

Biology and Disease

Interactions between Matrix Metalloproteinase-2 (MMP-2) and its endogenous tissue inhibitor molecule TIMP-2 have important effects on tumor invasion and spreading. While MMP-2 accelerates the breakdown of extracellular matrix attributing to metastasis, TIMP-2 negatively regulates this activity by forming a complex that blocks access to the MMP-2 catalytic site. The ratio between the number of activated MMP molecules and free TIMP molecules thus determines the extent of vasculature remodeling. The prognostic relevance of measuring circulating levels of MMP-2/TIMP-2 complex to the degree of risk in developing prostate cancer, malignant lymphoma, and plaque instability for cardiovascular disease is currently being examined.

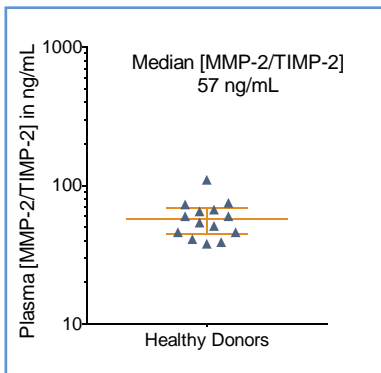
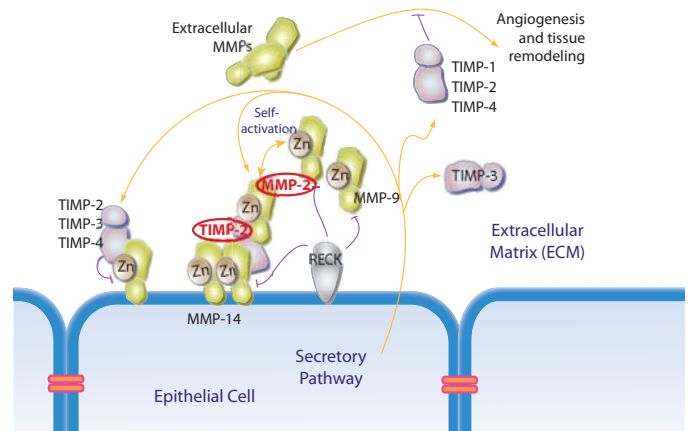


FIGURE 1: [MMP-2/TIMP-2] in EDTA plasma from 14 healthy donors, with median and interquartile range.

The Erenna[®] MMP-2/TIMP-2 Immunoassay Evaluation Reagent Kit reliably quantifies MMP-2/TIMP-2 in healthy subjects, who have a median [MMP-2/TIMP-2] of 57 ng/mL that is well above the detection limit of 0.8 pg/mL.

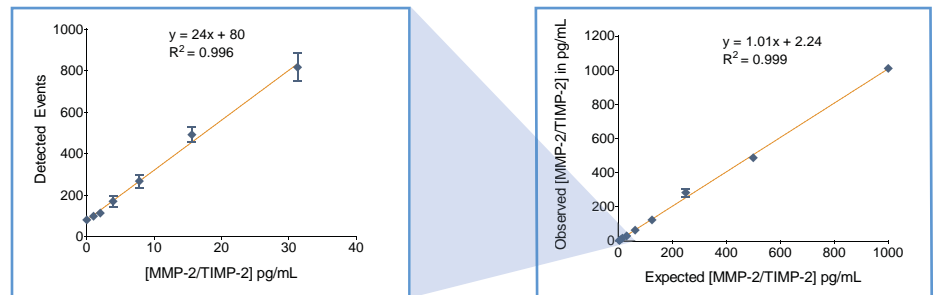


FIGURE 2: Erenna[®] MMP-2/TIMP-2 Immunoassay Evaluation Reagent Kit low-end standard curve signal (left) and curve fit (above).

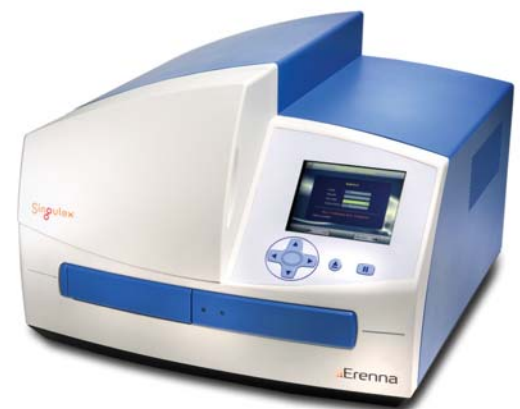
TABLE 1: Analytical sensitivity of the Erenna[®] MMP-2/TIMP-2 Immunoassay Evaluation Reagent Kit¹

Lower Limit of Detection	0.8 pg/mL
Lower Limit of Quantification ²	3.9 pg/mL
Upper Limit of Quantification	1000 pg/mL
Low-end CV% Range	7 - 16%
Low-end CV% Average	11%
Assay Volume	100 μ L
Minimum Sample Volume Required ³	0.01 μ L

¹ see product insert for updated values

² LLoQ \leq 20% CV and \pm 20% recovery

³ based upon median [MMP-2/TIMP-2] in a healthy reference population



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