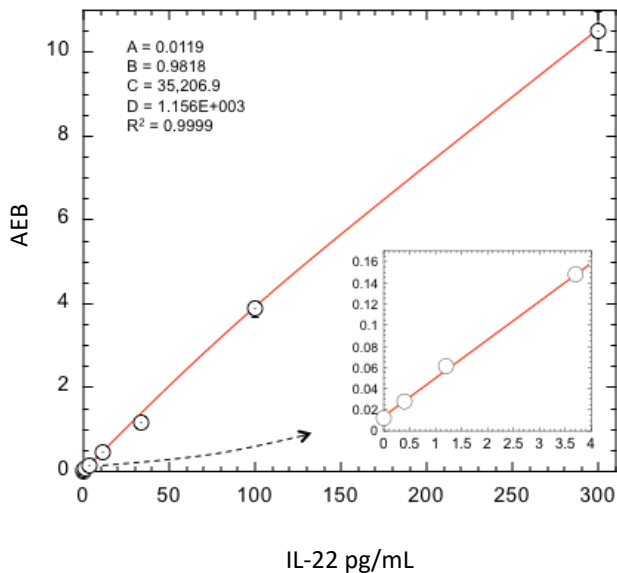


Description

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.



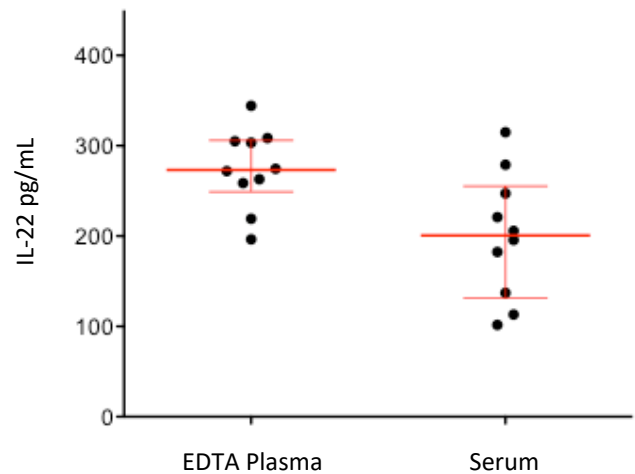
Lower Limit of Quantification (LLOQ): Triplicate measurements of serially diluted calibrator were read back on the calibration curve over 1 reagent lot across 3 instruments (5 runs total).

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).

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

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