

# Biotin Conjugated Anti-Human TIMP1 Antibody [PSH18-79] - Detector

## HA725368B



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	ELISA(Det), ELISA
<b>Clone number:</b>	PSH18-79

**Description:** 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.

<b>Conjugate:</b>	Biotin-conjugated
<b>Immunogen:</b>	Recombinant protein within Human TIMP1 aa 24-207 (HA211003).
<b>Positive control:</b>	Recombinant Human TIMP1 protein (HA211003).
<b>Subcellular location:</b>	Secreted.
<b>Database links:</b>	SwissProt: P01033 Human

### Recommended Dilutions:

<b>ELISA(Det)</b>	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH18-78] to Human TIMP1 antibody (Capture) (HA725367) and Recombinant Human TIMP1 protein (HA211003) as the standard. The reference range value is 78.1-20,000 pg/mL.
<b>ELISA</b>	Use at an assay dependent concentration.

<b>Storage Buffer:</b>	1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.05% Proclean 300.
<b>Storage Instruction:</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.
<b>Purity:</b>	Protein A affinity purified.

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Orders:0086-571-88062880

Technical:0086-571-89986345

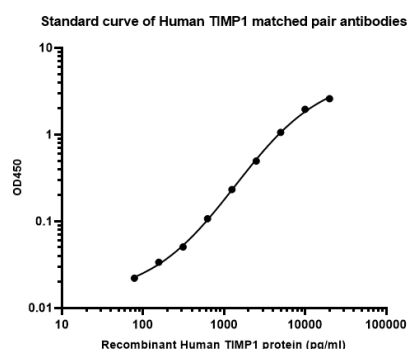
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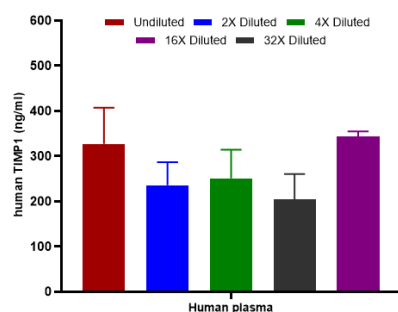
## Images

**Fig1:** Sandwich ELISA analysis of human TIMP1 matched pair antibodies

Capture: HA725367, Human TIMP1 Rabbit mAb [PSH18-78]  
 Detector: HA725368, Human TIMP1 Rabbit mAb [PSH18-79]

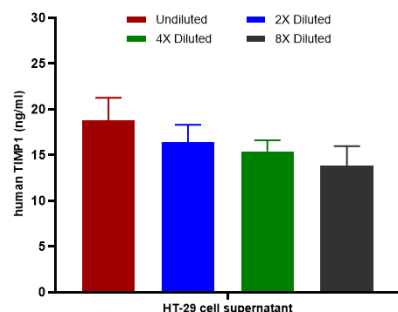


Elisa assay was performed by coating wells of a 96-well plate with 50  $\mu$ l per well of capture antibody (HA725367) diluted in carbonate/bicarbonate buffer, at a concentration of 2  $\mu$ g/ml overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 150  $\mu$ l 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human TIMP1 protein (HA211003) starting from 20,000 pg/ml to 0 pg/ml and detect antibody (HA725368, Biotin, 0.05  $\mu$ g/ml) for 1 hour at 30 $^{\circ}$ C with shaking. Then the plate was washed and incubated with 50  $\mu$ l per well of SA-HRP for 0.5 hour at 30 $^{\circ}$ C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

**Fig2:** Interpolated concentrations of native TIMP1 in human plasma samples.

Capture: HA725367, Human TIMP1 Rabbit mAb [PSH18-78]  
 Detector: HA725368, Human TIMP1 Rabbit mAb [PSH18-79]

The concentrations of TIMP1 were measured in duplicates, interpolated from the TIMP1 standard curve and corrected for sample dilution. Undiluted samples are human plasma 2%. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2). The mean TIMP1 concentration was determined to be 272.4 ng/ml in human plasma.

**Fig3:** Interpolated concentrations of native TIMP1 in HT-29 cell culture supernatant.

Capture: HA725367, Human TIMP1 Rabbit mAb [PSH18-78]  
 Detector: HA725368, Human TIMP1 Rabbit mAb [PSH18-79]

The concentrations of TIMP1 were measured in duplicates, interpolated from the TIMP1 standard curve and corrected for sample dilution. Undiluted samples are HT-29 cell culture supernatant 50%. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2). The mean TIMP1 concentration was determined to be 16.1 ng/ml in HT-29 cell culture supernatant.

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**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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### Background References

1. Guccini I et al. Senescence Reprogramming by TIMP1 Deficiency Promotes Prostate Cancer Metastasis. *Cancer Cell*. 2021 Jan
2. Schoeps B et al. TIMP1 Triggers Neutrophil Extracellular Trap Formation in Pancreatic Cancer. *Cancer Res*. 2021 Jul

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