Immunofluorescence Cell Staining

Written by Seok-Yong Choi in 2003

- 1. Take out the coverslip and drain it onto Kimwipes.
- 2. Put the coverslip in 6-well plate having 3% paraformaldehyde (PFA) and let stand for 15 min.
- 3. Wash cells 3X with PBS for 10 min.
- 4. Replace fixing solution with 0.2% Triton X-100/1% normal goat serum (NGS) in PBS and let stand for 5 min on ice.
- 5. (Optional) When staining nucleic acid, after 3X 10-min washing with PBS, add dyes, let stand for 5-10 min and wash 2x with PBS, 10 min each
- 6. Wash cells 3X with 1% NGS in PBS, 10 min each.
- 7. Transfer coverslip to a piece of parafilm set on a flat surface. Add 100 µl of primary antibody diluted in 5% NGS in PBS. Incubate at RT for 1 hr.
- 8. Remove the antibody solution from a coverslip, and wash 3X with 200 μl of 1% NGS in PBS, 10 min each.
- 9. Add 100 μ l of secondary antibody diluted in 5% NGS in PBS to coverslips, and incubate at RT for 1 hr.
- 10. Wash 3X with 200 µl of PBS, 10 min each.
- 11. Mount the coverslip on the slide with Vectashield.
 - 12 mm round coverslip: 3 µl of Vectashield or 4 µl of Prolong
 - 18 mm rectangle coverslip: 8 μl of Vectashield or 10 μl of Prolong
- * Approximately 2 ml of 5% NGS in PBS is required for the staining of each coverslip.