

**APA532Hu61 100µg**

**Active Plasminogen Activator Inhibitor 1 (PAI1)**

**Organism Species: *Homo sapiens (Human)***

***Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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1st Edition (Apr, 2016)

## **[ PROPERTIES ]**

**Source:** Eukaryotic expression.

**Host:** 293F cell

**Residues:** Val24~Pro402

**Tags:** N-terminal His-tag

**Purity:** >95%

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

**Buffer Formulation:** PBS, pH7.4, containing 5% trehalose.

**Applications:** Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 7.5

**Predicted Molecular Mass:** 44.4kDa

**Accurate Molecular Mass:** 46kDa as determined by SDS-PAGE reducing conditions.

## **[ USAGE ]**

Reconstitute in 10mM PBS (pH7.6) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **[ STORAGE AND STABILITY ]**

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were

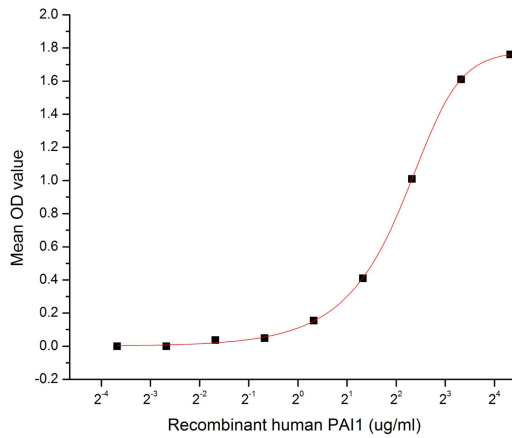
observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

## **[ SEQUENCE ]**

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VHHPPSY VAHLASDFGV RVFQQVAQAS  
KDRNVVFSFY GVASVLAMLQ LTTGGETQQQ IQAAMGFKID DKGMAPALRH  
LYKELMGPWN KDEISTTDAI FVQRDLKLVQ GFMPHFFRLF RSTVKQVDFS  
EVERARFIIN DWVKHTTKGM ISNLLGKGAV DQLTRLVLVN ALYFNGQWKT  
PFPDSSTHRR LFHKSDGSTV SVPMAQTNK FNYTEFTTPD GHYYDILELP  
YHGDTLSMFI AAPYEKEVPL SALTNILSAQ LISHWKGNMT RLPRLLVLPK  
FSLETEVDLR KPLENLGMTD MFRQFQADFT SLSDQEPLHV AQALQKVKIE  
VNESGTVASS STAVIVSARM APEEIIMDRP FLFVVRHNPT GTVLFMQVM  
EP
```

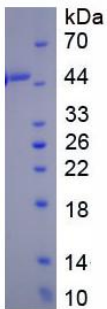
## **[ ACTIVITY ]**

Plasminogen Activator Inhibitor 1 (PAI1) is a member of the Serpin superfamily of serine protease inhibitors, Serpin E1/PAI-1 is the principal inhibitor of urokinase-type plasminogen activator (uPA) and tissue-type PA. As important regulators of extracellular matrix remodeling, uPA and PAI-1 play a major role in many processes such as angiogenesis, tumor invasion and obesity. Besides, Vitronectin (VTN) has been identified as an interactor of PAI1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PAI1 and recombinant human VTN. Briefly, PAI1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to VTN-coated microtiter wells and incubated for 2h at 37  $^{\circ}$ C. Wells were washed with PBST and incubated for 1h with anti-PAI1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37  $^{\circ}$ C. Finally, add 50 $\mu$ L stop solution to the wells and read at 450nm immediately. The binding activity of PAI1 and VTN was shown in Figure 1, and this effect was in a dose dependent manner, the EC50 was approximately 4.47  $\mu$ g/mL.



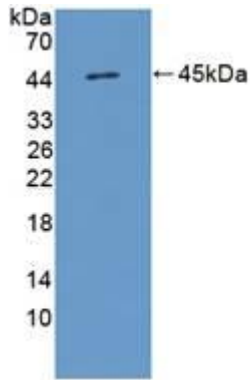
**Figure 1. The binding activity of PAI1 with VTN**

## [ IDENTIFICATION ]



**Figure 2. SDS-PAGE**

**Sample: Active recombinant PAI1, Human**



**Figure 3. Western Blot**

**Sample: Recombinant PAI1, Human;**

**Antibody: Rabbit Anti- Human PAI1 Ab (PAA532Hu06)**

**[ IMPORTANT NOTE ]**

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.