

**Plan****Record****Store**

TrailBlazer™ Tag and StarBright™ Dye Label Protocol Worksheet

This protocol worksheet outlines each step in the instructions for use (IFU) for the [TrailBlazer Tag](#) and [TrailBlazer StarBright Dye Label Kits](#). It allows you to record each step of the conjugation process, including antibody preparation and modification, SpyTag attachment, and StarBright Dye labeling, and can be stored for future reference.

Date: _____ Protocol identifier: _____

Antibody: _____ StarBright Dye format: _____

Tag kit batch number: _____ Label kit batch number: _____

TrailBlazer Tag Kit — Key Steps

For attaching a SpyTag peptide to a purified antibody

Full instructions found at bio-rad-antibodies.com/tag-kit-IFU

1. Antibody preparation

1.1 Antibody concentration: _____ Amount of antibody required for 100 µg: _____

1.2 Amount of Conjugation Buffer required: _____

1.3–1.4 Wash 1 wash 2 wash 3

1.5 Check that antibody volume is between 50–100 µl

1.6 Invert filter and centrifuge to recover antibody in eluate

2. Antibody modification

2.1 Prepare Reagent A

2.2 Add Reagent A to antibody

2.3 Incubate for 60 min

Start time: _____ End time: _____

2.4 Prepare desalting column; wash 1 wash 2 wash 3

2.5 Add antibody to desalting column; centrifuge

2.6 Retain flowthrough

3. Attachment of SpyTag to antibody

3.1 Prepare SpyTag

3.2 Add SpyTag to antibody

3.3 Incubate for 30 min–3 hr

Start time: _____ End time: _____

3.4 Prepare desalting column; wash 1 wash 2 wash 3

3.5 Add antibody to desalting column; centrifuge

3.6 Retain flowthrough, which contains antibody with SpyTag

Store the antibody with the SpyTag at 4°C in the dark for up to 2 weeks.

TrailBlazer StarBright Dye Label Kit — Key Steps

For attaching a StarBright Dye to an antibody with a SpyTag

Full instructions found at [bio-rad-antibodies.com/label-SB-kit-IFU](https://www.bio-rad-antibodies.com/label-SB-kit-IFU)

1. Incubate for 30 min–overnight
Start time: _____ End time: _____
2. Incubate for 60 min
Start time: _____ End time: _____
3. Centrifuge
4. Prepare Quenching Reagent
5. Add Quenching Reagent and Storage Buffer to labeled antibody

Store StarBright Dye–labeled antibody at 4°C in the dark for up to 12 months.

Experimental Protocols

To maximize the potential of your conjugated antibody, we suggest following our StarBright Dye flow cytometry protocols for both [cell surface](#) and [intracellular](#) staining. Additionally, we offer a range of protocols to enhance your flow cytometry and western blot assays, leading to clearer, cleaner, and more easily analyzed data.

[Find the right protocol for your experiment.](#)



Visit [bio-rad-antibodies.com/TrailBlazer-Kit](https://www.bio-rad-antibodies.com/TrailBlazer-Kit) for more information.

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