flowkon Flow Cytometry User Instructions at the University of Konstanz



# autoMACS®- General User instructions

#### autoMACS® Startup Procedure

☑ Check that all bottles are filled up with the appropriate solution. Disconnect storage bottle and connect Running buffer bottle (located in the fridge) to the appropriate blue sensor cable.

Note: The connectors for the fluid bottles are color-coded: blue for Running Buffer, green for washing solution, and red for the waste bottle.

- $\ensuremath{\boxtimes}$  Empty waste bottle and add 100 ml Clean to the bottom.
- ☑ Switch on the instrument. It starts initializing automatically (equilibration).
- ☑ Check the status for fluid container, columns and miniSampler in the status bar.

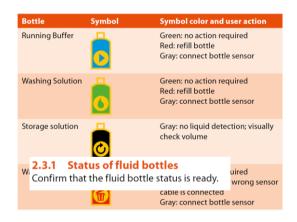




Figure 2.6: MACS MiniSampler status graphic. Left: The MACS MiniSampler was successfully installed. Right: No MACS MiniSampler was detected.

- ☑ To prime the instrument, go to the Separation menu and press wash now, select "Rinse" and press Run.
- $\ensuremath{\boxtimes}$  Instrument is now ready for performance.

### Autolabeling and Cell Separation

- ☑ Use pre-cooled chill rack (4 °C fridge).
- ☑ Prepare cell sample according to recommendations in the respective product datasheet.

☑ Install Reagent rack and Chill rack and place sample tubes:

A = Original sample, B = Negative (depleted) and C = Positive (enriched).

- ☑ Scan product QR-Code or enter order no. manually. Place vials accordingly.
- ☑ Select Separation, highlight the desired sample, define the separation template and assign an autolabeling protocol. Enter the correct sample volume.
- Choose a washing program between different samples and after the last sample (QRinse, Rinse or Sleep; use Clean only when you have sorted from whole blood or bone marrow).
- $\blacksquare$  Run the protocol and click OK in the buffer volume checkbox.

#### Manual labeling and Cell Separation

- ☑ Use pre-cooled chill rack (4°C fridge).
- ☑ Prepare cell sample according to recommendations in the respective product datasheet.
- $\square$  Install Reagent rack and Chill rack and place samples tubes: A = Original sample, B = Negative (depleted) and C = Positive (enriched).
- ☑ Scan product QR-Code or enter order no. manually. Place vials accordingly.
- ☑ Select Separation, highlight the desired sample and define the separation template. Enter the correct sample volume.
- ☑ Choose a washing program between different samples and after the last sample (QRinse, Rinse or Sleep; use Clean only when you have sorted from whole blood or bone marrow).
- $\blacksquare$  Run the protocol and click OK in the buffer volume checkbox.

#### **Cleaning and Shutdown Procedure**

- ☑ After finishing the last separation, the instrument has either been rinsed automatically when programmed as a last washing step OR do it manually.
- $\boxdot$  Press Shutdown icon.
- $\square$  Turn off the instrument.
- ☑ Refill 70% EtOH bottle, put Running buffer back into fridge and install an empty dummy glass bottle.
- $\ensuremath{\boxtimes}$  Clean table and accessories.
- $\ensuremath{\boxtimes}$  Provide information in the LogBook.

# **General Remarks**

- ☑ Detailed instructions are in this folder or check the User manual, which is in the cart below the table.
- ☑ Wash programs in between and after separation:

QuickRinse:	Standard short wash program, only Running Buffer. $\sim$ 1,5 min.
Rinse:	Extensive wash program, Washing solution and Running Buffer. ~3 min.
Clean:	Most stringent wash program. After whole blood or bone
	marrow. ~7 min.
Sleep:	For shut-down with 70% EtOH. ~5 min.

## Questions and Problems

- ☑ Please call the FlowKon staff -3947/-3949 or write an email to flowkon@unikonstanz.de when something is missing or not working properly.
- ☑ If an incident occurs during a session, please report it immediately in the PPMS incident sections so every autoMACS user is aware of this and can re-plan his/her experiments if necessary.