



# Mouse tissue inhibitors of metalloproteinase 1, TIMP-1 ELISA Kit

<b>Product Code</b>	CSB-E08004m
<b>Abbreviation</b>	TIMP1
<b>Protein Biological Process 1</b>	Cardiovascular
<b>Target Name</b>	TIMP metalloproteinase inhibitor 1
<b>Uniprot No.</b>	P12032
<b>Alias</b>	RP1-230G1.3, CLGI, EPA, EPO, FLJ90373, HCI, TIMP, erythroid potentiating activity fibroblast collagenase inhibitor tissue inhibitor of metalloproteinase 1
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Protein Biological Process 3</b>	Erythrocyte maturation
<b>Sample Types</b>	serum, plasma, cell culture supernates
<b>Detection Range</b>	0.156 ng/mL-10 ng/mL
<b>Sensitivity</b>	0.110 ng/mL
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Cardiovascular
<b>Gene Names</b>	Timp1
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich

## Description

This Mouse TIMP1 ELISA Kit was designed for the quantitative measurement of Mouse TIMP1 protein in serum, plasma, cell culture supernates. It is a Sandwich ELISA kit, its detection range is 0.156 ng/mL-10 ng/mL and the sensitivity is 0.110 ng/mL.

## Target Details

This gene belongs to the TIMP gene family. The proteins encoded by this gene family are natural inhibitors of the matrix metalloproteinases (MMPs), a group of peptidases involved in degradation of the extracellular matrix. In addition to its inhibitory role against most of the known MMPs, the encoded protein is able to



promote cell proliferation in a wide range of cell types, and may also have an anti-apoptotic function. Transcription of this gene is highly inducible in response to many cytokines and hormones. In addition, the expression from some but not all inactive X chromosomes suggests that this gene inactivation is polymorphic in human females. This gene is located within intron 6 of the synapsin I gene and is transcribed in the opposite direction.

## 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.

	Intra-Assay Precision			Inter-Assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	20	20	20
Mean (ng/ml)	1.265	1.234	1.265	1.244	1.268	1.246
SD	0.018	0.018	0.024	0.038	0.039	0.040
CV(%)	3.628	3.703	4.838	7.769	7.843	8.166

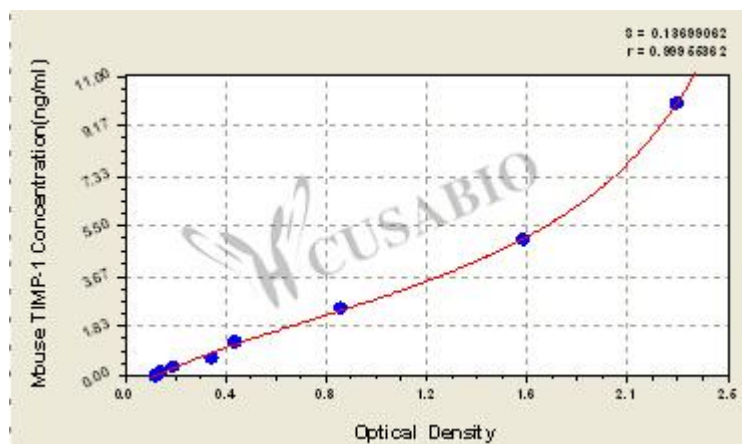
## Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse TIMP-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 %	89
	Range %	82-100
1:2	Average %	91
	Range %	85-102
1:4	Average %	93
	Range %	82-99
1:8	Average %	97
	Range %	89-105
	Sample	Cell culture Supernates (n=4)
1:1	Average %	88
	Range %	80-95
1:2	Average %	92
	Range %	88-99
1:4	Average %	95
	Range %	89-105
1:8	Average %	97
	Range %	90-110

## 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
0	0.136	0.135	0.136	
0.156	0.157	0.154	0.156	0.020
0.313	0.22	0.203	0.212	0.076
0.625	0.369	0.359	0.364	0.228
1.25	0.475	0.448	0.462	0.326
2.5	0.863	0.911	0.887	0.751
5	1.659	1.607	1.633	1.497
10	2.288	2.22	2.254	2.118

## Msds

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