Detailed Flow Cytometry Experiment Planner

Planning your flow cytometry experiment? This planner outlines common elements you need to consider, decide upon, and record when performing your flow cytometry experiment.

You can complete the following fields, skipping anything that isn't relevant to your work.

Experiment name: _____

Date: _____

Cell type: _____

Species: _____

Plating (for example, FACS tubes or 96-well plate): _____

Don't forget to use our handy 40-tube layout PDF and our 96-well plate PDF to plan, record, and store the details of your experiment.

Antibodies

Decide on which antibodies will help detect your target protein.

Target Protein (Marker)	Protein Location	Permeabilization Method	Primary Antibody Catalog #	Secondary Antibody Catalog #

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Fluorophores

Identify which fluorophores you will use. Don't forget to check your instrument settings to select compatible fluorophores.

Emission Wavelength (nm)	Ultraviolet (355 nm)	Violet (405 nm)	Blue (488 nm)	Yellow-Green (561 nm)	Red (640 nm)
395					
420					
440					
450					
480					
500					
520					
550					
570					
580					
600					
660					
680					
690					
700					
730					
750					
780					
800					

Antibodies and Fluorescent Dyes

Create a list of your panel. Record the amount of antibody to be used after performing antibody titrations.

Marker	Fluorophore	Fluorophore Relative Brightness	Antibody Catalog #	Amount of Antibody

Reagents Required

Blocking buffer: _____

Fixation buffer: _____

Permeabilization buffer: _____

Controls

Positive control: _____

Negative control: _____

Unstained control: _____

Secondary-only control: _____

Isotype control product details: _____

Viability control product details: _____

Fc block control product details: _____

FMO: _____

Flow Cytometer Settings

Lasers needed: _____

Wavelengths to be detected (for large panels make a separate note of these): _____

Bandpass filter wavelengths (for large panels make a separate note of these): _____

Number of cells to acquire: _____

Compensation

Check for spectral overlap. If present, compensation will be needed.

Compensation strategy (complete single stain for each fluorophore).

Compensation beads: _____

Data Analysis Plan

Consider:

- Histogram or scatterplot
- Parameter for x-axis
- Parameter for y-axis

Gating strategy:

Population	Gate 1	Gate 2	Gate 3	Gate 4
e.g., Tregs	Lymphocytes	CD3+	CD4+	CD25hi, CD127lo

Notes

Build better with Bio-Rad.

Visit **bio-rad-antibodies.com/StarBright** for more information.

Bio-Rad Laboratories, Inc.

Life Science Group

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Bulletin 3649 Ver A US/EG *24-0183 0324 Sig 0124*