

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-4Rα - IL-13Rα1 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.

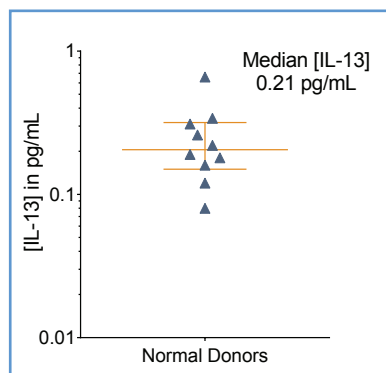
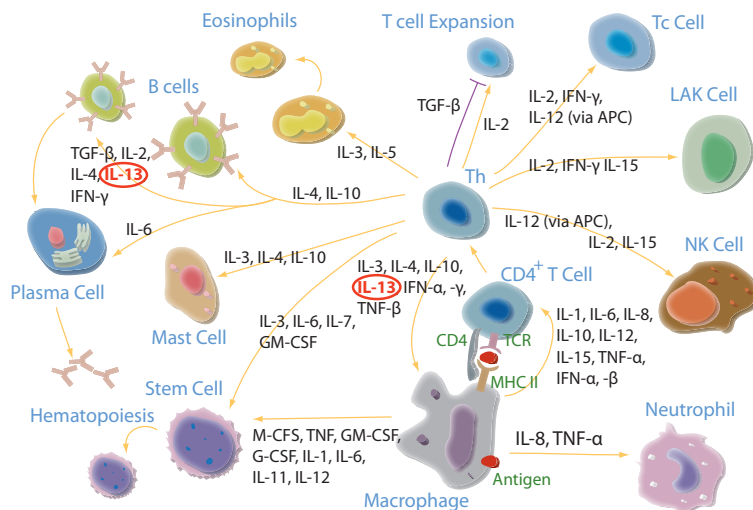


FIGURE 1: Endogenous [IL-13] in EDTA plasma and serum from 10 donors, with median and interquartile range.

The Erenna® IL-13 Immunoassay Kit reliably quantifies endogenous levels of IL-13 in EDTA plasma and serum with a median [IL-13] of 0.21 pg/mL that is well above the detection limit of 0.01 pg/mL.

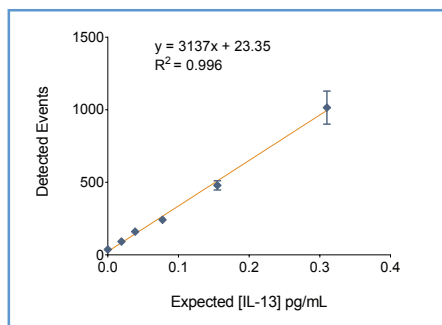


FIGURE 2: The Erenna® IL-13 (V2) Immunoassay Kit low-end standard curve.

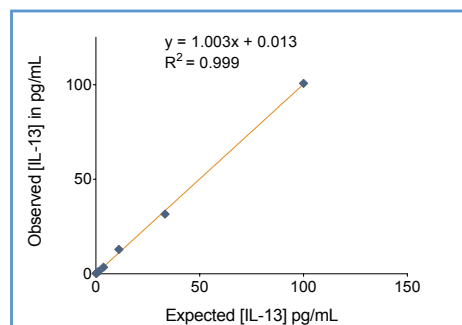


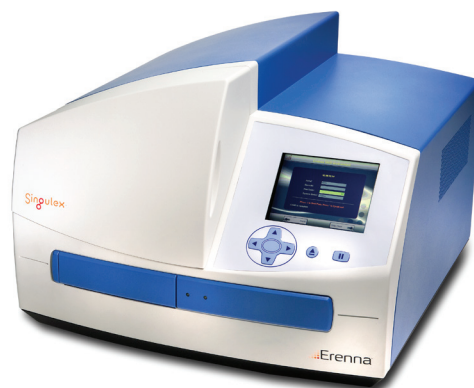
FIGURE 3: The Erenna® IL-13 (V2) Immunoassay Kit correlation curve.

TABLE 1: Analytical sensitivity of the Erenna® IL-13 (V2) Immunoassay Kit

Lower Limit of Detection	0.01 pg/mL
Lower Limit of Quantification ¹	0.04 pg/mL
Upper Limit of Quantification	100 pg/mL
Low-end CV% Range	0 - 12%
Low-end CV% Average	6%
Recommended Sample Volume	100 µL
Minimum Sample Volume Required ²	25 µL
Matrices Verified	human serum/ EDTA plasma

¹ LLoQ ≤ 20% CV and ± 20% recovery

² based upon median [IL-13] in a normal reference population



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