Human Matrix metalloproteinase 1,MMP-1 ELISA kit

Product Code	CSB-E04672h
Abbreviation	MMP1
Protein Biological Process 1	Developmental Protein
Target Name	matrix metallopeptidase 1 (interstitial collagenase)
Uniprot No.	P03956
Alias	CLG, CLGN, fibroblast collagenase|matrix metalloprotease 1|matrix metalloproteinase 1
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Collagen degradation
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	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
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution

Gene Names	MMP1
Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate ---The 96-well plate has been pre-coated with an anti-human MMP-1 antibody. This dismountable microplate can be divided into 12 x 8 strip plates. Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve. One vial Biotin-labeled MMP-1 antibody (100 x concentrate) (120 µl/bottle) ---Act as the detection antibody. One vial HRP-avidin (100 x concentrate) (120 µl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic. One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody. One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution. One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration. One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances. One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue. One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow. Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation. An instruction manual
Description	This Human MMP1 ELISA Kit was designed for the quantitative measurement of Human MMP1 protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.312 ng/mL-20 ng/mL and the sensitivity is 0.078 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 as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.
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-1 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 %	98
	Range %	93-105
1:2	Average %	92
	Range %	85-99
1:4	Average %	103
	Range %	95-108
1:8	Average %	96
	Range %	90-102

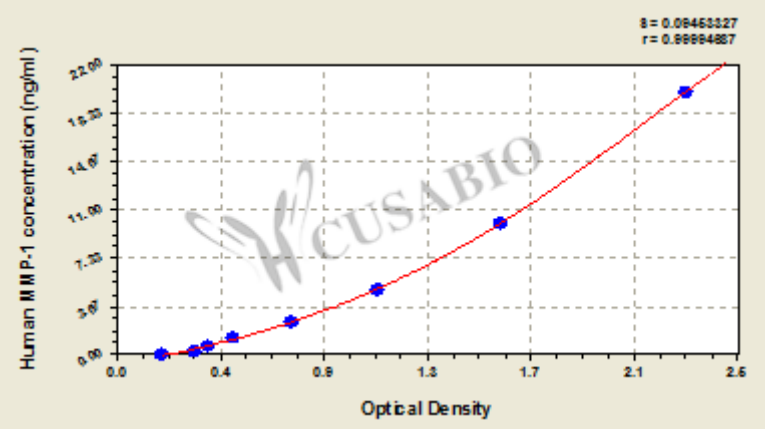
Recovery

The recovery of human MMP-1 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)	94	90-98
EDTA plasma (n=4)	96	90-100

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
20	2.244	2.404	2.324	2.122
10	1.556	1.587	1.572	1.370
5	1.062	1.081	1.072	0.870
2.5	0.709	0.736	0.723	0.521
1.25	0.476	0.499	0.488	0.286
0.625	0.374	0.397	0.386	0.184
0.312	0.330	0.336	0.333	0.131
0	0.201	0.203	0.202	?

Msds

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