



Rat Matrix Metalloproteinase 14, MMP-14 ELISA Kit

Product Code	CSB-E13158r
Abbreviation	MMP14
Target Name	matrix metalloproteinase 14 (membrane-inserted)
Uniprot No.	Q10739
Alias	MMP-X1, MT1-MMP, MTMMP1, matrix metalloproteinase 14 matrix metalloproteinase 14 (membrane-inserted) membrane type 1 metalloproteinase membrane-type matrix metalloproteinase 1 membrane-type-1 matrix m
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates
Detection Range	46.88 pg/mL-3000 pg/mL
Sensitivity	11.75 pg/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
Gene Names	Mmp14
Tag Info	quantitative
Protein Description	Sandwich

Description

This Rat MMP14 ELISA Kit was designed for the quantitative measurement of Rat MMP14 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 46.88 pg/mL-3000 pg/mL and the sensitivity is 11.75 pg/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. However, This protein is a member of the membrane-type MMP (MT-MMP) subfamily; each member of this subfamily contains a potential



transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. This protein activates MMP2 protein, and this activity may be involved in tumor invasion.

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 rat MMP-14 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 %	91
	Range %	88-95
1:2	Average %	95
	Range %	90-102
1:4	Average %	97
	Range %	95-107
1:8	Average %	101
	Range %	96-105

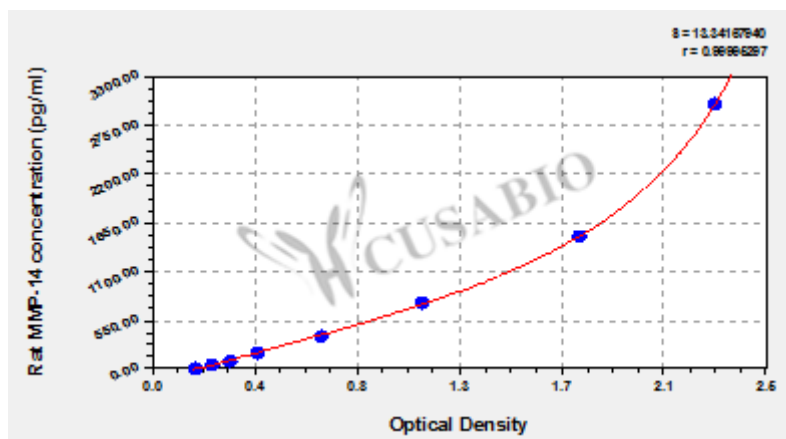
Recovery

The recovery of rat MMP-14 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)	90	87-96
EDTA plasma (n=4)	98	95-103

Typical

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



pg/ml	OD1	OD2	Average	Corrected
3000	2.288	2.289	2.289	2.092
1500	1.736	1.752	1.744	1.547
750	1.118	1.097	1.108	0.911
375	0.674	0.727	0.701	0.504
187.5	0.455	0.433	0.444	0.247
93.75	0.336	0.331	0.334	0.137
46.88	0.265	0.256	0.261	0.064
0	0.205	0.189	0.197	?

Msds

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