Preparation of Slides

Last updated: **October 6, 1999**

Materials	Qty	Order info	
Glass microscope slides	60	Gold Seal #3010	
Slide rack	2	Shandon Lipshaw #121 (800-245-6212)	<= Each rack holds 30 slides
Slide chamber	6	Shandon Lipshaw #121	<= Each chamber holds 350 mL
ddH2O	~5 L		
NaOH	70 g		
95% Ethanol	420 mL		
Poly-L-lysine	70 mL	Sigma #P 8920	
Tissue culture PBS	70 mL		
Vacuum oven (45C)			
Slide box (plastic only)	1	**VWR #48443-806**	

1. Place slides in slide racks. Place racks in chambers.
2. Prepare CLEANING SOLUTION:
   Dissolve 70 g NaOH in 280 mL ddH2O.
   Add 420 mL 95% ethanol. Total volume is 700 mL (= 2 X 350 mL); stir until completely mixed.
   If solution remains cloudy, add ddH2O until clear.
3. Pour solution into chambers with slides; cover chambers with *glass* lids. Mix on orbital shaker for 2 hr.
   Once slides are clean, they should be exposed to air as little as possible. Dust particles will interfere with coating and printing.
4. Quickly transfer racks to fresh chambers filled with ddH2O. Rinse vigorously by plunging racks up and down.
   Repeat rinses 4X with **fresh ddH2O each time**. *It is critical to remove all traces of NaOH-ethanol.*
5. Prepare POLYLYSINE SOLUTION:
   70 mL poly-L-lysine + 70 mL tissue culture PBS in 560 mL water.
   Use plastic graduated cylinder and beaker.
6. Transfer slides to polylysine solution and shake 15 min. - 1 hr.
7. Transfer rack to fresh chambers filled with ddH2O. Plunge up and down 5X to rinse.
8. Centrifuge slides on microtiter plate carriers (place paper towels below rack to absorb liquid) for 5 min. @ 500 rpm.
   Transfer slide racks to empty chambers with covers for transport to vacuum oven.
9. Dry slide racks in 45C vacuum oven for 10 min. *(Vacuum is optional.)*
10. Store slides in closed slide box **(plastic only, without rubber mat bottom)**
11. BEFORE PRINTING ARRAYS:
    Check that polylysine coating is not opaque.
    Test print, hyb and scan sample slides to determine slide batch quality.