

Biology and Disease

Granulocyte-Colony Stimulating Factor (G-CSF) is an endogenous hematopoietic agent activated and expressed by many types of cells, including macrophages, tumor cells, fibroblasts and endothelial cells. One of the main functions of G-CSF is to regulate formation of neutrophils during hematopoiesis, which are important for proper immune function. For example, in cancer patients, reduced hematopoiesis from chemotherapy results in low neutrophil production, which jeopardizes the immune system, leaving the body susceptible to infectious attacks. G-CSF therapy has been shown to restore hematopoiesis in cancer and leukemic patients by stimulating white blood cell production. Interestingly, G-CSF has also demonstrated effectiveness in improving cardiac function following a myocardial infarction.

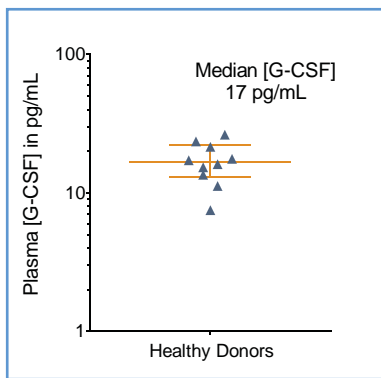
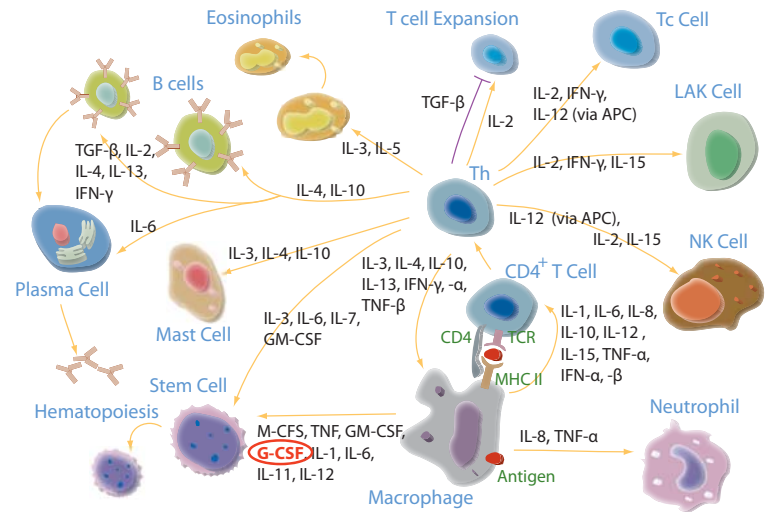


FIGURE 1: [G-CSF] in EDTA plasma from 10 healthy donors, with median and interquartile range.

The Erenna® G-CSF Immunoassay Kit reliably quantifies G-CSF in EDTA plasma from healthy subjects, who have a median [G-CSF] of 17 pg/mL that is well above the detection limit of 0.03 pg/mL.

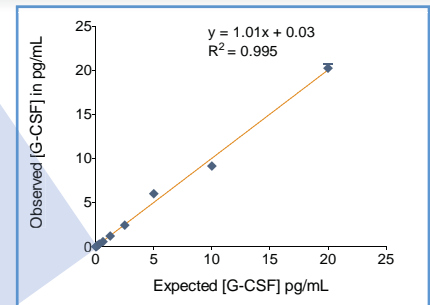
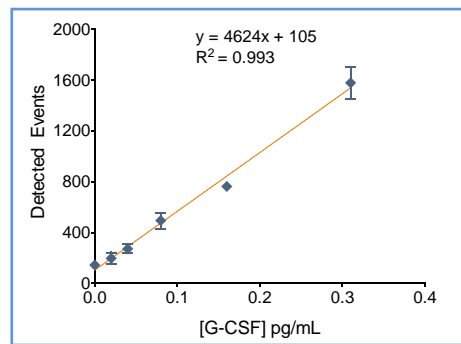


FIGURE 2: Erenna® G-CSF Immunoassay Kit low-end standard curve signal (left) and curve fit (above).

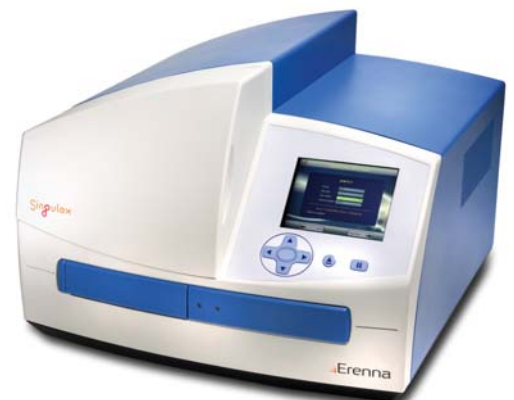
TABLE 1: Analytical sensitivity of the Erenna® G-CSF Immunoassay Kit¹

Lower Limit of Detection	0.03 pg/mL
Lower Limit of Quantification ²	0.08 pg/mL
Upper Limit of Quantification	20 pg/mL
Low-end CV% Range	5 - 9%
Low-end CV% Average	7%
Recommended Sample Volume	10 µL
Minimum Sample Volume Required ³	1 µL
Matrices Verified	human EDTA plasma

¹ see product insert for updated values

² LLoQ ≤ 20% CV and ± 20% recovery

³ based upon median [G-CSF] in a healthy reference population



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