Slide coating with poly L-Lysine

(1) Microscopic slides should first be washed with a washing solution for 2 hours. The washing solution consists of: 35g NaOH in 140ml ddH_2O and 210ml 95% ethanol. Total volume is 350ml. Mix on orbital shaker for 2hrs.

(2) When the slides are clean, they shouldn't be exposed to air for a long time since dust will easily be adsorbed. Quickly transfer the cleaned slide on a tray filled with water.

(3) Rinse at least 4X ddH_2O. It is critical to remove all trace of NaOH and ethanol. Let them to dry.

(4) Prepare **Poly L-Lysine solution** as the following:
Purchase **Sigma** stuff (**P 9155**: 5mg lyophilized poly L-lysine bottle). Dissolve it with 50ml of sterile water (use 0.22μm filter membrane and inject the filtered water with a syringe inside the bottle to keep it sterile).
This stock is **5mg/50ml = 0.1mg/ml = 0.01%.**

Take 5ml of the stock and add it to 20ml water → total is 25ml. Mix and add 250μl/slide, distribute evenly and let it dry.

An alternative protocol:

1. Place glass slides into glass bottomless slide racks and place in a beaker.

2. Add an appropriate volume of 1M HCl (enough to cover the racks)
1M HCl = 86.2 ml in 1 liter.

3. Boil for 10 minutes.

4. Place beaker under steady stream of water until the slides are completely rinsed.

5. Dip each rack (1 at a time) into the poly-L lysine solution in a glass bowl for 10 minutes (400 ml)
Poly-L lysine solution: 50 μg/ml in 10 mM Tris pH 8 (0.02 g Poly-L lysine in 396 ml water and 4 ml 1M Tris pH 8).

6. Let slides dry on bench (make sure they are covered so nothing sticks to them).

7. Place sides in a clean, covered slide rack.