

## Slide Stripping Protocol – Agilent Yeast Arrays

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variant of the Young lab protocol

1. The glue from the labels on the arrays causes a green residue. Remove the labels, keeping the one with the barcode written on it. On the back of each slide, where the numbered barcode stocker used to be, use a glass etcher to write the last few digits of the barcode.

2. Prepare 2 liters of 100mM potassium phosphate buffer, pH 6.6:

76.2 mL 1M  $K_2HPO_4$   
123.8 mL 1M  $KH_2PO_4$   
water to 2 L  
filter sterilize

3. Aliquot about 625 mL of the buffer into each of two 1 L flasks and microwave for 5 minutes. Stop and swirl flasks at about 2.5 minutes left. The buffer should be about 60-70°C after microwaving. Aliquot the remaining buffer into a glass dish w/cover and leave at room temperature.

4. While the buffer is microwaving, put your microarray slides in a slide rack (use the one w/plastic screw legs). Make sure they are spaced out well enough so that the array surface will be adequately exposed to the buffer during stripping.

5. Pour the heated buffer into a 4 L beaker, add a thermometer and stir bar, and place on a stirring/hot plate. Place the slide rack w/slides into the buffer, turn the temperature knob to its highest setting (10), and begin stirring (7-8). Make sure that all the slides are fully submerged in the buffer.

6. Tightly cover the beaker with foil and place a styrofoam rack (from the 50mL falcon tubes) on top for insulation. Make sure the thermometer is positioned so that you can read it easily.

7. It should take about 10 minutes for the buffer to begin boiling (100°C). Boil the slides for 5 minutes (start timing when buffer reaches 100°C). Try to keep the temperature of the buffer below 105°C by adjusting the temperature knob and/or removing the styrofoam rack from the top.

8. Transfer the slide rack w/slides from hot buffer to the glass dish filled with room temperature buffer. Cover, and let cool for 2 minutes.

9. Spin dry using an individual slide spinner or use the centrifuge with slide rack attachments and paper towels (500RPM, 2 min, @ room temperature!).

10. Reapply barcode label to the array side of the slide.

11. Scan slides to check stripping quality. Discard any that look very streaky or speckly or still have residual signal. You can attempt to restrip slides with residual signal. Store the slides in a slide box and leave in a drawer upstairs to allow ozone to degrade any remaining dye. After a week, you may want to store stripped slides in a dessicator if you are not planning on using them in the near future.