

Characterization of Cytokine Secretion by Multiplexing (continued)

Luminex

Luminex Screening and Performance Assays utilize color-coded polystyrene or superparamagnetic beads coated with analyte-specific antibodies. Beads recognizing different target analytes are mixed together and incubated with the sample. Captured analytes are subsequently detected using a cocktail of biotinylated detection antibodies and a streptavidin-phycoerythrin conjugate.

User-selected combinations of analytes can be assembled with our Luminex Assay Online Ordering Tool. The ordering tool walks you step-by-step through choices of screening or performance assays, polystyrene or magnetic bead formats, species, and target analytes of interest.

Luminex Screening Assays

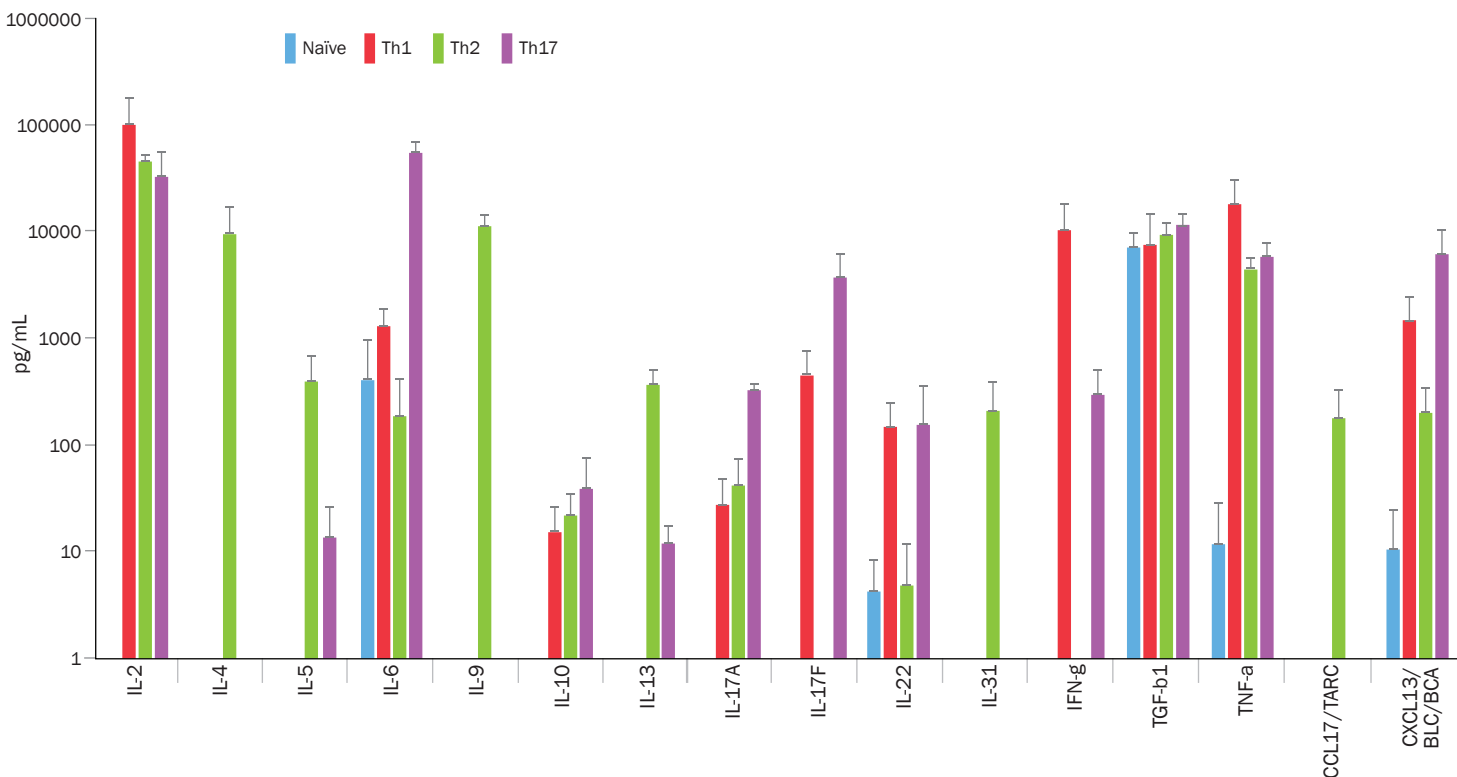
Luminex Screening Assays are the most flexible bead-based multiplex assays that we offer. They allow up to 100 user-defined target analytes to be simultaneously profiled using cell culture supernates, serum, or plasma samples.

Polystyrene beads are designed for use with the Luminex 100™, Luminex 200, or Bio-Rad® Bio-Plex® dual-laser analyzers.

Magnetic beads are compatible with Luminex MAGPIX®, Luminex 100, Luminex 200, and Bio-Rad Bio-Plex analyzers.

Luminex Performance Assays

Luminex Performance Assays are the most accurate and precise bead-based multiplex assays for simultaneously measuring up to 22 analytes in qualified complex matrices.



Detection of Cytokines Secreted by Polarized Human CD4⁺ T Cells Using Luminex Screening Assays. Naïve T cells were isolated from PBMCs of three donors using the MagCelect Human Naïve CD4⁺ T Cell Isolation Kit (Catalog # MAGH115). For Th1 differentiation, cells were treated with CellXVivo Human Th1 Cell Differentiation Kit (Catalog # CDK001) reagents. For Th2 differentiation, cells were treated with Mouse Anti-Human CD3 ϵ Monoclonal Antibody (Catalog # MAB100), Recombinant Human IL-2 (Catalog # 202-IL), Recombinant Human IL-4 (Catalog # 204-IL), Mouse Anti-Human IFN- γ Monoclonal Antibody (Catalog # MAB285), and Mouse Anti-Human CD28 Antibody. For Th17 differentiation, cells were

treated with Mouse Anti-Human CD3 ϵ Monoclonal Antibody (Catalog # MAB100), Recombinant Human IL-2 (Catalog # 202-IL), Recombinant Human IL-23 (Catalog # 1290-IL), Recombinant Human IL-1 β (Catalog # 201-LB), and Mouse Anti-Human CD28 Antibody. Analytes were measured in a single Luminex Screening Assay with polystyrene beads (Catalog # LXSAH). TGF- β levels were determined using the TGF- β 1,-2,-3 Luminex Performance Assay. Assays were read using a Luminex LX100/200 instrument calibrated for polystyrene beads. Data represent averaged values from the three donors.