

## Biology and Disease

Interleukin-13 (IL-13) is a cytokine that is crucial for mediating allergic responses. Predominately expressed by Th2 cells, IL-13 is also secreted by cell types such as mast cells, NK cells, and dendritic cells. Both IL-13 and IL-4 are found at elevated levels in the asthmatic lung and are thought to be key regulators of airway inflammation. IL-13 functions similarly to IL-4 in that both can signal through the heterodimer receptor IL-4R $\alpha$  - IL-13R $\alpha$ 1 and activate STAT-6 downstream. However, studies have suggested that IL-13 operates independently of IL-4 with regard to asthma regulation. Thus, IL-13 has become a promising therapeutic target for allergic diseases. Several anti-IL-13 antibodies are being evaluated as treatment for bronchial asthma.

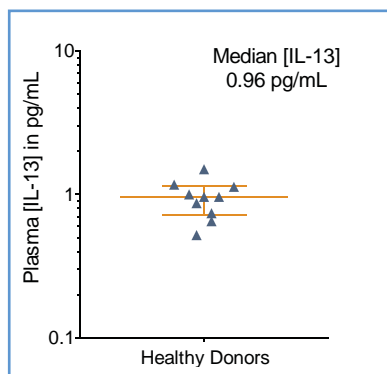
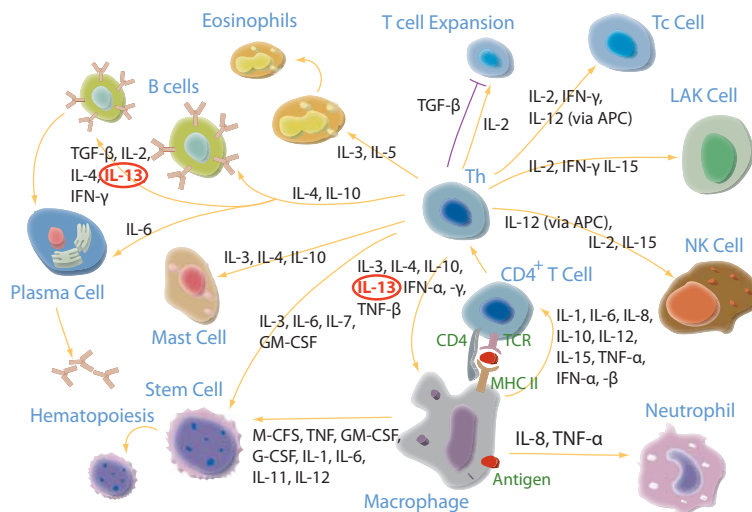


FIGURE 1: [IL-13] in EDTA plasma from 10 healthy donors, with median and interquartile range.

The Erenna® IL-13 Immunoassay Evaluation Reagent Kit can quantify IL-13 in EDTA plasma from healthy subjects, who have a median [IL-13] of 0.96 pg/mL that is above the detection limit of 0.01 pg/mL.

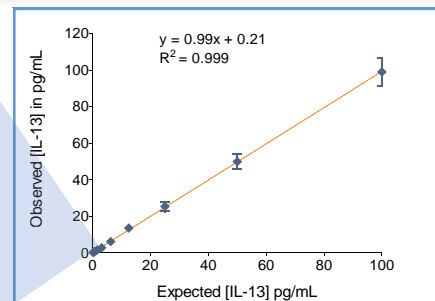
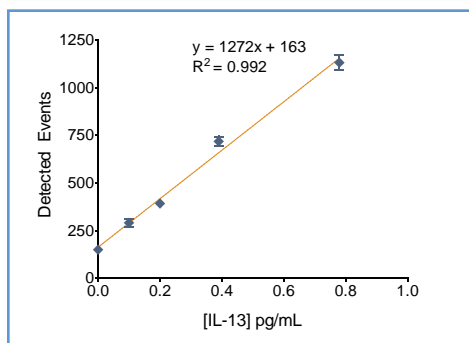


FIGURE 2: The Erenna® IL-13 Immunoassay Evaluation Reagent Kit low-end standard curve signal (left) and curve fit (above).

TABLE 1: Analytical sensitivity of the Erenna® IL-13 Immunoassay Evaluation Reagent Kit<sup>1</sup>

Lower Limit of Detection	0.01 pg/mL
Lower Limit of Quantification <sup>2</sup>	0.39 pg/mL
Upper Limit of Quantification	100 pg/mL
Low-end CV% Range	1 - 7%
Low-end CV% Average	5%
Recommended Sample Volume	100 $\mu$ L
Minimum Sample Volume Required <sup>3</sup>	50 $\mu$ L
Matrices Validated	human EDTA plasma

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

<sup>2</sup> LLoQ  $\leq$  20% CV and  $\pm$  20% recovery

<sup>3</sup> based upon median [IL-13] in a healthy reference population



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