MICROARRAY FACILITY

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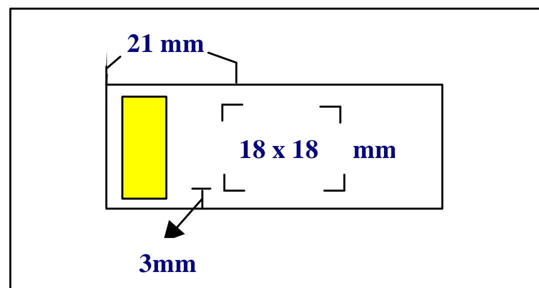
Protocol #: D03

Preparation of Denatured Microarray Slide for hybridization

Note: a. Slides should be kept in a slide box all the time during storage of transportation.
b. Do not introduce any ink on the slide. It will generate fluorescent background.
c. In general, all arrayed slides are baked (will state otherwise). No further DNA cross-linking procedure is required.

1. Before starting, place slide on a piece of paper (a 3" x 5 " Post-It works fine) and draw an outline around it. Then, mark the area that the array is printed on (according to the printing layout). See the example below:



M1K testslide
H1K testslide

2. Arrayed DNA is vapor moistened (~2 second) over boiling water.
3. Heat snap slide on a hot plate (~2 second or it easily breaks).
4. Dissolve 1 gram of succinic anhydride (sigma) in 63 ml of n-methyl-pyrrilidinone.
5. To this, add 7 ml of 0.2 M NaBorate, Ph 8.0, and stir until dissolved (Boric Acid pH'd with NaOH).
6. Sock arrays in this solution for 15-30 min with gentle shaking (the solution should cover the entire array area).
   *If you need to prepare more solution, scale up the component in propotion.
7. Rinse slide in 0.1% SDS for 30 seconds.
8. Rinse slide in filtered water for 1 min with one quick change of water.
9. Boil slide in 95° C water for 5 min.
10. Duck into ice-cold ethanol for 1 min.
11. Remove excess ethanol from slides by spinning the slide in a 50-ml conical tube at 1,500 rpm, RT for 5 min.
12. Slides are now ready for hybridization.