

## Luminex® MAGPIX® Quick Guide



For full details, reference the software manual

- 1. Turn on instrument – there are two power switches, one on the back and one on the front; check both**
  - 2. Turn on computer**
  - 3. Open xPonent® software**
  - 4. Adjust probe height if probe has been removed** (Page 115 of xPonent Software Manual)
    - a. Go to Maintenance > Probe & Heater
    - b. Use 2 discs in 96-well plate only
  - 5. Run enhanced startup routine**
    - a. Maintenance > Cmds & Routines > Enhanced Startup Routine (dropdown menu)
    - b. Fill off-plate reagent reservoir with appropriate reagents
      - i. diH<sub>2</sub>O
      - ii. 70% EtOH
      - iii. 0.1N NaOH
- NOTE:** Enhanced Startup Routine takes approximately 15 minutes
- 6. If needed, run calibration and verification**
    - a. Go to Maintenance > Auto Maint
    - b. Warm reagents to room temperature
    - c. Vortex vigorously before dropping into strip wells
    - d. 6 drops per reagent

**NOTE:** Full calibration/verification takes approximately 20 minutes

## 7. Create protocol

- a. SETTINGS / STEP 1:
  - i. Follow instrument setting instructions in assay protocol for sample volume
  - ii. Volume: This is how much of the sample / well will be aspirated
  - iii. Analysis Type: Quantitative Protocol
  - iv. Enter number of standards (do not include the blank)
  - v. Unless required in the PDF result file, leave controls as zero
- b. ANALYTES / STEP 2:
  - i. Select Bead Regions
  - ii. Name analytes
  - iii. Count = 50
  - iv. Units = pg/mL
  - v. Click Apply All
- c. PLATE LAYOUT / STEP 3:
  - i. Change Replicate Count
  - ii. Assign Background and Standards – this can be changed in the batch

**NOTE:** All users can share a protocol if running the exact same analytes and bead regions

## 8. Create standard curve for protocol

- a. Go to Protocols Tab > Stds & Ctrl's > Create New Std/Ctrl Lots
- b. Choose protocol from dropdown menu
- c. Enter highest concentration
  - i. This information is on the Certificate of Analysis or Standard Value Card
- d. Enter dilution as a whole number
  - i. Not sample dilution! Dilution factor of the standard curve
- e. Highlight and Apply All using arrows

## 9. Create batch

- a. Select Protocol
- b. Associate Std Curve
- c. Assign Unknown Sample Wells
- d. Program any options specific to your batch
  - i. Add wash steps
  - ii. Add multiple plates
- e. Name Samples (optional)
  - i. Can Import List – comma delineated list of Sample ID and Dilution Factor
- f. Add Sample Dilution Factor
  - i. If you add sample names after sample dilution factor, you will need to add sample dilution factor again

## 10. Results

- a. Go to Results > Saved Batches > Select Batch to Analyze
- b. Check box for all analytes
- c. Generate report
- d. SAVE AS .PDF: Save All Button
- e. SAVE AS EXCEL: Save Button for each different analyte

## 11. System shutdown

- a. Remove Assay Plate
- b. Go to Maintenance > Auto Maint > Shutdown
- c. Fill off-plate reagent reservoir block with appropriate reagents and run Shutdown
- d. Remove off-plate reagent reservoir block, empty it, and replace it in the instrument
- e. Exit xPonent software and shut down the instrument and computer

**NOTE:** System shutdown takes approximately 5 minutes

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