

## Biology and Disease

Amyloid beta proteins (40 and 42 amino acids) are the main constituent of amyloid plaques in the brains of Alzheimer's disease (AD) patients. In healthy and disease states Aβ-40 is the more common form of the two (10–20X higher than Aβ-42) in both cerebrospinal fluid (CSF) and plasma. In patients with AD, Aβ-42 primarily aggregates and deposits in the brain forming plaques. Thus the effective concentration of Aβ-42 monomer is decreased in the CSF of many AD patients. Recent studies suggest that a decrease in Aβ-42 concentrations (with a paralleled change in the ratio of Aβ-40/Aβ-42) can be monitored and may indicate AD progression.<sup>t</sup>

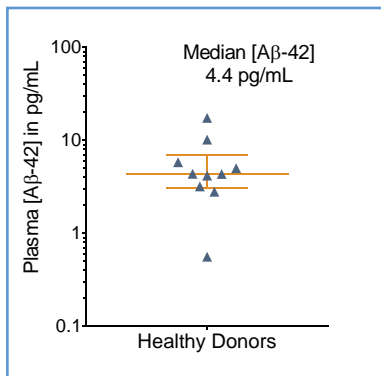
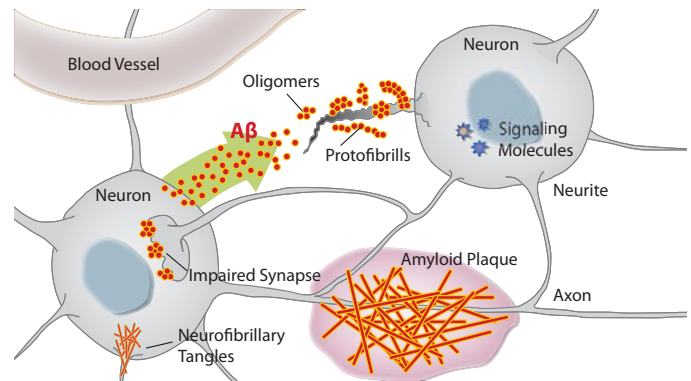


FIGURE 1: Normal [Aβ-42] in 10 EDTA plasma donors, with median and interquartile range.

The Erenna® Aβ-42 Immunoassay Evaluation Reagent Kit reliably quantifies Aβ-42 in healthy subjects, who have a median [Aβ-42] of 4.4 pg/mL that is well above the detection limit of 0.2 pg/mL.

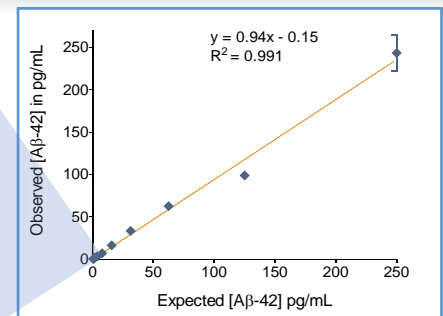
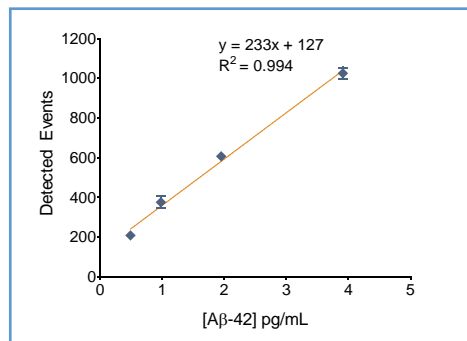


FIGURE 2: Erenna® Aβ-42 Immunoassay Evaluation Reagent Kit low-end standard curve signal (left) and curve fit (above).

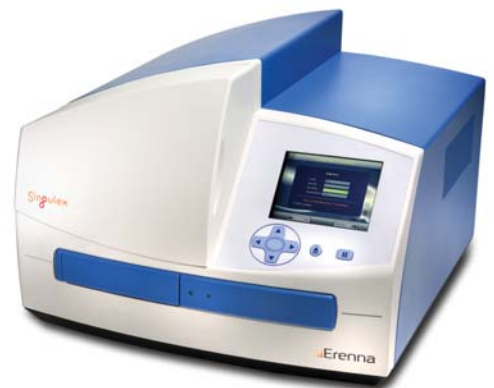
TABLE 1: Analytical sensitivity of the Erenna® Aβ-42 Immunoassay Evaluation Reagent Kit<sup>1</sup>

Lower Limit of Detection	0.2 pg/mL
Lower Limit of Quantification <sup>2</sup>	0.5 pg/mL
Upper Limit of Quantification	250 pg/mL
Low-end CV% Range	1 - 8%
Low-end CV% Average	3%
Assay Volume	75 μL
Minimum Sample Volume Required <sup>3</sup>	10 μL

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

<sup>2</sup> LLoQ ≤ 20% CV and ± 20% recovery

<sup>3</sup> based upon median [Aβ-42] in a healthy reference population



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