PROTOCOL FOR WESTERN BLOTTING Lan Zhou 2/20/01, Edited by JYP 8/12/02

- 1. First, run the samples in SDS-PAGE.
- 2. Fetch and mark the membrane (right size) with pencil; then soak it in MeOH and wash it under tap water.
- 3. Equilibrate the membrane, pads and transfer foam in transfer buffer (store in 4°C) for 5 minutes.
- 4. Assemble transfer sandwich like as follows and put it into transfer tank.
- 5. Run: 250mA and 70 minutes in cold room.
- 6. Blocking: block the membrane in cold room (rocking) with blocking solution (5-10% milk-TSBT) @ 4°C O.N. or @ RT 2hrs.
- 7. Trim the membrane as small as possible.
- 8. Prep first antibody solution: Calculate the total volume needed and prepare it (dilute the primary antibody with blocking solution (1:500-1:1000)).
- 9. Place the membrane into the 1st antibody solution and rock it for 1--2 hours @ RT.
- 10. Wash the membrane with TSBT 5 minutes X 3 (rocking).
- 11. Prepare 2nd antibody solution with TSBT (1:15,000) and put the membrane in it for 20-30 minutes (rocking).
- 12. Wash it with TSBT 5 minutes X 3.
- 13. Mix the ECL Dection Reagents 1 and 2 (1:1 volume).
- 14. In dark room, add the mix directly to the membrane and incubate for 60 seconds and drain off with paper.
- 15. Wrap the membrane and put the fluorescent marker on the membrane.
- 16. Place them into a film cassette and expose to X-ray film for 10 or 30 seconds.
- 17. Let the Development System treat the film.

Or

14a. Let the membrane soak in the solution for 60 seconds and expose it by Imagestation.

TBST (Tris-Buffered Saline-Tween-20):

10mM Tris-HCI (pH8.0) 150mM NaCl 0.05% Tween-20 (after all and water are mixed, add tween-20)

Transfer Buffer:

800ml Methanol 12.12g Tris 57.63g Glycine -----4L