

Anti-Human PAI1 Antibody [PSH12-18] - BSA and Azide free (Capture/Detector)

HA723435



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Cap), ELISA(Det)
Clone number:	PSH12-18

Description: Plasminogen activator inhibitor-1 (PAI-1) also known as endothelial plasminogen activator inhibitor (serpin E1) is a protein that in humans is encoded by the SERPINE1 gene. Elevated PAI-1 is a risk factor for thrombosis and atherosclerosis. PAI-1 is a serine protease inhibitor (serpin) that functions as the principal inhibitor of tissue-type plasminogen activator (tPA) and urokinase (uPA), the activators of plasminogen and hence fibrinolysis (the physiological breakdown of blood clots). It is a serine protease inhibitor (serpin) protein (SERPINE1). The other PAI, plasminogen activator inhibitor-2 (PAI-2) is secreted by the placenta and only present in significant amounts during pregnancy. In addition, protease nexin acts as an inhibitor of tPA and urokinase. PAI-1, however, is the main inhibitor of the plasminogen activators.

Immunogen: Recombinant protein within Human PAI1 aa 24-402 (HA210982).

Positive control: Recombinant Human PAI1 protein (HA210982).

Subcellular location: Secreted.

Database links: SwissProt: P05121 Human

Recommended Dilutions:

ELISA(Cap) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH12-19] to Human PAI1 antibody (Detector) (HA723436) and Recombinant Human PAI1 protein (HA210982) as the standard. The reference range value is 78.1-10,000 pg/mL.

ELISA(Det) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH12-20] to Human PAI1 antibody (Capture) (HA723438) and Recombinant Human PAI1 protein (HA210982) as the standard. The reference range value is 78.1-10,000 pg/mL.

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

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Orders:0086-571-88062880

Technical:0086-571-89986345

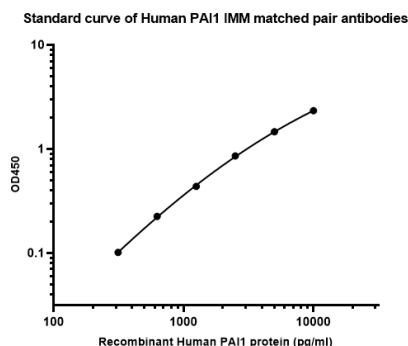
Service mail:support@huabio.cn

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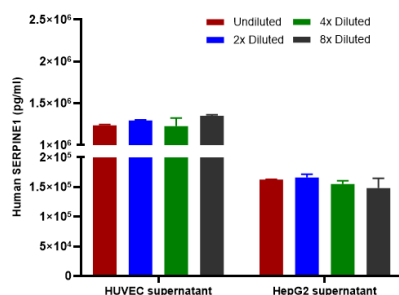
Images

Fig1: Sandwich ELISA analysis of Human PAI1 matched pair antibodies

Capture: HA723435, Human PAI1 Rabbit mAb [PSH12-18]
 Detector: HA723436, Human PAI1 Rabbit mAb [PSH12-19]

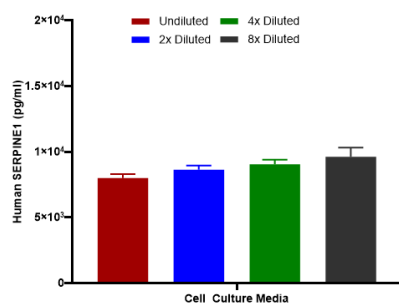


Elisa assay was performed by coating wells of a 96-well plate with 100 μ l per well of capture antibody (HA723435) diluted in carbonate/bicarbonate buffer, at a concentration of 5 μ g/mL overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 150 μ l 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human PAI1 protein (HA210982) starting from 10,000 pg/ml to 0 pg/ml and detect antibody (HA723436, Biotin, 0.2 μ g/ml) for 1 hour at 30 $^{\circ}$ C with shaking. Then the plate was washed and incubated with 100 μ 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 PAI1 in human cell culture supernatant samples.

Capture: HA723435, Human PAI1 Rabbit mAb [PSH12-18]
 Detector: HA723436, Human PAI1 Rabbit mAb [PSH12-19]

Interpolated concentration of native PAI1 was measured in duplicate at different sample concentrations. The interpolated dilution factor corrected values were plotted (mean \pm SD, n=2). The mean PAI1 concentration was determined to be 1276000pg/mL in HUVEC sups, 158000 pg/ml in HepG2 cell culture supernatant.

Fig3: Interpolated concentrations of spiked PAI1 in cell culture media samples.

Capture: HA723435, Human PAI1 Rabbit mAb [PSH12-18]
 Detector: HA723436, Human PAI1 Rabbit mAb [PSH12-19]

The concentrations of PAI1 were measured in duplicates, interpolated from the PAI1 standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2).

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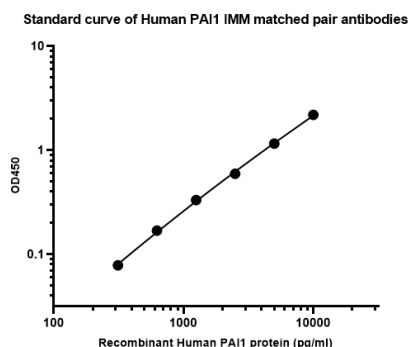
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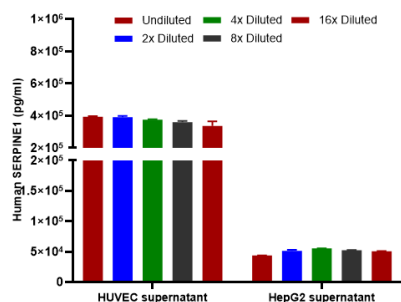
Fig4: Sandwich ELISA analysis of Human PAI1 matched pair antibodies

Capture: HA723438, Human PAI1 Rabbit mAb [PSH12-20]
 Detector: HA723435, Human PAI1 Rabbit mAb [PSH12-18]



Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA723438) diluted in carbonate/bicarbonate buffer, at a concentration of 5 µg/mL overnight at 4°C. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human PAI1 protein (HA210982) starting from 10,000 pg/ml to 0 pg/ml and detect antibody (HA723435, Biotin, 0.2 µg/ml) for 1 hour at 30°C with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30°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.

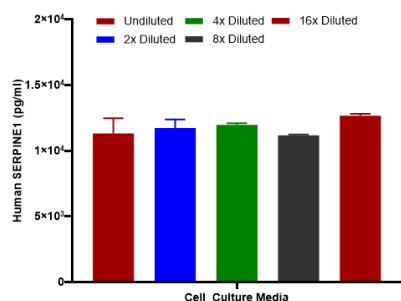
Fig5: Interpolated concentrations of native PAI1 in human cell culture supernatant samples.



Capture: HA723438, Human PAI1 Rabbit mAb [PSH12-20]
 Detector: HA723435, Human PAI1 Rabbit mAb [PSH12-18]

Interpolated concentration of native PAI1 was measured in duplicate at different sample concentrations. The interpolated dilution factor corrected values were plotted (mean +/- SD, n=2). The mean PAI1 concentration was determined to be 371000 pg/ml in HUVEC sups, 51000 pg/ml in HepG2 cell culture supernatant.

Fig6: Interpolated concentrations of spiked PAI1 in cell culture media samples.



Capture: HA723438, Human PAI1 Rabbit mAb [PSH12-20]
 Detector: HA723435, Human PAI1 Rabbit mAb [PSH12-18]

The concentrations of PAI1 were measured in duplicates, interpolated from the PAI1 standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

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

Background References

1. Chen JF et al. PAI1 inhibits the pathogenesis of primary focal hyperhidrosis by targeting CHRNA1. Orphanet J Rare Dis. 2023 Jul
2. Zhang D et al. SERPINE1AS2 regulates intramuscular adipogenesis by inhibiting PAI1 protein expression. Int J Biol Macromol. 2024 Aug

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