Workflow Overview

The following figure shows the steps for daily workflow using BD FACSDiva software.

Before starting your daily workflow, ensure that your lab’s software administrator has performed all the necessary tasks to set up the software for your use. This guide shows a workflow that uses application settings.

Starting Up the System

1. Turn on the cytometer main power.
2. Start up the computer, start BD FACSDiva software, and log in.
3. Check fluid levels in the Cytometer window.
4. Select Cytometer > Fluidics Startup if automatic cleaning is disabled.
5. Check the flow cell for air bubbles.
6. Check that laser warmup has finished, indicated by a ready status.

Checking Cytometer Performance

1. Select Cytometer > CST.

2. Place a tube of the BD™ Cytometer Setup and Tracking beads in position 1 on a carousel and run the beads.
3. View the Cytometer Performance Report.
4. Close the Cytometer Setup and Tracking window.
Setting Up the Experiment

1. Select Edit > User Preferences and verify that selected preferences are appropriate.
2. Create an experiment in the Browser.
4. Select Experiment > Compensation Setup > Create Compensation Controls.
5. Copy and paste plots from the Unstained Control normal worksheet to a Global Worksheet.
Verify that the current tube pointer is set to the Unstained Control tube and that a global worksheet is displayed.

Install compensation control tubes in the carousel in the same order as listed in the Browser and install the carousel on the Loader.

Verify that the cytometer is configured for automatic loading and Click 📋 Run Single Tube 📋.

Click 📋 Unload 📋 and then click 📋 RunCarousel 📋.

View recorded data in the normal worksheets and gate the positive populations.

Select Experiment > Compensation Setup > Calculate Compensation.

Adjust the P1 gate, right-click, and select Apply to All Compensation Controls.

Adjust the P2 gates to fit the positive populations.

Rename the compensation setup.
Recording Specimen Data

1. Create Browser elements.

   Use the Browser toolbar to add elements.

2. Specify Carousel Setup settings.

   Specify a carousel ID.

   Specify run settings and tube pressurization error handling settings.


   Specify reagents labels, keywords, and acquisition criteria as needed.

4. Install the carousel on the Loader and click Run Carousel.
3 Specify tubes to run.

Analyzing Data

1 Create plots, gates, and statistics needed for analysis.

2 Perform quality control of the analysis.
Do one of the following to print or export the results.
- Select File > Print to print the active worksheet.
- Select File > Export to export selected elements.
- Right-click a specimen or experiment and select Batch Analysis (using a global worksheet).

Shutting Down the System

1. Select Carousel > Clean.

2. Install the carousel with the appropriate cleaning tubes and perform the cleaning cycle.

3. Perform a fluidics shutdown.

4. Empty waste and refill fluids if prompted to do so.

5. Turn off the cytometer main power and shut down the computer.