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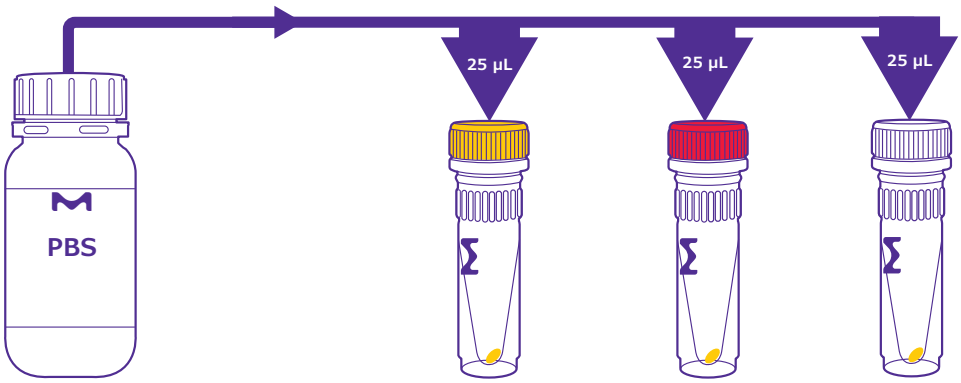
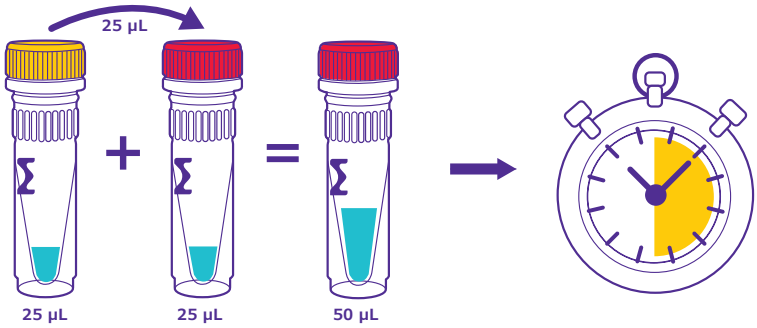
ColorWheel® 3-Step Protocol

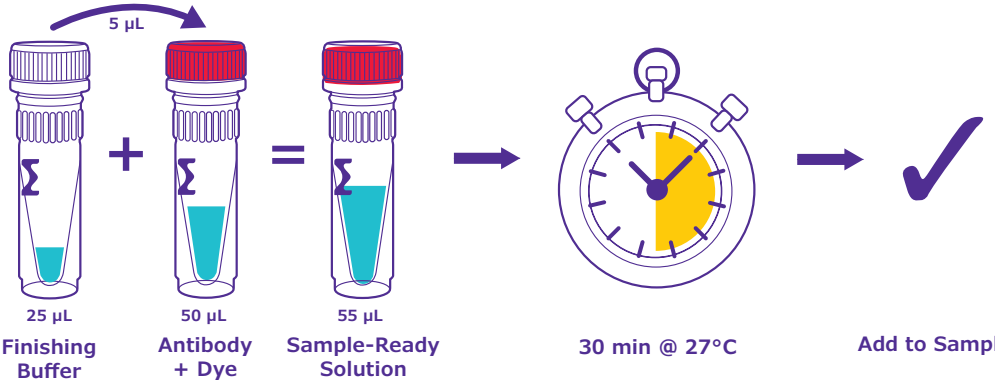
STEP 1 Spin Down Antibody, Dye, and Finishing Buffer; Resuspend



STEP 2 Mix Antibody and Dye



STEP 3 Add Finishing Buffer and Add to Sample



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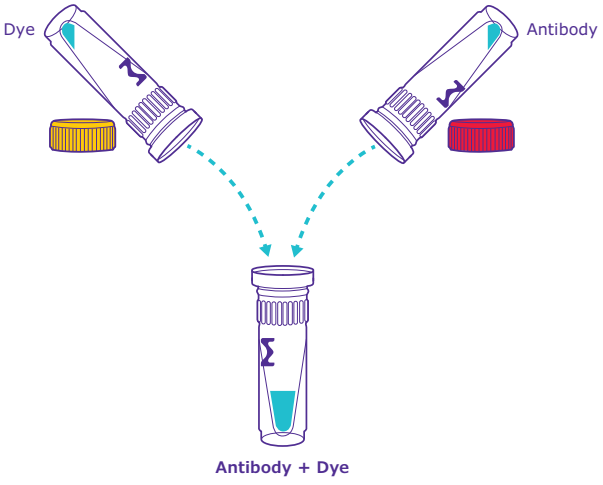
The Colors of Compatibility

ColorWheel® Flow Cytometry Antibodies and Dyes

The ColorWheel® flow cytometry portfolio of antibodies and dyes was designed with simplicity and flexibility in mind to help streamline your flow cytometry workflow without compromising on quality.



What Is the ColorWheel® Flow Cytometry Portfolio?

The ColorWheel® flow cytometry portfolio utilizes a proprietary technology optimized for flow cytometry that allows users to independently select antibodies and dyes for assembly in any desired combination. The mix-and-match ability of these antibodies and dyes serves as an analog to primary conjugated antibodies.

Features include:

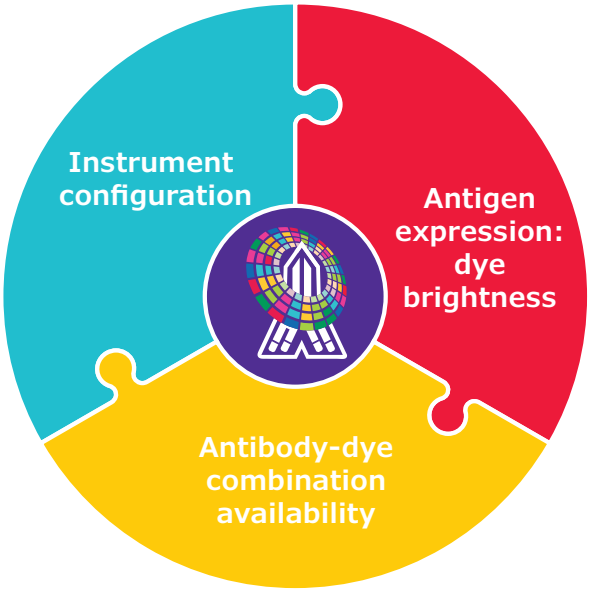
- Flexibility to pair any antibody with any dye
- Less than 5 minutes of hands-on time for a simplified workflow
- Lyophilized product for enhanced stability and ambient shipping
- Preservative-free presentation for sustainability and wider sample type compatibility

Comparison to Conventional Flow Cytometry Methods

Conventional Method	Conventional Workflow Complication	Comparison to ColorWheel® Workflow
Conjugated Primary Antibodies	Procedures require an antibody of interest and an instrument-compatible dye to be available together.	The ColorWheel® mix-and-match ability allows any ColorWheel® antibody to be conjugated to any ColorWheel® dye for maximum flexibility.
Conjugated Secondary Antibodies	Procedures require repeated wash steps and introduce cross-reactivity concerns.	ColorWheel® antibodies and dyes can be conjugated in 3 steps with < 5 minutes of hands-on time, all without the added complexity of species reactivity and the potential for antibody loss with repeated washing.
Labeling Kits	Using these kits adds time, increases costs, and introduces variability to the data.	ColorWheel® antibodies and dyes remove the need for labeling kits, saving time and eliminating the inherent cost and variability that comes with them.

The Multiplexing Puzzle

Multiplexing in flow cytometry can be a puzzle that researchers have to piece together. Flow cytometry multiplexing involves balancing various pieces of the puzzle including the configuration of the instrument, balancing antigen expression with dye brightness, and antibody-dye combination availability. If it is not possible to fit all these factors into one experiment, researchers need to compromise by performing multiple assays. Running multiple assays introduces different experimental conditions causing variability that may lead to unreliable data. The flexibility of ColorWheel® technology helps you fit the multiplexing puzzle pieces together.



Unlock Freedom in Assay Design

When solving the puzzle of multiplexing in flow cytometry, the flexibility that comes with ColorWheel® antibodies and dyes removes experimental constraints to unlock more freedom in assay design. See how the ColorWheel® portfolio solves the following puzzles:

Expanding an existing multiplex assay by adding a new target

Problem: The new target is only commercially available conjugated to 1 dye, displacing the antibody already conjugated to that dye in your existing assay.

ColorWheel® Solution: Instead of forcing users to decide which target to analyze, the mix-and-match ability of ColorWheel® antibodies and dyes gives you freedom over your target choice by allowing a simple exchange between the antibodies already in the assay with any unused instrument-compatible dye.

Building a new multiplex assay with antigens of varying expression levels

Problem: Matching antibodies against antigens of varying expression levels with dyes of suitable brightness consumes a lot of time and effort.

ColorWheel® Solution: The user-friendly ColorWheel® portfolio allows you to order the targets you want with the dyes that fit your instrument. Then, with the flexibility of ColorWheel® antibodies and dyes, simply mix and match your target and dyes at the bench as needed, freeing you from compatibility restraints.

Discover more at SigmaAldrich.com/ColorWheel