lightning-Link® labeling kits (Figure 2). Mix-n-Stain™ kits feature CF® dyes, with superior brightness and photostability compared to the Lightning-Link® labeling (Figure 2). In addition, Mix-n-Stain CF® dye kits are compatible with labeling in the presence of excess stabilizer protein or ascites, unlike Lightning-Link®.

**Large selection of labels:**

- Choice of ~30 bright fluorescent CF® Dye colors
- Fluorescent proteins and tandem dyes: R-PE, APC, PerCP, RPE-CF®647T, & APC-CF®750T
- Enzymes: horseradish peroxidase (HRP), alkaline phosphatase (AP), glucose oxidase (G0x)
- Biotin, dinitrophenol (DNP), digoxigenin (DIG)

Figure 1. Mouse anti-transferrin receptor antibody was labeled using Lightning-Link® DyLight® Conjugation Kits (left) or Mix-n-Stain™ CF® Dye Antibody Labeling Kits (right) according to manufacturers’ instructions.

The CF® dye conjugates show much higher signal compared to the DyLight® dye conjugates when imaged using the same instrument settings. The insets show the same field of view imaged at a higher gain setting to confirm the presence of DyLight® conjugated antibodies.

**Mix-n-Stain™ labeled antibodies perform better than Lightning-Link® labeled antibodies**

**Mix-n-Stain™ labeled antibodies perform comparably to purified antibody conjugates**

Figure 2. Flow cytometry analysis of Jurkat cells stained with CF®633 Mix-n-Stain™ labeled mouse anti-human CD3 antibodies (BD). Reference (gray bar): Purified Alexa Fluor® 647 mouse anti-human CD3 (BD).

Mix-n-Stain™ conjugates prepared using different kit sizes perform similarly to the commercially available purified conjugate of the same primary antibody.
Mix-n-Stain™
Small Ligand Labeling Kits

Mix-n-Stain™ CF® Dye Small Ligand Labeling Kits are designed for rapid, covalent labeling of low molecular weight (MW ~150 to 5,000), high affinity biological ligands or substrates without a purification step. Simply mix your ligand with the CF® dye of your choice and after a 30 minute incubation and a brief quenching step, you will have a covalently labeled dye-ligand conjugate for protein labeling that performs as well as synthetic fluorescent ligands from leading suppliers (Figure 3), at a fraction of the cost. Even without column purification, the CF® dye-ligand does not show non-specific staining. Ligands that have an aliphatic amine, such as SNAP-tag®, CLIP-tag™, HaloTag® and TMP-tag are compatible with the Mix-n-Stain™ CF® Dye Small Ligand Labeling Kit.

![Figure 3. Live cell imaging of HeLa cells expressing CLIP-NK1R labeled with (A) CLIP-amine conjugated to CF®488A using Mix-n-Stain™; and (B) CLIP-surface 488 from New England Biolabs. Cell nuclei were stained with Hoechst 33342 (see related products). Green: FITC channel; Blue: DAPI channel.](image)

![Figure 4. CF®540 Mix-n-Stain™-labeled Cox8A (mitochondria protein) in living cells via the CLIP-tag™. Cell nuclei were stained with Hoechst 33342. Blue: DAPI channel; Red: TMR channel.](image)

![Figure 5. Two-color live cell imaging. CF®500 Mix-n-Stain™ kit was used to label nuclear protein H2B via the CLIP-tag™ (green); CF®858 Mix-n-Stain™ kit was used to label cell surface protein ADRβ2 via the SNAP-tag® (red).](image)

**Common tag types that can be labeled for cell surface or intracellular targets:**

- SNAP-tag®
- CLIP-tag™
- HaloTag®
- TMP-tag

### Mix-n-Stain™ Small Ligand Labeling Kits

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### Small Ligand for Labeling

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Mix-n-Stain™ CF® Dye Antibody Labeling Kits

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Mix-n-Stain™ Fluorescent Protein and Tandem Dye Antibody Labeling Kits

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Ozyme

Nous contacter

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