Mix-n-Stain™ Maxi Antibody Labeling Kits, 1 mg Labeling

The simplicity and convenience of Mix-n-Stain™ labeling, for conjugation of 1 mg IgG with our CF® Dyes or other dyes.

Product attributes

Labeling scale	1 mg
Purification method	Purification not required after labeling

Product Description

Mix-n-Stain™ Maxi Antibody Labeling Kits allow you to rapidly label 1 mg of IgG with one of our next-generation CF® Dyes or other label.

Unrivaled Convenience

Mix-n-Stain™ Maxi Antibody Labeling Kits allow you to rapidly label 1 mg of IgG with one of our next-generation CF® Dyes or other label. Simply mix your antibody with the reaction buffer and optimally formulated dye provided, followed by a 30 minute incubation and addition of the provided stop buffer. Any remaining free dye or other label is no longer reactive at the end of the labeling, so the conjugate is ready for staining without further purification. Note the labeling protocol and buffer requirements for the Maxi kits differ from our original micro-scale Mix-n-Stain™ kits, see the Reaction Compatibility Chart below.

After the reaction, the antibody will be labeled with an average of 4-6 dye molecules per antibody molecule. Mix-n-Stain™ labeling is covalent, so labeled antibodies can be used for multiplex staining without transfer of dyes/labels between antibodies.

Superior CF® Dyes

These kits feature a choice of Biotium's next-generation CF® Dyes, which were designed for advantages in brightness and photostability compared to Alexa Fluor®, DyLight®, and other fluorescent dyes. Learn more about CF® Dyes. We also offer kits for labeling with Cyanine 555, Cyanine 647, or fluorescein/FITC. See Ordering Information below.

Choose the Right Kit for Your Application

These kits are optimized for a single labeling reaction with 1 mg of IgG. Mix-n-Stain™ kits are not designed to be used for multiple labeling reactions. For smaller-scale conjugation, see our original Mix-n-Stain™ CF® Dye Antibody Labeling Kits; original Mix-n-Stain™ kits also have greater tolerance for antibody buffer additives, and provide special protocols for labeling antibodies in buffer with BSA or in ascites fluid. The kits are not recommended for labeling IgM antibodies, which may denature under the reaction conditions.

Mix-n-Stain™ kits can be used to label other proteins, however, the degree of labeling (DOL, or number of dye molecules per antibody) may not be optimal, and the kits are not designed to allow for DOL measurement after labeling. For performing reactions to optimize DOL for your antibody or application, we recommend using our CF® Dye SE Protein Labeling Kits. The kits include everything you need to perform controlled conjugation reactions and post-labeling purification, as well as detailed instructions and correction factors for determining DOL for CF® Dyes.

Learn about all of our Mix-n-Stain™ and protein labeling options, or see our Frequently Asked Questions (FAQs) for more information.

Reaction Compatibility for Mix-n-Stain™ Maxi Antibody Labeling Kits, 1 mg Labeling

Component	Compatibility
Sodium azide	Compatible
Glycerol ≤ 10%:	Compatible
Glycerol > 10%:	Compatible after ultrafiltration*
Tris ≤20 mM	Compatible
Tris >20 mM	Compatible after ultrafiltration*
Glycine	Compatible after ultrafiltration*
BSA or gelatin	Not compatible; purify antibody**
Serum, cell culture supernatant, or ascites fluid	Not compatible; purify antibody**

* Ultrafiltration vials are sold separately (catalog no. 22004).
** Protocol/reagents for antibody purification not provided.

Mix-n-Stain™ Maxi Ordering Information

Conjugation	Ex/Em	Labeling size	Catalog No.	Dye Features
CF®350	347/448 nm	1 mg	92420	CF®350 Features
CF®405S	404/431 nm	1 mg	92421	CF®405S Features
CF®405M	408/452 nm	1 mg	92404	CF®405M Features
CF®405L	395/545 nm	1 mg	92454	CF®405L Features
CF®488A	490/515 nm	1 mg	92405	CF®488A Features
CF®555	555/565 nm	1 mg	92406	CF®555 Features
CF®568	562/583 nm	1 mg	92407	CF®568 Features
CF®594	593/614 nm	1 mg	92408	CF®594 Features
CF®633	630/650 nm	1 mg	92409	CF®633 Features
CF®647	650/665 nm	1 mg	92410	CF®647 Features
CF®680	681/698 nm	1 mg	92422	CF®680 Features
CF®750	755/777 nm	1 mg	92423	CF®750 Features
CF®770	770/797 nm	1 mg	92424	CF®770 Features
Fluorescein (FITC)	494/518 nm	1 mg	92411	
Cyanine 555	555/565 nm	1 mg	92415	
Cyanine 647	650/665 nm	1 mg	92419	

Antibody & Protein Labeling Kits

Product Name	Label Options	Labeling Scale	Labeling Time	Features
Mix-n-Stain™ CF® Dye Antibody Labeling Kits	CF® Dyes	≤5-20 ug IgG 20-50 ug IgG 50-100 ug IgG	~ 15 min.	• Rapid, simple labeling • No purification • Tolerates BSA & other additives • Dyes for super-resolution, spectral flow, & NIR detection
Mix-n-Stain™ FITC Antibody Labeling Kits	FITC			
Mix-n-Stain™ Cyanine Dye Antibody Labeling Kits	Cyanine 555 Cyanine 647			
Mix-n-Stain™ Biotin Antibody Labeling Kits	Biotin			
Mix-n-Stain™ Digoxigenin Antibody Labeling Kits	Digoxygenin (DIG)			
Mix-n-Stain™ DNP Antibody Labeling Kits	DNP			
Mix-n-Stain™ Maxi Antibody Labeling Kits	CF® Dyes Cyanine Dyes	1 mg IgG	~ 30 min.	
Mix-n-Stain™ CF® Dye IgM Antibody Labeling Kits	CF® Dyes FITC	25 ug IgM 100 ug IgM	15-30 min.	• Rapid, simple labeling • No purification
Mix-n-Stain™ STORM CF® Dye Antibody Labeling Kits	CF® Dyes	50 ug IgG	~ 30 min.	• Optimized to provide low 1-2.5 DOL • No purification

Product Name	Label Options	Labeling Scale	Labeling Time	Features
Mix-n-Stain™ Nanobody Labeling Kits	CF® Dyes	5-20 ug Nanobody® 20-50 ug Nanobody®	~ 30 min.	• Optimized for Nanobodies® • Tolerates BSA & other additives
Mix-n-Stain™ Nanobody Thiol Labeling Kits	CF® Dyes		~ 2 hours	• Optimized for Nanobodies® with single exposed cysteine residue
Mix-n-Stain™ Small Ligand Labeling Kits	CF® Dyes	0.1 umol small ligand	~ 30 min.	• Label SNAP®, CLIP™, HaloTag® & other small ligands • Dye options for surface or intracellular targets
VivoBrite™ Rapid Antibody Labeling Kits for Small Animal In Vivo Imaging	Near-IR CF® Dyes	3 x 1 mg IgG	~ 2 hours	• Dyes, buffers, & spin vials for labeling + purification • Sterile syringes, filters and storage vials for in vivo use
CF® Dye & Biotin SE Protein Labeling Kits	CF® Dyes Biotin	3 x 1 mg protein	~ 2 hours	• Dyes, buffers, & spin vials for labeling + purification

References

Download a list of curated CF® Dye references.