

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.

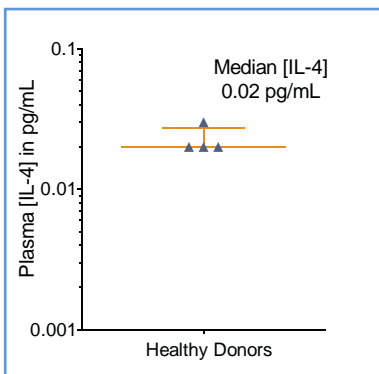
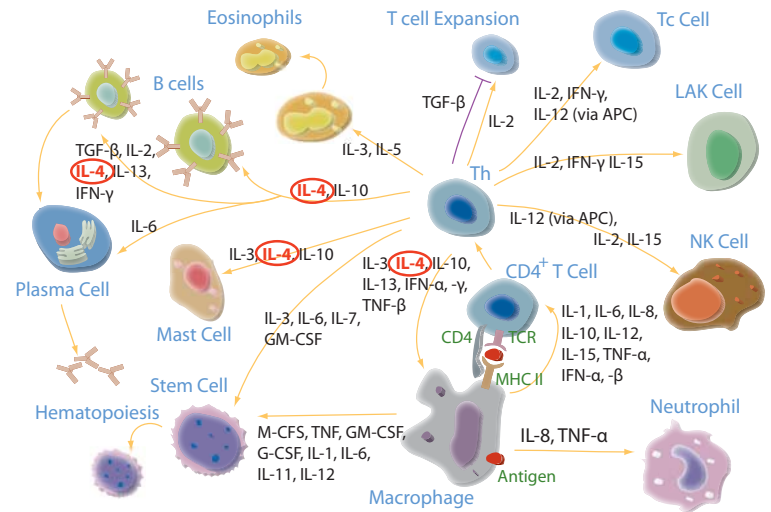


FIGURE 1: [IL-4] in EDTA plasma from 10 healthy donors (6 samples < LLoQ), with median and interquartile range.

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.

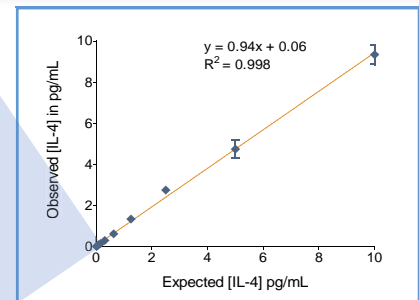
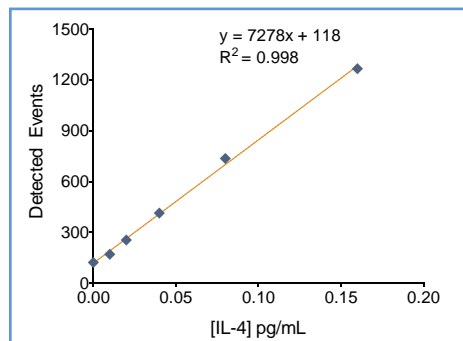


FIGURE 2: The Erenna® IL-4 Immunoassay kit low-end standard curve signal (left) and curve fit (above).

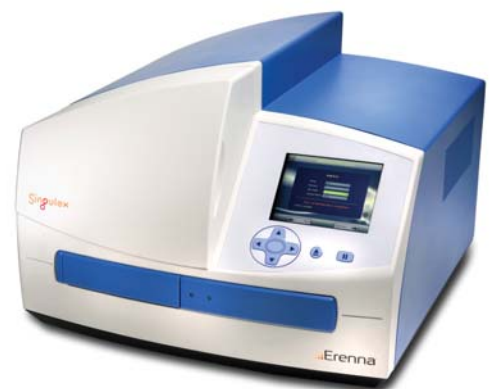
TABLE 1: Analytical sensitivity of the Erenna® IL-4 Immunoassay Kit<sup>1</sup>

|   |                   |
|---|-------------------|
| Lower Limit of Detection                    | 0.003 pg/mL       |
| Lower Limit of Quantification <sup>2</sup>  | 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 <sup>3</sup> | 100 µL            |
| Matrices Validated                          | human EDTA plasma |

<sup>1</sup> see product insert for updated values

<sup>2</sup> LLoQ ≤ 20% CV and ± 20% recovery

<sup>3</sup> 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.