





# Human Matrix metalloproteinase 13,MMP-13 **ELISA** kit

Product Code	CSB-E04674h
Abbreviation	MMP13
Protein Biological Process 1	Developmental Protein
Target Name	matrix metallopeptidase 13 (collagenase 3)
Uniprot No.	P45452
Alias	CLG3, MANDP1, collagenase 3 matrix metalloproteinase 13 matrix metalloproteinase 13 (collagenase 3)
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Collagen degradation
Sample Types	serum, cell culture supernates, urine, tissue homogenates
<b>Detection Range</b>	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
<b>Detection Wavelength</b>	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cancer
Gene Names	MMP13
Tag Info	quantitative
<b>Protein Description</b>	Sandwich
Description	This Human MMP13 ELISA Kit was designed for the quantitative measurement of Human MMP13 protein in serum, cell culture supernates, urine, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.156 ng/mL-10 ng/mL and the sensitivity is 0.039 ng/mL.
Target Details	Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP s are secreted

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as inactive proproteins which are activated when cleaved by extracellular proteinases. This protein cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3.

#### **Product Precision**

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

## Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human MMP-13 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	94
	Range %	90-99
1:2	Average %	95
	Range %	92-99
1:4	Average %	89
	Range %	82-95
1:8	Average %	90
	Range %	84-97

# Recovery

The recovery of human MMP-13 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	97	91-103

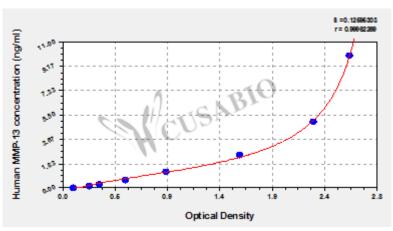
### **Typical**

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.









ng/ml OD1 OD2 Average Corrected

2.642 2.842 2.742 2.638 5 2.158 2.345 2.252 2.148 2.5 1.602 1.589 1.596 1.492 1.25 0.924 0.944 0.934 0.830 0.625 0.544 0.587 0.566 0.462  $0.312\,0.325\,0.346\,0.336$ 0.232  $0.156\,0.246\,0.250\,0.248$ 0.144 0 0.107 0.101 0.104 ?

**Msds** 

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