731 Bio, LLC

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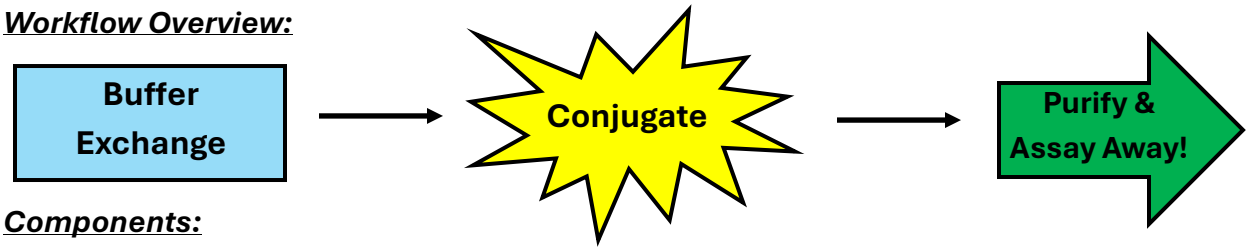
Quick Color Biotin/FITC Antibody Labeling Kit

Introduction: Welcome to the quick color antibody labeling kit product line. *These kits are intended to label between 50-100 µg of BSA / carrier protein free antibody with FITC or biotin, at a starting concentration of 0.5-1.0 mg/mL*. In just a short number of steps, you will have a modified antibody ready for your assays. Let's get started!

STOP! Please make sure your buffers are free of the following: BSA or other carrier proteins such as gelatin and no supernatants.

Workflow Overview:



Components:

Part	Description	Storage
1 x Blue Column	Column for Buffer Exchange	4C°
2 x Red Column	Columns for Final Purification	4C°
3 x Empty Spin Column	Empty Spin Columns for elution	Ambient or 4C°
1 x Biotin or Dye Tube	Ready to react FITC or Biotin reagent	-20C°

Protocol:

NOTE: ALL COLUMN SPINS ARE DONE FOR 2 MINUTES AT 1500 RCF.

1. Prep the **blue column** by breaking off the bottom tab, loosening the cap, and spin down at 1500 rcf in a benchtop centrifuge for 2 minutes. The column resin should be white.
2. Discard the flow-through and place the capless tube back with the **blue column**.
3. Place your BSA / carrier protein-free antibody directly onto the **blue column** resin and spin down.
4. Add the antibody flow through directly to the biotin or dye tube, mix well by vortex or repeat pipetting, and react for 60 minutes at room temperature in the dark.
5. Around the 45-minute mark, prep both **red columns** by spinning down per the **note**. Discard the flow through and place the capless tubes back with the **red column**.

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6. After 60-minute incubation, take your first **red column** and load your modified antibody directly onto the resin. Spin down per the **note**.
7. Take the flow through and load onto the second prepped **red column** as spin down per the **note**.
8. After 2nd red column spin, your antibody is now ready to use in an assay. Standard antibody recovery is over 90% and commonly over 95% with an Ab concentration around 0.8-1.0 mg/mL assuming a starting concentration of 1.0 mg/mL. Store at 4C°. **For longer term storage, it is recommended to use a screw cap tube with an O-ring as evaporation may occur in microcentrifuge tubes.**

Supporting Data:

Product	Catalog #	Peak Excitation (nm)	Peak Emission (nm)	Molar Extinction Coefficient $M^{-1}cm^{-1}$ at 280nm
FITC Kit	QCL-FITC	495	519	75,000
Biotin Kit	QCL-BTN	-	-	-

Disclaimer: RESEARCH USE ONLY. NOT FOR HUMAN OR ANIMAL THERAPEUTIC OR DIAGNOSTIC USE.

This kit is intended for research purposes only. It should be handled by trained laboratory personnel in accordance with established safety procedures. Refer to the Safety Data Sheet (SDS) for detailed information on handling, storage, and disposal. This product is not intended for use in diagnostic procedures on humans or animals, nor for therapeutic applications.

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