

Biology and Disease

Interleukin-4 (IL-4), is a cytokine that is a key regulator in humoral and adaptive immunity. IL-4 induces differentiation of naive helper T-cells (Th0 cells) to Th2 cells. It has many biological roles, including the stimulation of activated B-cell and T-cell proliferation, and the differentiation of CD4+ T-cells into Th2 cells. Further, IL-4 controls the production of IgE, expands IL-4 producing T-cell subsets, and stabilizes effector cell functions. IL-4 has great therapeutic potential due to its role in the development of allergic inflammatory responses. IL-4 also has shown to have promise in drug targeting for cancer.

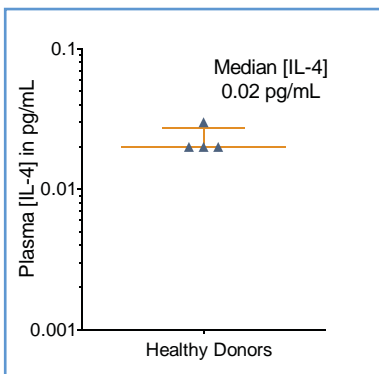
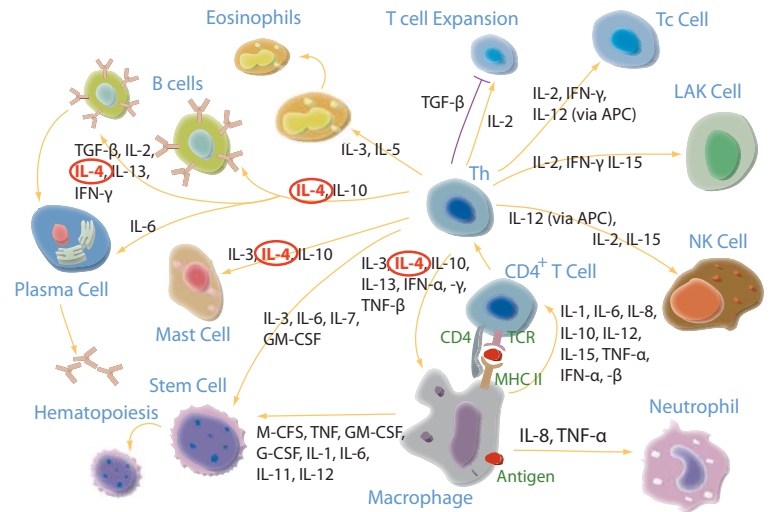


FIGURE 1: [IL-4] in EDTA plasma from 10 healthy donors (6 samples < LLoQ), with median and interquartile range.

The Erenna® IL-4 Immunoassay Kit can quantify IL-4 in EDTA plasma from healthy subjects, who have a median [IL-4] of 0.02 pg/mL that is above the detection limit of 0.003 pg/mL.

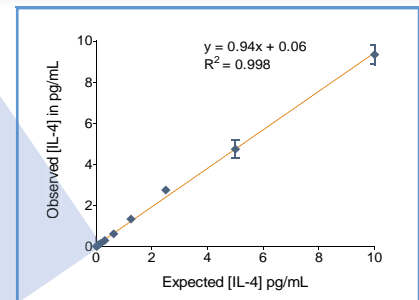
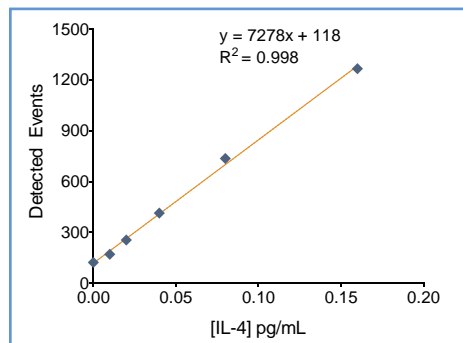


FIGURE 2: The Erenna® IL-4 Immunoassay kit low-end standard curve signal (left) and curve fit (above).

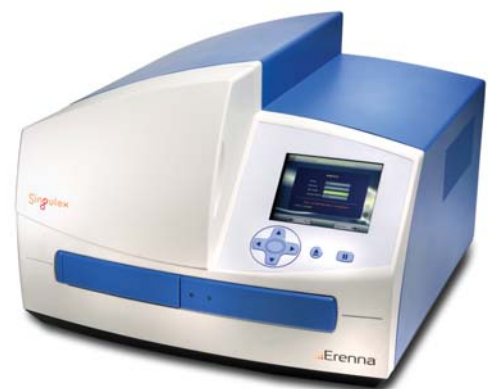
TABLE 1: Analytical sensitivity of the Erenna® IL-4 Immunoassay Kit¹

Lower Limit of Detection	0.003 pg/mL
Lower Limit of Quantification ²	0.02 pg/mL
Upper Limit of Quantification	10 pg/mL
Low-end CV% Range	2 - 12%
Low-end CV% Average	7%
Recommended Sample Volume	100 µL
Minimum Sample Volume Required ³	100 µL
Matrices Validated	human EDTA plasma

¹ see product insert for updated values

² LLoQ ≤ 20% CV and ± 20% recovery

³ based upon median [IL-4] in a healthy reference population



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