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

Label your antibody with one of our CF® Dyes specialized for STORM super-resolution microscopy. Labeling takes just 30 minutes without a purification step, and yields an antibody conjugate with a low degree of labeling optimal for STORM.



Product attributes

Call us: 800-304-5357

Email: btinfo@biotium.com

Product Description

Mix-n-StainTM STORM CF® Dye Antibody Labeling Kits allow you to label 50 ug of your antibody with one of Biotium's STORM CF® Dyes to produce an antibody conjugate with a low 1-2.5 DOL (degree of labeling) optimal for super-resolution STORM (Stochastic Optical Reconstruction Microscopy). Labeling takes just 30 minutes, with minimal hands-on time and no purification.

Superior CF® Dyes for STORM Imaging

These kits feature a choice of 8 CF® Dyes developed with superior brightness and unique photoswitching properties that are ideal for super-resolution imaging by STORM. In addition, these specialized Mix-n-StainTM STORM CF® Dye Antibody Labeling Kits are designed to offer a low degree of labeling (DOL, or dye molecules per antibody molecule) of 1-2.5, which is reported to be optimal for STORM (1). Learn more about CF® Dyes for STORM or our other fluorescent reagents validated for super-resolution microscopy.

Discover More with Green-Excitable CF® Dyes Developed for Multi-Color STORM

High-quality STORM imaging relies heavily on bright fluorescent dyes with excellent photoswitching properties. While there are several commonly used red-excited dyes suitable for STORM imaging such as CF®647, CF®660C and CF®680, generating comparable dyes for other excitation sources to produce quality multi-color STORM images remains a challenge. Biotium scientists have met this challenge by developing novel chemical modifications for green-excited fluorescent dyes to offer optimal performance for STORM super-resolution imaging . This includes CF®583R and CF®597R which were developed specifically for STORM imaging and display exceptional performance for multi-color STORM (2).

See the product table below for a quick reference of the maximum excitation and emission of each CF® Dye. Select the links in the Dye Features column to learn more about each CF® Dye and potential applications.

Other Labeling Kits

We now offer Mix-n-Stain™ Maxi Antibody Labeling Kits for labeling 1 mg of antibody with CF® Dyes, and Mix-n-Stain™ Nanobody Labeling Kits. Mix-n-Stain™ kits also are available for labeling antibodies biotin, DNP, or DIG. See our full selection of Mix-n-Stain™ Antibody Labeling Kits.

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

Conjugation	Ex/Em	Size	Catalog No.	Dye Features
CF®505	505/519 nm	50 ug	<u>92549</u>	
<u>CF®568</u>	562/584 nm	50 ug	<u>92550</u>	CF®568 Features
<u>CF®583R</u>	585/609 nm	50 ug	<u>92551</u>	CF®583R Features
<u>CF®597R</u>	597/619 nm	50 ug	<u>92553</u>	CF®597R Features
<u>CF®647</u>	652/668 nm	50 ug	<u>92554</u>	CF®647 Features
<u>CF®660C</u>	667/685 nm	50 ug	<u>92555</u>	CF®660C Features
<u>CF®680</u>	681/698 nm	50 ug	<u>92556</u>	CF®680 Features
<u>CF®750</u>	755/779 nm	50 ug	<u>92557</u>	CF®750 Features

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 lgG 20-50 ug lgG 50-100 ug lgG	~ 15 min.	Rapid, simple labeling
Mix-n-Stain™ FITC	FITC			No purification
Antibody Labeling Kits				 Tolerates BSA & other additives
Mix-n-Stain™ Cyanine Dye Antibody Labeling Kits	Cyanine 555 Cyanine 647			Dyes for super-resolution, spectral
Mix-n-Stain™ Biotin Antibody Labeling Kits	Biotin			flow, & NIR detection
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 lgG	~ 30 min.	
Mix-n-Stain™ CF® Dye IgM Antibody Labeling	CF® Dyes FITC	25 ug IgM 100 ug IgM	15-30 min.	Rapid, simple labeling
Kits	1110	100 ug igivi		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
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™ CF® Dyes 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 lgG	~ 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

CF is a registered trademark of Biotium, Inc.

References

- 1. Proc. SPIE 9331, (2015), <u>DOI: 10.1117/12.2083209</u> 2. Angew. Chem. Int. Ed. 9331, e202113612, (2021), <u>DOI: 10.1002/ANIE.202113612</u>

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