

Slide Coating (polylysine treatment)

Date _____

During all procedures wear powder free gloves and wash fresh gloves with soap and water. This protocol is for coating 60 slides.

1. Load 60 slides (GoldSeal) into stainless steel slide racks (30 slides/rack). Check each slide for scratches and defects. Discard any questionable slides.
2. Prepare cleaning solution as follows: 350ml/slide rack

<u>For 350ml</u>	<u>For 700ml</u>	
50g NaOH	100g NaOH	Lot# _____
100ml MQ H ₂ O	200ml MQ H ₂ O	NaOH (g) _____
250ml 95% EtOH	500ml EtOH	

Dissolve NaOH in water and slowly add EtOH (**Caution EXOTHERMIC Rx**)
Add additional MQ H₂O until solution is clear (about 100ml/350ml solution)

3. Add 350ml of cleaning solution to each glass dish with slides. Cover dishes with glass and shake gently for 2 hrs.
4. Remove slides from cleaning solution and plunge into 400ml fresh MQ water in dish. Plunge up and down vigorously and shake for 5 minutes.
5. Repeat this wash step 5 times with fresh MQ water for each wash. It is imperative that all NaOH is removed before polylysine coating. X X X X X
6. Prepare polylysine solution

<u>For 350ml</u>	<u>For 700ml</u>	
35ml polylysine (Sigma)	70ml polylysine	Lot# _____
35ml 1X PBS (filtered)	70ml 1X PBS	Expiration Date _____
280ml MQ H ₂ O	560ml MQ H ₂ O	

7. Add 350ml of polylysine solution to a clean glass dish and submerge washed slides (in rack) and shake gently for 1hr.
8. Remove slides from polylysine and rinse by plunging 10X into fresh MQ H₂O.
9. Spin slides in slide rack at 500 RPM, 5 minutes, wrap slides in aluminum foil and place slides in 42°C oven for 2-3 hrs.

Note. At this point you want to minimize exposure of slides to dust. Working in a hood, transfer slides to clean slide box and label box with the date that the slides were coated and name of person performing coating.

**Slides must be aged at least 2 weeks prior to printing. The aging allows slides to become sufficiently hydrophobic so that printed DNA is maintained in compact spot.