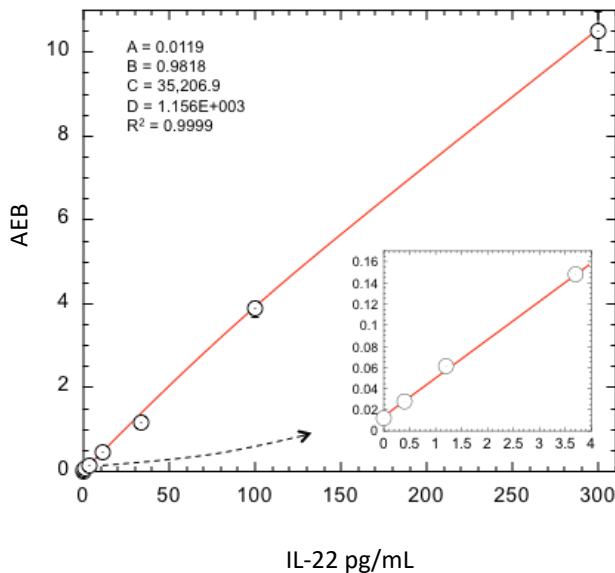


**Description**

IL-22 is a member of IL-10 superfamily. It is produced by Th17 cells and NK cells, especially in epithelial cells. Human IL-22 cDNA encodes a 179 amino acid (aa) residue protein with a putative 33 aa signal peptide that is cleaved to generate a 147 aa mature protein. Mouse IL-22 shares 79% similarity to human IL-22. IL-22 binds to a receptor complex consisting of IL-22 R and IL-10 R beta. IL-22 and IL-10 receptor chains play a role in cellular targeting and signal transduction to selectively initiate and regulate immune responses. IL-22 can contribute to immune disease through the stimulation of inflammatory responses. IL-22 also promotes hepatocyte survival in the liver and epithelial cells in the lung and gut similar to IL-10.

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



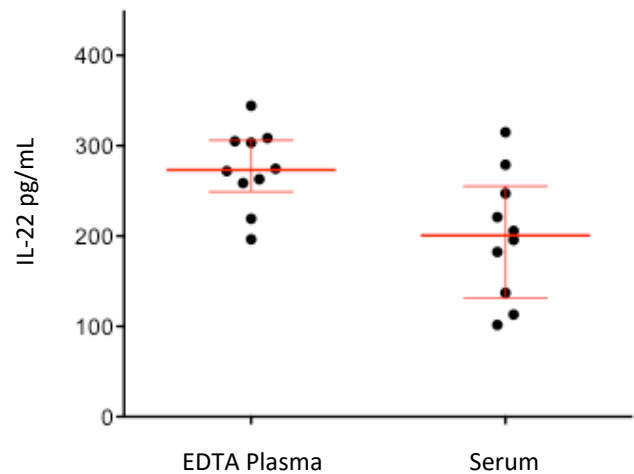
**Lower Limit of Quantification (LLOQ):** Triplicate measurements of serially diluted calibrator were read back on the calibration curve over 1 reagent lot across 3 instruments (5 runs total).

**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).

<b>LLOQ</b>	<b>0.206 pg/mL</b> pooled CV 20% mean recovery 100%
<b>LOD</b>	<b>0.095 pg/mL</b> range 0.0603–0.1493 pg/mL
<b>Dynamic range (serum and plasma)</b>	0–1200 pg/mL
<b>Diluted Sample volume*</b>	100 µL per measurement
<b>Tests per kit</b>	192

\*See Kit Instruction for details

**Endogenous Sample Reading:** IL-22 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-22 pg/mL	% Above LOD
EDTA Plasma	273.3	100%
Serum	200.8	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
Serum Pool 1	94.4	3.1%	7.0%
Serum Pool 2	106	3.2%	6.5%
Plasma Pool 1	324	8.7%	6.3%

**Spike and Recovery:** Mouse IL-22 spiked into 2 serum and 1 plasma samples at 2 levels.

**Dilution Linearity:** Plasma pool pre-diluted 2x serially from MRD (4x) to 256x with Sample Diluent.

<b>Spike and Recovery (Serum/Plasma)</b>	<b>Mean = 101%</b> Range: 93.5–111%
<b>Dilution Linearity (256x)</b>	<b>Mean = 102%</b> Range: 94–115%