

Biology and Disease

Interleukin-12 (IL-12) is a cytokine expressed by T-cells and natural killer cells in response to the presence of microbial agents. Increased expression of IL-12 drives a positive feedback loop, which generates more T-cells and natural killer cells, along with other immuno-regulatory cytokines such as IFN- γ , IL-10 and TNF α . Although IL-12 is an important initiator of cell-mediated immunity, its pro-inflammatory effects can be deleterious. Over production of this cytokine has been implicated in several autoimmune disorders such as inflammatory bowel disease, psoriasis, and Crohn's disease. The ability to escalate and strengthen the immune response makes IL-12 an important immunostimulant therapy for infectious diseases and metastatic cancers.

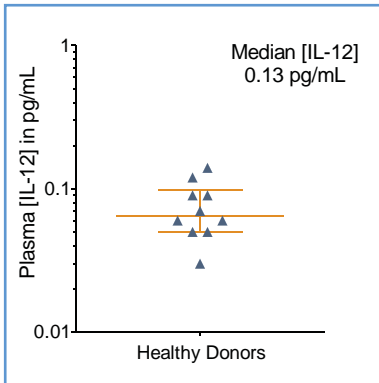
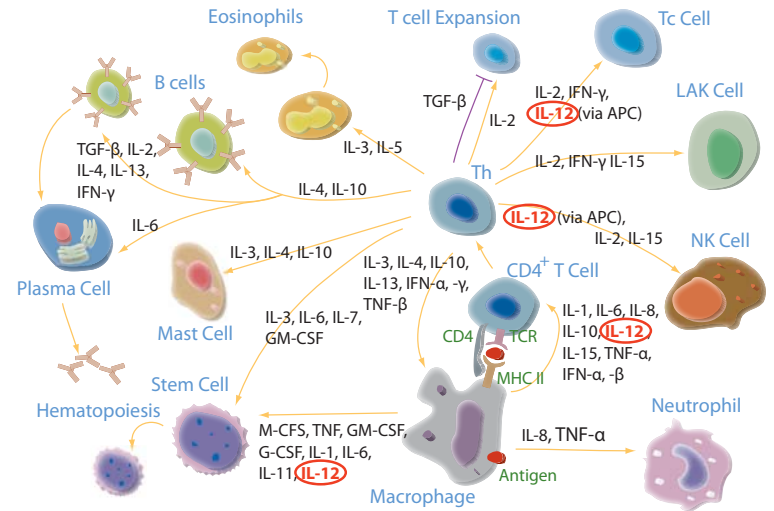


FIGURE 1: [IL-12] in EDTA plasma from 10 healthy donors, with median and interquartile range.

The Erenna® IL-12 Immunoassay Kit reliably quantifies IL-12 in EDTA plasma from healthy subjects, who have a median [IL-12] of 0.13 pg/mL that is well above the detection limit of 0.01 pg/mL.

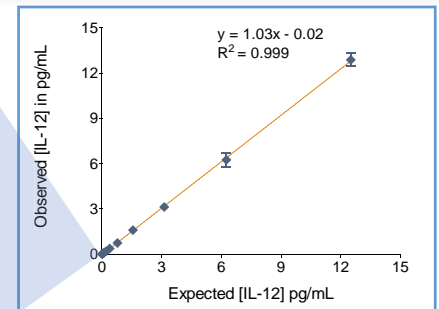
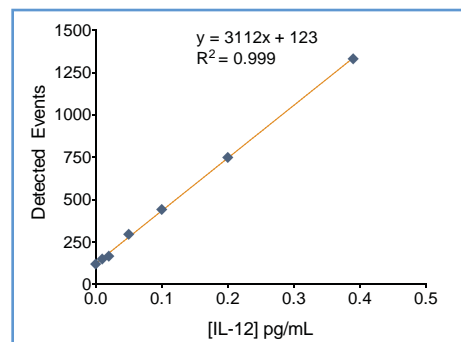


FIGURE 2: Erenna® IL-12 Immunoassay Kit low-end standard curve signal (left) and curve fit (above).

TABLE 1: Analytical sensitivity of the Erenna® IL-12 Immunoassay Kit¹

Lower Limit of Detection	0.01 pg/mL
Lower Limit of Quantification ²	0.05 pg/mL
Upper Limit of Quantification	12.5 pg/mL
Low-end CV% Range	2 - 8%
Low-end CV% Average	4%
Recommended Sample Volume	100 μ L
Minimum Sample Volume Required ³	50 μ L
Matrices Validated	human serum and EDTA plasma

¹ see product insert for updated values

² LLoQ \leq 20% CV and \pm 20% recovery

³ based upon median [IL-12] in a healthy reference population



Representative data shown for demonstration purposes only. Individual results may vary depending upon samples tested and protocol used.