

## Revised N.B. protocol --- Use of Hybridization Oven Hongwei Cheng, 11/21/02, commented by TCH

Buffer preparation:

50mM NaOH/10mM NaCl:  
1N NaOH            25ml  
5M NaCl            1ml

-----  
                  Q.S. to 500ml  
10x Sodium Phosphate Buffer:  
Na<sub>2</sub>HPO<sub>4</sub>            160.8gm  
NaH<sub>2</sub>PO<sub>4</sub>            55.2gm

-----  
                  Q.S. to 4 L.

Pretreatment of gel:

- Wash with ddH<sub>2</sub>O x 10min.
- Wash with 50mM NaOH/10mM NaCl x 20min.
- Wash with 1x Sodium Phosphate Buffer x 20min.

Transfer:

- Set up transfer device (from bottom to top):  
          glass > bridge filter paper (two pieces) > filter paper (two pieces) > gel  
(face down)  
          > membrane > filter paper (two pieces) > paper towels > glass > heavy  
thing
- Transfer in 1x Sodium Phosphate Buffer for 24 hr.
- Harvest the membrane, mark lane position on the top of it
- Wash the membrane with 1x Sodium Phosphate Buffer, let air dry briefly
- Autolink (1200uJ/cm<sup>2</sup>) in Stratalink with RNA side facing up

Prehybridization, Hybridization and Washes:

- Turn on the hybridization oven. Set up the temperature by press the “menu”  
and the “Δ” or “∇” button
- Put the membranes into hybridization tubes

- Add 8-12ml pre-warmed (at 65<sup>0</sup>C) QuikHyb (Stratagene, shake well!) into the tubes, according to the tube's size
- Prehyb at 68<sup>0</sup>C for 20min, or longer
- Add labeled probe directly into the tubes and mix well by shaking
- Hyb at 68<sup>0</sup>C for 1-2 hrs.
- Wash with 0.3x SSC/0.1% SDS at 65<sup>0</sup>C for 5-40min in water bath
- Wash twice with 0.1x SSC/0.1% SDS at 65<sup>0</sup>C briefly

Wrap the membrane and expose film or expose to a phosphoimager screen.