

Biology and Disease

Interleukin-15 (IL-15) is a cytokine that bears structural and biological similarities to IL-2, as both cytokines are triggered by the presence of exogenous bacteria and viruses. Unlike IL-2, which is expressed mainly by activated monocytes, IL-15 is constitutively expressed by a variety of tissues and cell types, including macrophages, dendritic cells, osteoclasts and fibroblasts. IL-15 is known to affect the proliferation of T-, B- and natural killer cells, and initiates the up-regulation of the cytokines GM-CSF and TNFα. The pro-inflammatory properties of IL-15 elicit autoimmune activity and elevated levels of IL-15 have been associated with psoriasis, multiple sclerosis, rheumatoid arthritis and systemic lupus.

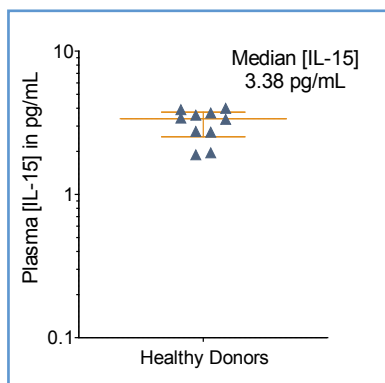
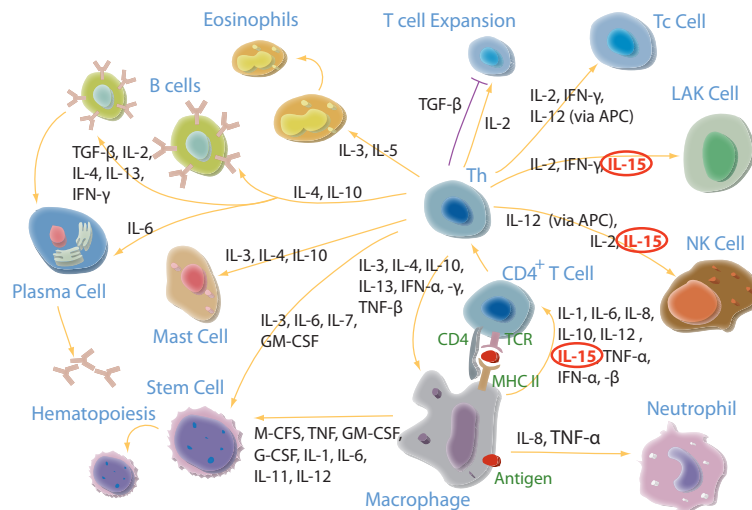


FIGURE 1: [IL-15] in EDTA plasma from 10 healthy donors, with median and interquartile range.

The Erenna® IL-15 Immunoassay kit reliably quantifies IL-15 in EDTA plasma from healthy subjects, who have a median [IL-15] of 3.38 pg/mL that is well above the detection limit of 0.01 pg/mL.

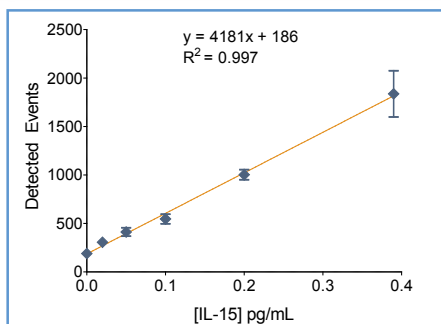


FIGURE 2: The Erenna® IL-15 Immunoassay Kit low-end standard curve.

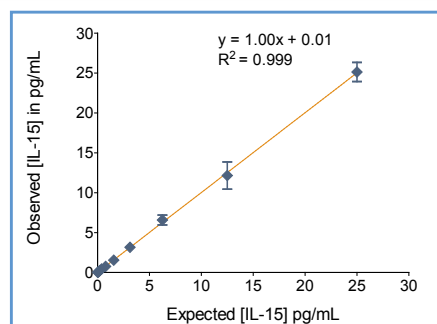


FIGURE 3: The Erenna® IL-15 Immunoassay Kit correlation curve.

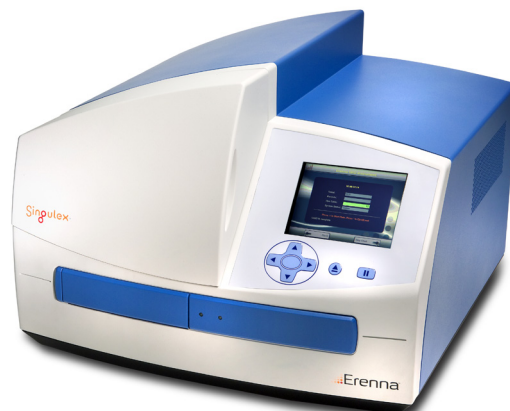
TABLE 1: Analytical sensitivity of the Erenna® IL-15 Immunoassay Kit¹

Lower Limit of Detection	0.01 pg/mL
Lower Limit of Quantification ²	0.10 pg/mL
Upper Limit of Quantification	25 pg/mL
Low-end CV% Range	7 - 16%
Low-end CV% Average	10%
Recommended Sample Volume	100 µL
Minimum Sample Volume Required ³	5 µL
Matrices Validated	human serum and EDTA plasma

¹ see product insert for updated values

² LLoQ ≤ 20% CV and ± 20% recovery

³ based upon median [IL-15] in a healthy reference population



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