# Product datasheet

## Anti-PAI1 antibody [EPR17272-21] ab182973

### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-PAI1 antibody [EPR17272-21]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR17272-21] to PAI1</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: Flow Cyt, WB, ICC/IF</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mouse, Rat, Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Recombinant fragment within Mouse PAI1 aa 1-250. The exact sequence is proprietary. Database link: P22777</td>
</tr>
<tr>
<td>Positive control</td>
<td>WB: Hepa1-6 and HepG2 whole cell lysates; mouse lung (7 days supernatant), mouse placenta, rat placenta, rat lung. ICC/IF: Hepa1-6 cells. Flow cytometry: Hepa1-6 cells.</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage buffer</td>
<td>Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol, PBS</td>
</tr>
<tr>
<td>Purity</td>
<td>Protein A purified</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Clone number</td>
<td>EPR17272-21</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
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</table>

### Applications

Our Abpromise guarantee covers the use of ab182973 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
This inhibitor acts as 'bait' for tissue plasminogen activator, urokinase, and protein C. Its rapid interaction with TPA may function as a major control point in the regulation of fibrinolysis.

**Tissue specificity**

Found in plasma and platelets and in endothelial, hepatoma and fibrosarcoma cells.

**Involvement in disease**

Defects in SERPINE1 are the cause of plasminogen activator inhibitor-1 deficiency (PAI-1D) [MIM:613329]. It is a hematologic disorder characterized by increased bleeding after trauma, injury, or surgery. Affected females have menorrhagia. The bleeding defect is due to increased fibrinolysis of fibrin blood clots due to deficiency of plasminogen activator inhibitor-1, which inhibits tissue and urinary activators of plasminogen.

Note=High concentrations of SERPINE1 seem to contribute to the development of venous but not arterial occlusions.

**Sequence similarities**

Belongs to the serpin family.

**Post-translational modifications**

Inactivated by proteolytic attack of the urokinase-type (u-PA) and the tissue-type (TPA), cleaving the 369-Arg-Met-370 bond.

**Cellular localization**

Secreted.

### Images

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

- **Lane 1**: Rat placenta tissue lysate
- **Lane 2**: Rat lung tissue lysate
- **Lane 3**: Rat liver tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

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

**Predicted band size**: 45 kDa

**Observed band size**: 45 kDa
**Exposure time:** 20 seconds

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.

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

**Lane 1:** Mouse placenta tissue lysate
**Lane 2:** Mouse liver tissue lysate

Lysates/proteins at 20 µg per lane.

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

**Predicted band size:** 45 kDa
**Observed band size:** 45 kDa

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
**Western blot - Anti-PAI1 antibody [EPR17272-21] (ab182973)**

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

**Lane 1:** Hepa1-6 (mouse hepatoma epithelial cell line) whole cell lysate

**Lane 2:** HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

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

Developed using the ECL technique.

**Predicted band size:** 45 kDa

**Observed band size:** 45 kDa

Blocking and dilution buffer: 5% NFDM/TBST

Exposure times.

Lane 1: 1 second

Lane 2: 3 seconds
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 at 1/1000 dilution.

Anti-PAI1 antibody [EPR17272-21] (ab182973) at 1/1000 dilution + Mouse lung (7 days supernatant) at 10 µl

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Developed using the ECL technique.

**Predicted band size:** 45 kDa

**Observed band size:** 45 kDa

**Exposure time:** 3 seconds

Blocking and dilution buffer: 5% NFDM/TBST
All lanes: Anti-PAI1 antibody [EPR17272-21] (ab182973) at 1/5000 dilution

Lane 1: HepG2 (human hepatocellular carcinoma epithelial cell) grown in serum-free media for 18 hours, whole cell lysate

Lane 2: HepG2 grown in serum-free media for 18 hours, then treated with 10ng/ml TGFß for 24 hours, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 45 kDa
Observed band size: 45 kDa

Exposure time: 180 seconds

Blocking and diluting buffer: 5% NFDM/TBST

This image was performed on a BIO-RAD ChemiDoc™ MP instrument. The expression profile observed is consistent with what has been described in the literature (PMID: 20519507).

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-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.
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