9-mer Hybridization Protocol

Visualization of printed DNA as a quality control check can be easily performed by hybridizing the array with a Cy-labeled random 9-mer sequence at room temperature.

Basic Protocol:

- use 150 pmol of Cy labeled 9-mer in a regular Hybridization mix
- hyb at Room Temperature 3-5 min.
- wash slide
- scan

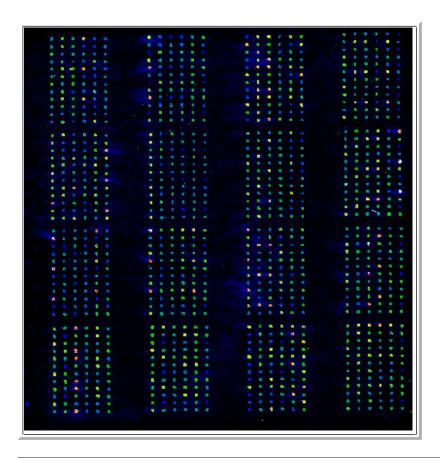
for 20 ul 9-mer Hyb Mix:

Target	Amount	Stock
4x SSC	4 ul	20x
1 mg/ml poly-dA	2 ul	10 mg/ml
50 mM HEPES pH 7 (or Tris pH 7.5)	1 ul	1 M
0.2% SDS	0.4 ul	10% SDS
7.5 uM Cy3 random 9-mer	150 pmols	?
Total Volume to 20 ul with H2O		

- 1. Briefly heat probe to 90 deg C.
- 2. Cool by Spinning in Microfuge (don't place on ice or SDS will precipitate)
- 3. Pipet probe onto slide and use coverslip as you would for a normal hybridization.
- 4. Allow to incubate at room temperature for 3 to 5 minutes.
- 5. Wash slide in 2X SSC 0.2% SDS
- 6. Wash slide in 0.05X SSC
- 7. Dry slide by spinning slide rack or by placing slide in 50 ml Falcon tube, and spinning at 500-1000 RPM for 5 min.

Notes:

The Tm for a 9-mer ranges from about 4 to 40 degrees Celsius. The average will likely be below room temperature. So the things to consider with this protocol are Temperature, salt concentration, and oligo concentration.



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