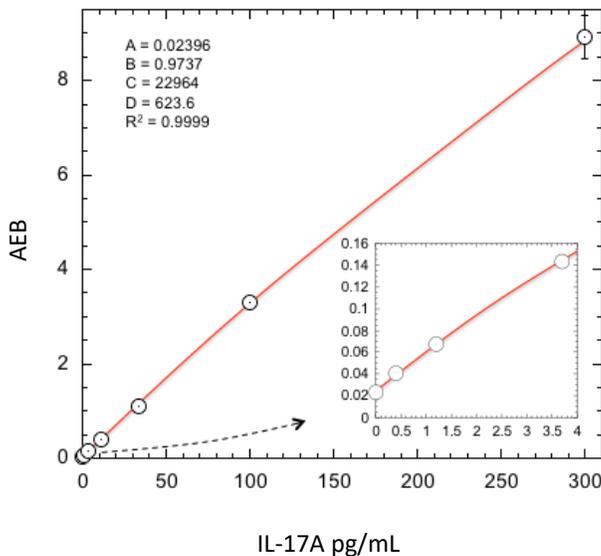


Description

Mouse Interleukin 17A (IL-17A) is a cytokine of 158 amino acids (molecular weight 21 kDa) and a member of an IL-17 family of related cytokines (IL-17B through IL-17F). All IL-17 cytokines have a similar protein structure, and no sequence similarity to any other cytokines. These cytokines are well conserved in mammals, with significant sequence conservation between the human and mouse homologs. A major role of IL-17A is its involvement in inducing and mediating proinflammatory responses. It acts as potent mediator in delayed-type reactions by increasing chemokine production in various tissues to recruit monocytes and neutrophils to the site of inflammation, similar to interferon gamma. IL-17A is produced by T-helper cells and is induced by IL-23 which results in destructive tissue damage in delayed-type reactions. IL-17 induces the production of many other synergistic cytokines, including GM-CSF, IL-6, IL-1b, and TNF α . The IL-17 family has been linked to many immune/autoimmune related diseases including rheumatoid arthritis, asthma, lupus, allograft rejection, anti-tumor immunity and recently Psoriasis. Because of its involvement in autoimmune conditions, IL-17 inhibitors are being investigated as possible treatments.

Calibration Curve: Four-parameter curve fit parameters are depicted.



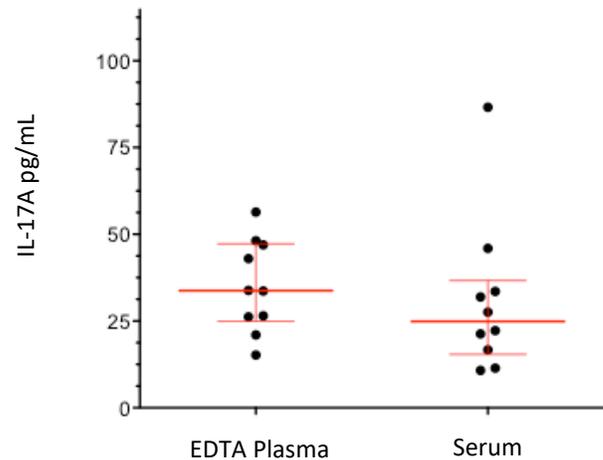
Lower Limit of Quantification (LLOQ): Triplicate measurements of serially diluted calibrator were read back on the calibration curve over 1 reagent lot across 2 instruments (5 runs total).

Limit of Detection (LOD): Calculated as 2.5 standard deviations from the mean of background signal read back on each calibration curve over 1 reagent lot across 2 instruments (5 runs total).

| | |
|---|---|
| LLOQ | 0.206 pg/mL pooled CV 19% mean recovery 107% |
| LOD | 0.088 pg/mL range 0.0615–0.175 pg/mL |
| Dynamic range (serum and plasma) | 0–2400 pg/mL |
| Diluted Sample volume* | 104 μ L per measurement |
| Tests per kit | 192 |

*See Kit Instruction for details

Endogenous Sample Reading: IL-17A in EDTA plasma (n=10) and serum (n=10) from non-medicated, non-immunized mice. Error bars depict median and interquartile ranges.



| Sample Type | Median IL-17A pg/mL | % Above LOD |
|-------------|---------------------|-------------|
| EDTA Plasma | 33.76 | 100% |
| Serum | 24.91 | 100% |

Precision: Representative precision was estimated with repeated assay of mouse serum and plasma pools using two instruments and one reagent lot. Within-run and between-run CVs are depicted in the following table. Within-run CVs reflect average CVs across 5 experiments of 3 replicates each.

| Sample | Mean (pg/mL) | Within run CV | Between run CV |
|---------------|--------------|---------------|----------------|
| Serum Pool 1 | 18.61 | 3.7% | 11.0% |
| Serum Pool 2 | 50.3 | 3.1% | 7.8% |
| Plasma Pool 1 | 39.1 | 1.6% | 10.5% |

Spike and Recovery: Mouse IL-17A spiked into 2 serum and 2 plasma samples at 2 levels.

Dilution Linearity (Plasma): Plasma pool diluted 2x serially from MRD (8x) to 64x with Sample Diluent.

Dilution Linearity (Serum): Serum pool diluted 2x serially from MRD (8x) to 128x with Sample Diluent.

| | |
|--|--|
| Spike and Recovery (Serum/Plasma) | Mean = 90.6% Range: 80–99.7% |
| Dilution Linearity (Plasma, 64x) | Mean = 109% Range: 100–122% |
| Dilution Linearity (Serum, 128x) | Mean = 126% Range: 116–132% |