

Biology and Disease

Matrix Metalloproteinase-2 (MMP-2) is part of a family of zinc and calcium-dependent endopeptidases that are induced by cytokines such as IL-1 β , TNF- α and EGF. As with most MMPs, MMP-2 is secreted in the proenzymatic form and must be cleaved for activation. Active MMP-2 is responsible for the breakdown of the extracellular matrix, and is involved in tissue remodeling under normal physiological and diseased conditions. Because of its role in tumor infiltration and progression, cancer cells that produce MMP-2 have been shown to have an increased potency toward metastasis. Thus, molecules with MMP-2 suppressing activity, such as the MMP-2 tissue inhibitor TIMP-2, are investigated for their ability to combat epithelial cancer.

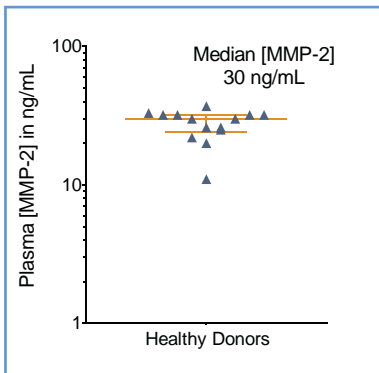
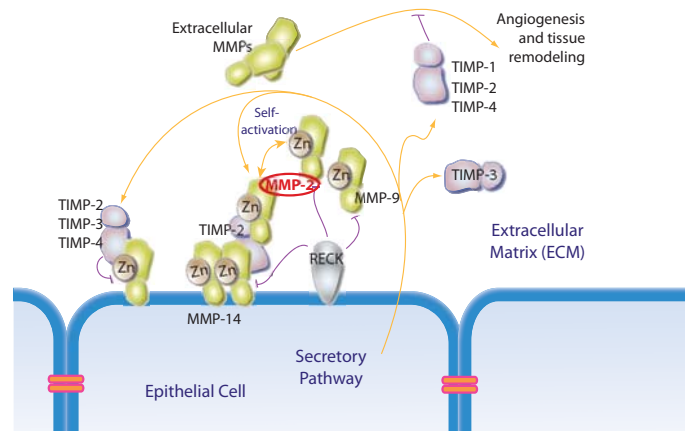


FIGURE 1: [MMP-2] in EDTA plasma from 14 healthy donors, with median and interquartile range.

The Erenna[®] MMP-2 Immunoassay Evaluation Reagent Kit reliably quantifies MMP-2 in healthy subjects, who have a median [MMP-2] of 30 ng/mL that is well above the detection limit of 0.4 pg/mL.

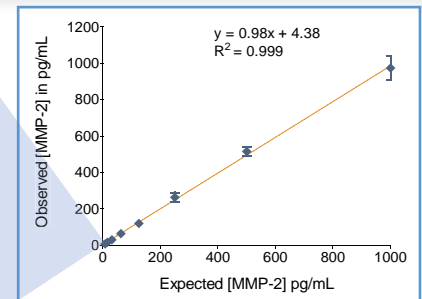
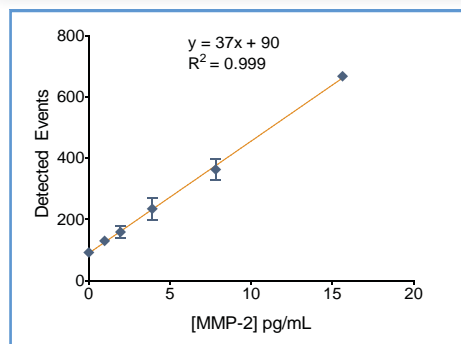


FIGURE 2: Erenna[®] MMP-2 Immunoassay Evaluation Reagent Kit low-end standard curve signal (left) and curve fit (above).

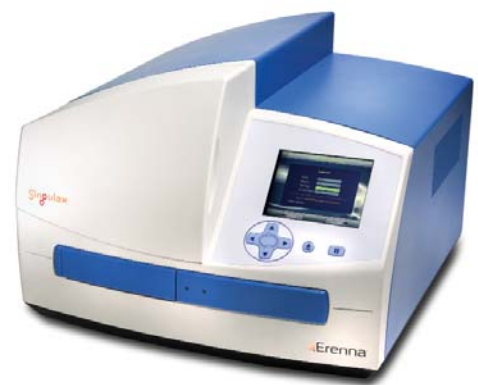
TABLE 1: Analytical sensitivity of the Erenna[®] MMP-2 Immunoassay Evaluation Reagent Kit¹

Lower Limit of Detection	0.4 pg/mL
Lower Limit of Quantification ²	7.8 pg/mL
Upper Limit of Quantification	1000 pg/mL
Low-end CV% Range	2 - 9%
Low-end CV% Average	6%
Assay Volume	100 μ L
Minimum Sample Volume Required ³	0.1 μ L

¹ see product insert for updated values

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

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



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