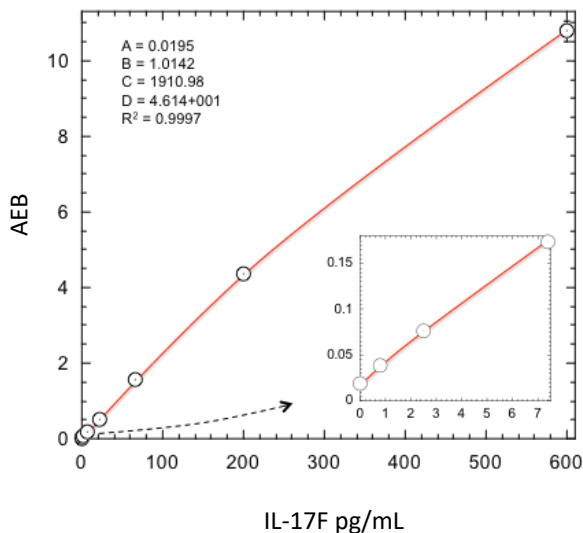


Description

Mouse Interleukin 17F (IL-17F) is a member of an IL-17 family of related cytokines (IL-17A through IL-17F). All IL-17 cytokines have a similar protein structure. These cytokines are well conserved in mammals, with significant sequence conservation between the human and mouse homologs. A major role of IL-17 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-17 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 TNFα. 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.



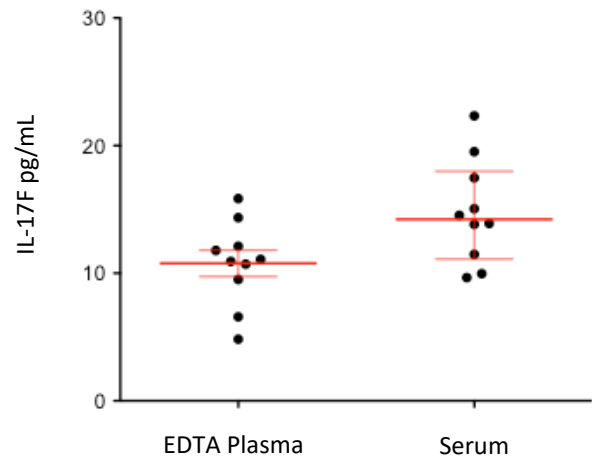
Lower Limit of Quantification (LLOQ): Triplicate measurements of serially diluted calibrator were read back on the calibration curve over 1 reagent lot across 3 instruments (5 runs total).

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 3 instruments (5 runs total).

LLOQ	0.412 pg/mL pooled CV 12% mean recovery 111%
LOD	0.102 pg/mL range 0.0311–0.2911 pg/mL
Dynamic range (serum and plasma)	0–2400 pg/mL
Diluted Sample volume*	100 µL per measurement
Tests per kit	192

*See Kit Instruction for details

Endogenous Sample Reading: IL-17F 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-17F pg/mL	% Above LOD
EDTA Plasma	11.01	100%
Serum	14.22	100%

Precision: Representative precision was estimated with repeated assay of mouse serum and plasma pools using three 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
Plasma Pool 1	11.5	2.9%	3.8%
Serum Pool 1	14.4	3.1%	8.1%
Serum Pool 2	16.0	4.4%	7.0%

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

Dilution Linearity: Serum pool diluted 2x serially from MRD (4X) to 128x with Sample Diluent.

Spike and Recovery (Serum/Plasma)	Mean = 86.9% Range: 65.2–102%
Dilution Linearity (128x)	Mean = 91.2% Range: 79.5–101%