

Note: Running QC takes approximately 5 minutes and should be performed every 24 hours

Windows login: username: FlowAdmin

password: BDIS#1

Warm up instrument and run QC:

1. Ensure instrument is on (black switch on back of instrument) and log into PPMS
2. Open **CytExpert** software and login
username: Admin
password: *****
3. Go to **Cytometer** -> **Initialize**
4. Confirm System Startup program has been performed
5. Vortex the Beckman Coulter QC beads (blue cap, cat # B53230) and deposit 1 drop into the next available well of the 96 well QC plate.
6. Using the DI water bottle, fill the well containing the drop of beads with approximately 200 uL of water
7. Go to **Cytometer** -> **QC & Standardization**
8. Under Plate settings, ensure the well containing the QC beads is selected
9. Note the bead lot number on the vial of QC beads and assign the bead lot number in the software (usually the first number in the drop-down list). If the bead lot # is not available, see **Importing Lot-Specific Target Values** below
10. Load the QC plate (with lid removed) on the cytometer
11. Select **Start** in software and confirm
12. When QC is finished the plate will automatically eject
13. Empty remaining liquid out of the plate by blotting on a Kimwipe
14. Confirm QC passed in the software
15. Clean the cytometer to remove any remaining QC beads (~12 minutes)
 - a. Go to **Cytometer** -> **Daily Clean**
 - b. Fill the wells of the daily clean plate according to the layout on the screen
 - i. Blue wells = DI water
 - ii. Orange wells = Coulter Clenz
 - c. Load the cleaning plate (with lid removed) onto the cytometer, click **Start** and confirm
 - d. When the daily clean is finished, the plate will be automatically ejected
 - e. Remove the daily clean plate and click **Load** to retract the plate holder
 - f. Empty remaining liquid out of the plate for re-use by blotting on a Kimwipe
16. Go to **File** -> **Close QC & Standardization**
17. In the top right-hand side of the software, click **Administrator** -> **Logout**
18. Log out of PPMS

Importing Lot-Specific Target Values

1. Open CytExpert QC screen
2. Select **Target Library** from **Settings** menu
3. Select **Download Target File**
4. In **Search By Product** section, choose the following from the drop down menu and select **Search**:

- a. Market: Research and Discovery
 - b. Product Line: Flow Cytometry
 - c. Product Platform: Instruments
 - d. Product: CytoFLEX
 - e. Software Name: CytoFLEX QC Fluorospheres Target
 - f. Lot Number: All
 - g. Language: English
5. Using the Lot No. for the new beads, select **CytoFLEX QC Fluorospheres Target Values** under the **Software Name column**
 6. Select **Download** for the correct Lot No. and **Save** to ...
 7. In the CytExpert software, select **Import** from the Target Library window
 8. Navigate to the file downloaded in step 6 and select **Open**
 9. **Close** the Target Library window
 10. New Lot No. will now be available to select for QC
 11. If QC fails with a new bead lot number, select Yes to software prompt about adjusting gains (may happen 3 times before target gain values are established for new lot number)