Intracellular Cytokine Staining

Cells can be counterstained for surface markers to get cell-specific results. Cytofix/CytopermTM, Perm/WashTM Buffer, and GolgiPlugTM are available in a kit (Cat. No. 555028) or as single reagents from BD Biosciences. Cytokine-specific antibodies are available from multiple vendors.

- 1. After samples have been stimulated for the appropriate amount of time add $1\mu L/mL$ of GolgiPlugTM and incubate for 5 hours at 37°C in 5% CO2.
- 2. Resuspend cells in 100µL of Cytofix/Cytoperm[™] solution and incubate on ice for 20 minutes in the dark.
- 3. Add 100µL of 1x Perm/Wash[™] Buffer, centrifuge at 1400rpm for 10 minutes, and repeat wash 2 more times with 200µL of Perm/Wash[™] Buffer.
- 4. Resuspend in 50µL of Perm/Wash[™] Buffer and 0.05-0.1µg/mL of anticytokine antibody and incubate at 4°C for 30 minutes in the dark.
- 5. Wash cells 3 times with Perm/WashTM Buffer and twice with 5% FBS in PBS.
- 6. Resuspend cells in 2% Formaldehyde/PBS and analyze.
 - a. Alternatively, cells can be stored at 4°C in the dark until acquisition (best within 24hrs).