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Mix-n-Stain™ Nanobody Labeling Kits

These kits allow optimal labeling of single-chain nanobodies with CF® Dyes or biotin in 30 minutes without a purification step.



Product attributes

Product Description

Mix-n-Stain™ Nanobody Labeling Kits are the only kits specifically designed for labeling single-domain Nanobodies® (also called camelid single variable or VHH domains) with fluorescent dyes or biotin. The kits allow optimal labeling of between 5-50 ug of nanobody in just 30 minutes, with minimal hands-on time and no purification. The kit reduces the chance of over-labeling the nanobody, which can affect antigen binding. Labeling tolerates common buffer additives, including BSA.

The kits come with a selection of our next-generation fluorescent CF® dyes or biotin. CF® dyes have advantages in brightness and photostability compared to Alexa Fluor®, DyLight®, and other fluorescent dyes (learn more about CF® Dyes).

- Label 5-20 ug or 20-50 ug of Nanobody®
- Choice of 7 CF® Dye colors or biotin
- Simple 30 minute labeling, no purification
- Compatible with common stabilizers
- Prevent over-labeling
- Dye options for super-resolution and 2-photon imaging (learn more)

Choosing the Right Kit for Your Application

Before selecting a Mix-n-Stain™ Nanobody Labeling Kit, please download the Product Protocol to see our Kit Compatibility and Protocol Selection guidelines.

Biotium also offers a Mix-n-Stain™ Nanobody Thiol Labeling Kit designed for labeling VHH via a single cysteine (1x Cys) only. The kit is particularly useful for labeling commercially available nanobodies that contain a single cysteine, or labeling VHH for functionality studies.

For labeling IgG antibodies, please use one of our Mix-n-Stain™ Antibody Labeling Kits. We also offer Mix-n-Stain™ Small Ligand Labeling Kits, for labeling SNAP-tag®, CLIP-tag™, and HaloTag® ligands, or other small molecules. See Mix-n-Stain™ Product Lines below for our full selection of antibody, protein, and ligand labeling kits.

Mix-n-Stain™ Nanobody Labeling Kits

Label	Ex/Em	Labeling size (ug Nanobody®)	Catalog number
Biotin	N/A	5-20 ug	92500
20-50 ug			92501
CF®405S	404/431 nm	5-20 ug	92502
20-50 ug			92503
CF®488A	490/515 nm	5-20 ug	92504
20-50 ug			92505
CF®568	562/583 nm	5-20 ug	92506
20-50 ug			92507
CF®594	593/614 nm	5-20 ug	92508
20-50 ug			92509
CF®640R	642/662 nm	5-20 ug	92510
20-50 ug			92511
CF®647	650/665 nm	5-20 ug	92512
20-50 ug			92513
CF®680R	680/701 nm	5-20 ug	92514
20-50 ug			92515

Note: Before selecting a kit, please download the Product Protocol to see Kit Compatibility and Protocol Selection guidelines.

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
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

Nanobody is a registered trademark of Ablynx, a Sanofi company. Alexa Fluor and DyLight are registered trademarks of Thermo Fisher Scientific. Cy Dye is a registered trademark of Cytiva. SNAP-tag and CLIP-tag are trademarks or registered trademarks of New England BioLabs; HaloTag is a registered trademark of Promega Corporation.

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