Create New Experiment

Experiment Templates

Public Templates

Blank Template

Measurement Settings

Parameter Settings

	Marker	Fluorochrome		
FSC	---	---		☑
BSC	---	---		☑
FL1	CD8	FITC	▼	☑
FL2		PE	▼	☑
FL3		PE-Texas Red	▼	☐
FL4		PerCP-Cy5.5	▼	☐

Example

Instrument Settings

Laser
- ☐ 405nm
- ☑ 488nm
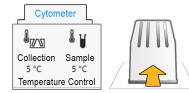- ☐ 561nm
- ☐ 638nm

Cytometer
Collection 5 °C — Temperature Control / Sample 5 °C

- Ensure MA900 is calibrated for sorting
- Install collection tube holder and activate temperature control if needed

- Under File > New, select a Template (Blank or Existing)
- Select the desired parameters (488 laser must stay on)
- Click Create Experiment
- Start Compensation Wizard to run single-color controls or run your sample
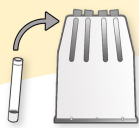
Follow Compensation Wizard

- Best Practice: Filter samples prior to loading into MA900
- Run the unstained sample & adjust sensor gains
- Set the Recording Stop Condition to record enough data
- Go to the Compensation Tab & click Calculate Matrix
- Click Finish to proceed to the first sample tube worksheet

Compensation Wizard «
- ✔ 1. Gain Settings
- 2. Acquiring Sample Data
- ✔ <u>Negative Control</u> FITC

Detector & Threshold Settings

Sensor Gain

FSC	4 ▼
BSC	30.0%
FL1: FITC	40.0%
FL2: PE	40.0%

Compensation

Calculate Matrix

Gate Sample

- Load your filtered sample and click **Start** to preview
- As needed, adjust FSC, BSC & Threshold settings
- Click **Restart**, accumulate some data, and **Pause** sample
- Create plots (e.g. Cells > Singlets > Fluorescence plots)
- Advanced Options: Adjust plot scaling, do manual compensation, & create plot overlays
- Create Sort Gates & rename them as needed

Example

Detector & Threshold Settings

Threshold

Channel: FSC   Value: 5.00%

Sensor Gain
- FSC: 5
- BSC: 33.0%

Property Window

Plot Properties

Scale: Biexponential ▼

Maximum Value: 1,000,000 ▼

Minimum Value: -2,500 ▼
-100
-500
-1,000
-1,250
-1,650
-2,000
-2,500

Scale:

Maximum Value:

All Events — Cells: 69.2%
Cells — Singlets: 89.17%
Singlets — B cells: 5.45%, CD3+: 27.55%
CD3+ — CD8+: 18.21%, CD4+: 78.55%

Sort Set-up

- Insert labeled tubes (with collection buffer) into the Tube Holder in the Collection Chamber & close the door.

- Under Sort Control, click Load Collection & set Method (e.g. 5mL for 4-way)
- Set Mode (for details, see *MA900 Sorting Modes Guide*)

Sort Control   ☑ Auto Record
- Sort & Record Start
- Load Collection
- Method: 5 mL Tubes ▼   Sort Settings
- Mode: Purity ▼

Sort Settings - 5 mL Tubes

	Far Left	Left	Right	Far Right
Sort Gate:	F ▼	C ▼	D ▼	E ▼
Stop Count:	0	0	0	0

- Open Sort Settings Window & assign Sort Gates (assign rare subsets to Far L and Far R streams)
- Set Stop Count (0 = non-stop sorting)
- Important: Set Data Recording conditions

Sort Control   ☑ Auto Record

Recording
- Elapsed Time: 00:00:00
- Event Count: 0 / 100,000
- Stop Condition: Event Count ▼
- Stop Value: 100,000

Sorting

- Click **Resume** and **Restart** to check Gating, Event rate, Sample Pressure, & **Droplet** Breakoff
- Do not exceed the suggested Event Rate (for details, see *MA900 Nozzle Guide*)
- In the Sort Control Panel, click **Sort & Record Start** to initiate sorting

- Monitor: the Event rate, Stream, Statistics (efficiency), Sample & Collection Volumes
- **IMPORTANT:** Stop the sample before it runs dry. If needed, run a Purity Check
- Clean MA900 for the next user or Shut Down MA900 & turn off air supply

Finish

HClO Bleach Cleaning / DI Water Rinse — *CLEAN*

OR

Shutdown Wizard
1. Bleach cleaning
2. DI water rinse
3. Shutdown
SHUTDOWN