abcam

ab226864

# Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Carrier free** | Yes |
| **Clone number** | EPR17272-21 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.055 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## WB

### Tested

| | |
|---|---|
| **Species** | Mouse, Rat, Human |
| **Dilution info** | - |

| | |
|---|---|
| **Notes** | - |

## ICC/IF

### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Rat, Human |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | - |
| **Notes** | - |

### Expected

| | |
|---|---|
| **Species** | Rat, Human |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## IP

### Tested

| | |
|---|---|
| **Species** | Human, Mouse |
| **Dilution info** | - |
| **Notes** | - |

**Expected**

| | |
|---|---|
| **Species** | Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Target data

See full target information SERPINE1

**Function**

Serine protease inhibitor. Inhibits TMPRSS7 (PubMed:15853774). Is a primary inhibitor of tissue-type plasminogen activator (PLAT) and urokinase-type plasminogen activator (PLAU). As PLAT inhibitor, it is required for fibrinolysis down-regulation and is responsible for the controlled degradation of blood clots (PubMed:17912461, PubMed:8481516, PubMed:9207454, PubMed:21925150). As PLAU inhibitor, it is involved in the regulation of cell adhesion and spreading (PubMed:9175705). Acts as a regulator of cell migration, independently of its role as protease inhibitor (PubMed:15001579, PubMed:9168821). It is required for stimulation of keratinocyte migration during cutaneous injury repair (PubMed:18386027). It is involved in cellular and replicative senescence (PubMed:16862142). Plays a role in alveolar type 2 cells senescence in the lung (By similarity). Is involved in the regulation of cementogenic differentiation of periodontal ligament stem cells, and regulates odontoblast differentiation and dentin formation during odontogenesis (PubMed:25808697, PubMed:27046084).

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |
| **Storage information** | Do Not Freeze |

## Notes

ab226864 is the carrier-free version of ab182973.

**Patented technology**

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**What are the advantages of a recombinant monoclonal antibody?**
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

**Conjugation ready**
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

**Compatibility**
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

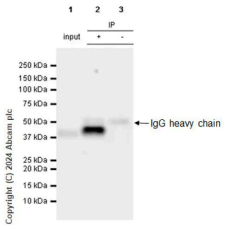
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We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

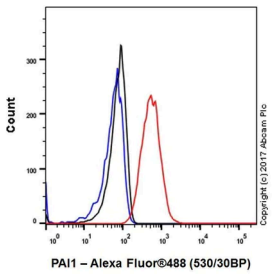
Full details and terms and conditions can be found here:
Terms & Conditions.

# 7 product images




## Immunoprecipitation - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

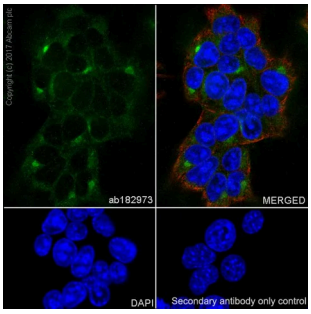
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182973). ab182973 at 1/30 immunoprecipitating PAI1 in SW480 (human colorectal adenocarcinoma epithelial cell) whole cell lysate. Lane 1 (input): SW480 (human colorectal adenocarcinoma epithelial cell) whole cell lysate (10µg) Lane 2 (+): SW480 (human colorectal adenocarcinoma epithelial cell) whole cell lysate Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab182973 in SW480 whole cell lysate For western blotting, ab182973 followed by ab131366 VeriBlot for IP (HRP) was used for detection (1/5000). Blocking/Diluting buffer and concentration: 5% NFDM/TBST.




## Flow Cytometry (Intracellular) - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

PAI1 Flow Cytometry (Intracellular) staining using rabbit Anti-PAI1 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methonol-permeabilized Hepa1-6 (mouse hepatoma epithelial cell line) cells labeling PAI1 with ab182973 at 1/60 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077), at 1/2000 dilution was used as the secondary antibody.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182973).



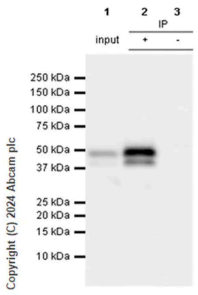

## Immunocytochemistry/ Immunofluorescence - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

PAI1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PAI1 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Hepa1-6 (mouse hepatoma epithelial cell line) cells labeling PAI1 with ab182973 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on Hepa1-6 cells.
The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

-ve control: PBS only, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182973).




## Immunoprecipitation - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182973). ab182973 at 1/30 immunoprecipitating PAI1 in SW480 (human colorectal adenocarcinoma epithelial cell) whole cell lysate. Lane 1 (input): Mouse placenta tissue lysate 10 µg Lane 2 (+): Mouse placenta tissue lysate Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab182973 in mouse placenta tissue lysate For western blotting, ab182973 followed by ab131366 VeriBlot for IP (HRP) were used for detection (1/5000). Blocking/Diluting buffer and concentration: 5% NFDM/TBST.
Lanes 1 - 3:
Immunoprecipitation - Anti-PAI1 antibody [EPR17272-21] (ab182973) at 1/30 dilution

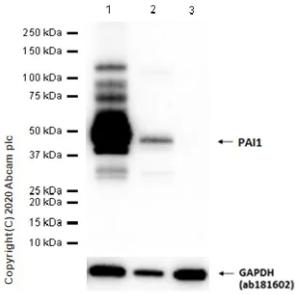
Lanes 1 - 3:
Immunoprecipitation - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

All lanes:
Mouse placenta tissue lysate at 10 µg

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 8s




## Western blot - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.
The expression level of mouse and rat PAI1 may be low in normal liver tissue (PMID: 21898503). This antibody detects no bands in rat liver.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182973).

All lanes:
Western blot - Anti-PAI1 antibody [EPR17272-21] (ab182973) at 1/1000 dilution

Lane 1:
Rat placenta tissue lysate at 20 µg

Lane 2:
Rat lung tissue lysate at 20 µg

Lane 3:
Rat liver tissue lysate at 20 µg

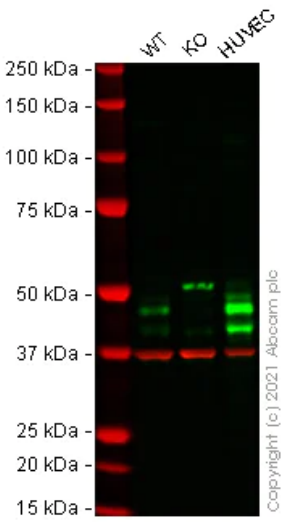
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 45 kDa

Observed band size: 45 kDa

Exposure time: 20s




## Western blot - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

This data was developed using the same antibody clone in a different buffer formulation (ab182973).
**Lanes 1 - 3:** Merged signal (red and green). Green - ab182973 observed at 48 kDa. Red - loading control ab8245 (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab182973 was shown to react with PAI1 in wild-type A549 cells in Western blot. The band observed in the edited lysate lane above 45 kDa is likely to represent SERPINE1 with an insertion. This has not been investigated further. Wild-type A549 and SERPINE1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab182973 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.

All lanes:
Western blot - Anti-PAI1 antibody [EPR17272-21] (ab182973) at 1/1000 dilution

Lane 1:
Wild-type A549 cell lysate at 20 µg

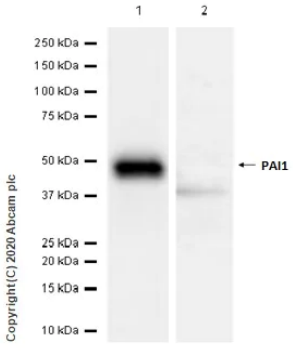
Lane 2:
SERPINE1 knockout A549 cell lysate at 20 µg

Lane 3:
HUVEC cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 45 kDa

Observed band size: 48 kDa




## Western blot - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.
The expression level of mouse and rat PAI1 may be low in normal liver tissue (PMID: 21898503).
This antibody detects a 37kDa extra band without BOI in mouse liver.

**Exposure time:**

**Lane 1 :** 3.25 seconds
**Lane 2 :** 180 seconds

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab182973).

All lanes:
Western blot - Anti-PAI1 antibody [EPR17272-21] (ab182973) at 1/1000 dilution

Lane 1:
Mouse placenta tissue lysate at 20 µg

Lane 2:

Mouse liver tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 45 kDa

Observed band size: 45 kDa

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