

Biology and Disease

Interleukin-2 (IL-2) is a naturally produced cytokine whose key function is to activate the immune system during an infectious attack. Foreign antigens trigger IL-2 secretion. When IL-2 binds to its receptor IL-2R, the complex stimulates immune cell proliferation and differentiation, including cytotoxic T-cells, natural killer cells, lymphocytes, monocytes and macrophages. Interestingly, research suggests that impaired IL-2 activity has been linked to the development of autoimmunity rather than immunodeficiency. Autoimmune system hyperactivity may cause chronic inflammatory disorders, lymphadenopathy, hepatomegaly, and splenomegaly. Recent studies also suggest an important role for IL-2 in the regulation of innate immunity.

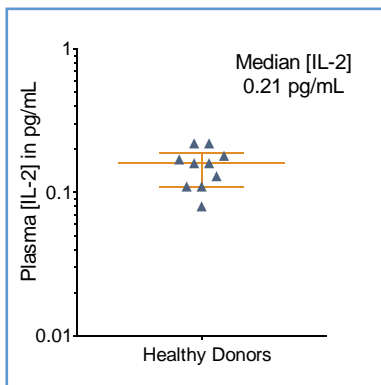
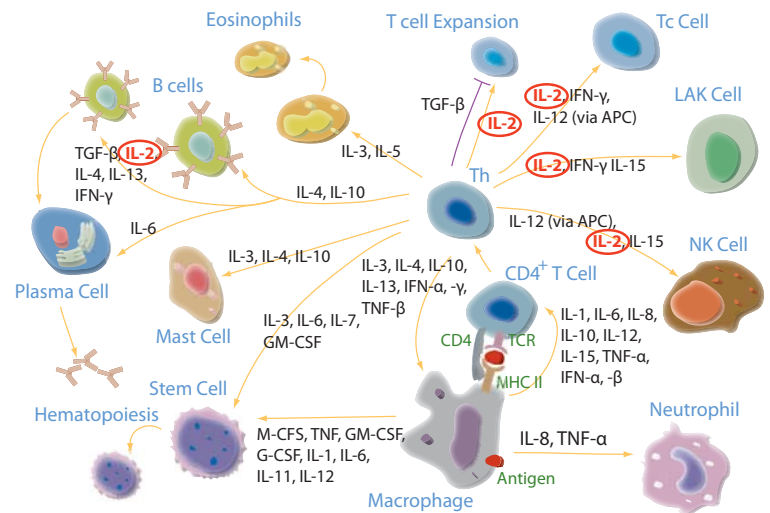


FIGURE 1: [IL-2] in EDTA plasma from 10 healthy donors, with median and interquartile range.

The Erenna® IL-2 Immunoassay Kit reliably quantifies IL-2 in EDTA plasma from healthy subjects, who have a median [IL-2] of 0.21 pg/mL that is well above the detection limit of 0.01 pg/mL.

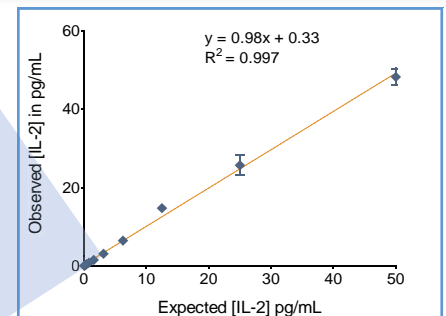
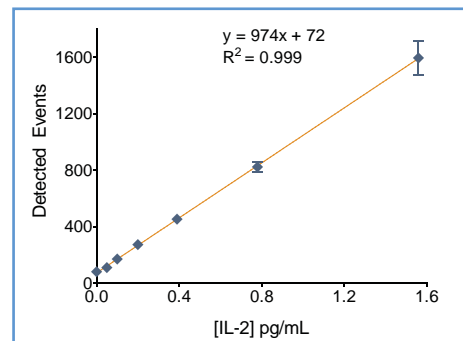


FIGURE 2: Erenna® IL-2 Immunoassay Kit low-end standard curve signal (left) and curve fit (above).

TABLE 1: Analytical sensitivity of the Erenna® IL-2 Immunoassay Kit¹

Lower Limit of Detection	0.01 pg/mL
Lower Limit of Quantification ²	0.20 pg/mL
Upper Limit of Quantification	50 pg/mL
Low-end CV% Range	3 - 10%
Low-end CV% Average	6%
Recommended Sample Volume	100 µL
Minimum Sample Volume Required ³	93 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-2] in a healthy reference population



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