Job Aid

BD FACSDiscover™ S8 Cell Sorter: Sorting into tubes

This job aid contains instructions for how to sort into tubes and analyze the post-sort data in BD FACSChorusTM Software. For additional information, see the BD FACSDiscoverTM S8 Cell Sorter with BD CellViewTM and BD SpectralFXTM Technology User's Guide.



Before you begin

- Start up the system and run the daily fluidics startup procedure.
- Add and design an experiment, adjust your scatter and spectral gains and Region of Analysis (ROA) for your sample.
- Perform spectral unmixing by recording data for single-stained controls, if applicable.
- Record pre-sort data and create sort gates on the View Data page.

Working with the Set Up Sort tab

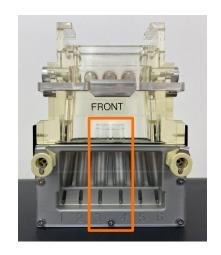
Preparing the sort

- 1. Click the **Set Up Sort** tab.
- 2. Make appropriate selections in the Collection Setup panel.
- 3. In the Sort Setup panel, enter the starting buffer volume for each collection tube.
- 4. Assign populations to tubes by selecting a tube, then clicking the population of interest in the population hierarchy.
 - **NOTE** A population does not need to be assigned for every tube.
- 5. Assign the target event count for each tube.



Loading the collection device

- Insert your collection tubes into the collection device.
 Load tubes from the inside out. For example, a 2-way sort will use slots 3 and 4 in the collection device. A 4-way sort will use slots 2 through 5.
- 2. Install the collection device onto the bottom of the sort block.



Working with the Sort tab

Sorting

- 1. Click the **Sort** tab.
- 2. Load the sample tube and adjust the flow rate, if needed.
- 3. Click **Start Sort** in the Sort Status panel.

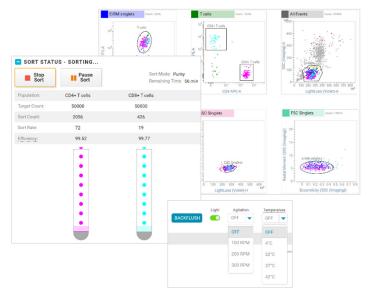
NOTE The instrument will take several seconds to initialize the sort before the sort begins.

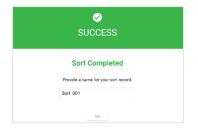
- 4. Monitor the sort as it progresses.
 - Adjust gates as needed in the Sort Population Plots and Additional Plots panels.
 - Monitor the sort count and efficiency of your sorted populations in the Sort Status panel.
 - Record additional data while the sort progresses, if needed.
 - Adjust the sample tube's temperature and agitation speed in the dashboard.
 - Toggle the light switch to help visually monitor the sample volume as the sort progresses.
- 5. When the sort finishes or is stopped, name the sort report.
- 6. Unload the tube, if needed.





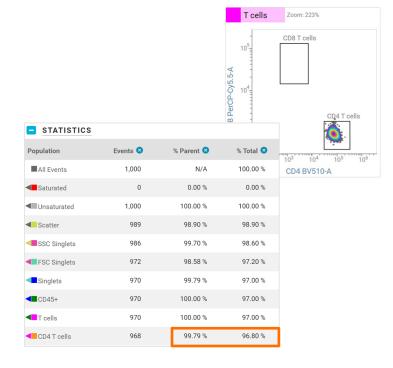
Set Up Sort





(Optional) Checking post-sort purity

- 1. Click the **View Data** tab.
- 2. Set the FCS Stopping Criteria to 1,000 events. Toggle on or off the Images Stored switch.
- 3. Record the collection tubes.
 - a. Click **Backflush** in the dashboard. Click **OK** to clear the dialog.
 - b. Load a collection tube.
 - c. Click Record.
 - d. Name the post-sort data file.
 - e. Repeat steps a through d for each collection tube.
- 4. View the Statistics panel to verify post-sort purity.



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