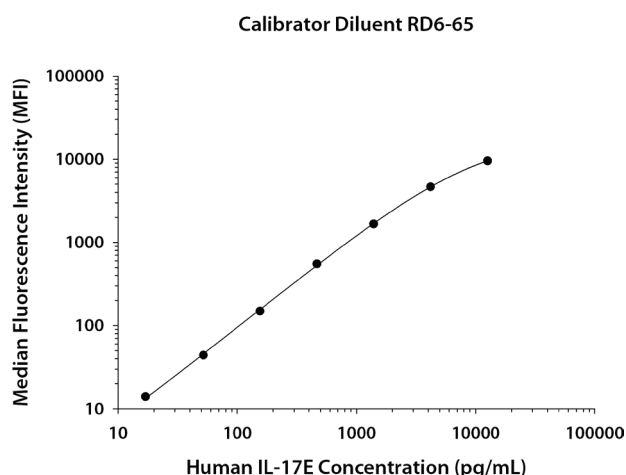


- Recommended Sample Types** • Cell culture supernates, serum, EDTA plasma, and heparin plasma
- Microparticle Region** • Region-51
- Components** • Human IL-17E/IL-25 Magnetic Microparticles (Part 898810) is supplied as a 100X concentrated stock (0.075 mL) with preservatives.
- Other Supplies Required** • Magnetic Luminex® Performance Assay Human XL Discovery Base Kit (R&D Systems®, Catalog # LUXLM000).
- Storage** • Store the unopened kit at 2-8 °C. Do not use past the expiration date on the label.  
• **Avoid freezing microparticles.**  
• **Protect microparticles from light.**
- Instructions for Use** • Refer to the base kit insert for the Magnetic Luminex® Performance Assay procedure.

**TYPICAL DATA**

This human IL-17E standard curve is provided only for demonstration. A standard curve must be generated each time an assay is run, utilizing values from the Standard Value Card included in the base kit.



Standard	(pg/mL)	MFI	Average	Corrected
Blank	0	13 14	14	—
1	12,570	9537 9611	9574	9560
2	4190	4602 4725	4664	4650
3	1397	1665 1691	1678	1664
4	466	549 583	566	552
5	155	159 167	163	149
6	52	57 60	58	44
7	17	27 28	28	14

**PERFORMANCE CHARACTERISTICS**

All data were collected with assays run as a multiplex.

**Sensitivity** - The Minimum Detectable Dose (MDD) was determined by adding two standard deviations to the mean MFI of twenty zero standard replicates and calculating the corresponding concentration.

Six assays were evaluated, and the MDD of human IL-17E ranged from 1.88-4.95 pg/mL. The mean MDD was 1.95 pg/mL.

## PRECISION

**Intra-assay Precision** (precision within an assay) - Two samples of known concentration were tested twenty times on one plate to assess intra-assay precision.

**Inter-assay Precision** (precision between assays) - Two samples of known concentration were tested in twenty-five separate assays to assess inter-assay precision.

Sample	Intra-Assay Precision		Inter-Assay Precision	
	1	2	1	2
n	20	20	25	25
Mean (pg/mL)	94.5	3574	92.0	3618
Standard deviation	1.59	62.2	13.2	468
CV (%)	1.7	1.7	14.3	12.9

## RECOVERY

Samples containing and/or spiked with human IL-17E were evaluated for recovery.

Sample Type	Average % Recovery	Range
Cell culture supernates	110	80-131%
Serum	87	54-110%
EDTA plasma	87	61-105%
Heparin plasma	90	67-107%

## LINEARITY

Samples containing and/or spiked with human IL-17E were serially diluted to evaluate assay linearity.

		Cell culture supernates	Serum	EDTA plasma	Heparin plasma
1:2	Average % of Expected	98	121	112	111
	Range (%)	88-112	107-131	104-123	107-115
1:4	Average % of Expected	98	121	119	127
	Range (%)	85-116	98-136	106-138	120-133
1:8	Average % of Expected	98	123	119	132
	Range (%)	84-117	97-140	102-143	124-144

## SPECIFICITY

**Note:** Refer to the base kit insert for a complete list of analytes tested for cross-reactivity and interference.

This assay recognizes natural and recombinant human IL-17E.

Recombinant human IL-17B R interferes at concentrations > 0.823 ng/mL.

## TECHNICAL HINTS

- Protect the microparticles and streptavidin-PE from light at all times.
- Refer to the Base Kit Standard Value Card for reconstitution volume and values of the reconstituted standard.
- Diluted microparticles cannot be stored. Make a fresh dilution of microparticles each time the assay is run.
- The use of a magnetic device made to accommodate a microplate is necessary for washing.
- Discrepancies may exist in values obtained for the same analyte utilizing different technologies.

Magnetic Luminex® Performance Assays afford the user the benefit of multi-analyte analysis of biomarkers in a complex sample. For each sample type, a single, multipurpose diluent is used to optimize recovery, linearity, and reproducibility. Such a multipurpose diluent may not optimize any single analyte to the same degree that a unique diluent selected for analysis of that analyte can optimize conditions. Therefore, some performance characteristics may be more variable than those for assays designed specifically for single analyte analysis.