QA/QC of Prints

Each new print must be checked for quality and approved for general lab use.

Fill out Microarray Printing Quality Control Worksheet.

Pre-Processing Quality Check

To check spot quality select slides # 1, 50 and 96. View slide under inverted fluorescent microscope located in Room D260(tissue culture room). View each pin carefully and circle quality of spots on the worksheet.

Check the autofluorescence of slides # 1, 50 and 96 by scanning with 532nm laser set at 1000 PMTs. View image and circle quality of image on worksheet.

Post-Processing Quality Check

After slides have been crosslinked and blocked, check the autofluorescence of slides # 1, 50 and 96 by scanning with 532nm laser set at 1000 PMTs. View image and circle quality of image on worksheet.

Stain slide #1, or whichever slide has been marked with the grid, with POPO3 DNA stain by following the POPO3 staining protocol. View image and circle quality of image on worksheet.

Label and hybe slide #2 according to label and hybe protocol. Follow QA/QC protocol for hybridizations.

Review all results with Print Masters and Supervisors.

If print is approved get signatures from Print Masters and Supervisors.

Get GIPO from bioinformatics and signature of person who approves GIPO is correct for print.

Compile all worksheets from printing and QA/QC. Fill out print log sheet and add slide sign out sheet. Make a copy of all sheets. Place one copy in Print Log Book located in room D224, and place second copy in duplicate print log book located in room D218A.

Inform Slide Masters, who will fill out Slide Sign Out sheets and assign slides to lab members who have requested slides. When slide supply is running low, Slide masters will inform Print Masters that another print is needed.

Microarray Printing Quality Control

Print Type
Print Number
Poly-L-Lysine Lot # Exp Date
Age of Slides at start of print
Date print started
Date print ended
Hours active (printing)
Hours non-active (nights, weekend)

Spot quality- microscope - circle all that apply Slide #1

Pin1 - uniform small medium large double fragmented #missed Pin2 - uniform small medium large double fragmented #missed Pin3 - uniform small medium large double fragmented #missed Pin4 - uniform small medium large double fragmented #missed Pin5 - uniform small medium large double fragmented #missed Pin6 - uniform small medium large double fragmented #missed Pin7 - uniform small medium large double fragmented #missed Pin8 - uniform small medium large double fragmented #missed Slide#50 Pin1 - uniform small medium large double fragmented #missed Pin2 - uniform small medium large double fragmented #missed Pin3 - uniform small medium large double fragmented #missed Pin4 - uniform small medium large double fragmented #missed Pin5 - uniform small medium large double fragmented #missed Pin6 - uniform small medium large double fragmented #missed Pin7 - uniform small medium large double fragmented #missed Pin8 - uniform small medium large double fragmented #missed Slide#96 Pin1 - uniform small medium large double fragmented #missed Pin2 - uniform small medium large double fragmented #missed Pin3 - uniform small medium large double fragmented #missed Pin4 - uniform small medium large double fragmented #missed Pin5 - uniform small medium large double fragmented #missed Pin6 - uniform small medium large double fragmented #missed Pin7 - uniform small medium large double fragmented #missed Pin8 - uniform small medium large double fragmented #missed

Autofluorescence pre processing:

Slide#1 - low medium high uniform patchy Slide#50 - low medium high uniform patchy Slide#96 - low medium high uniform patchy

Date of Crosslinking Pyrrilidinone Lot # Succinic Anhydride Lot # Ethanol , Isopropanol, Water Date of Blocking

Autofluorescence post-processing:

Slide#1 - low medium high uniform patchy Slide#50 - low medium high uniform patchy Slide#96 - low medium high uniform patchy

POPO3 staining DNA spotting quality - circle all that apply

Slide#1

Pin1 – size-small/medium/large, intensity-high/medium/low, double fragmented

Pin2 - size-small/medium/large, intensity-high/medium/low, double fragmented

Pin3 - size-small/medium/large, intensity-high/medium/low, double fragmented

Pin4 - size-small/medium/large, intensity-high/medium/low, double fragmented

Pin5 - size-small/medium/large, intensity-high/medium/low, double fragmented

Pin6 - size-small/medium/large, intensity-high/medium/low, double fragmented

Pin7 - size-small/medium/large, intensity-high/medium/low, double fragmented

Pin8 - size-small/medium/large, intensity-high/medium/low, double fragmented

Test Hybe - Slide # 2 - see QA/QC sheet

Comments: