

**Table 1. Common Interfering Substances Lead to False Positives in Competitor Luminex Assays**

Normal					
Analyte	R&D Systems Luminex Performance Assay	R&D Systems Luminex Screening Assay	Competitor 1	Competitor 2	Competitor 3
TNF- $\alpha$	—	—	—	—	—
IFN- $\gamma$	—	—	—	—	—
GM-CSF	—	—	—	—	—
IL-10	—	—	—	+	—
IL-2	—	—	—	—	—
IL-4	—	—	—	—	—
IL-5	—	—	—	—	—
HAMA-high					
Analyte	R&D Systems Luminex Performance Assay	R&D Systems Luminex Screening Assay	Competitor 1	Competitor 2	Competitor 3
TNF- $\alpha$	—	—	—	—	—
IFN- $\gamma$	—	—	—	++	—
GM-CSF	—	—	—	+++	—
IL-10	—	—	—	++	—
IL-2	—	—	—	++	—
IL-4	—	—	—	—	—
IL-5	—	—	—	—	—
RF-high					
Analyte	R&D Systems Luminex Performance Assay	R&D Systems Luminex Screening Assay	Competitor 1	Competitor 2	Competitor 3
TNF- $\alpha$	—	—	—	++	+
IFN- $\gamma$	—	—	—	++	—
GM-CSF	—	—	—	+++	—
IL-10	—	—	—	+	—
IL-2	—	—	—	++	—
IL-4	—	—	—	++	+
IL-5	—	—	—	+	—

Serum samples confirmed to be Human Anti-Mouse Antibody-high (13-41.5 ng/mL; HAMA-high) or Rheumatoid Factor-high (30-42 IU/mL; RF-high) were purchased from ProMedDx. Normal serum was collected from apparently healthy donors. Seven analytes common to Luminex panels from R&D Systems and leading companies were run simultaneously. High concentrations of HAMA or RF caused false positive readings (i.e., measureable signal within the standard curve; +) by Luminex assays manufactured by two of the three competitor assays. No false positives were observed using the R&D Systems assays.