abcam

ab182973

Anti-PAI1 antibody [EPR17272-21]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR17272-21
Purification technique	Affinity purification Protein A
Concentration	0.678 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat

Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/60
Notes	-

Expected

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

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Species	Mouse
Dilution info	1/30
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	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

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

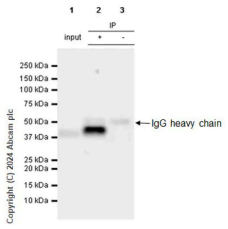
We do not recommend this combination. It is not covered by our product promise.

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.

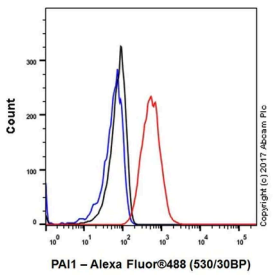
10 product images



Immunoprecipitation - Anti-PAI1 antibody [EPR17272-21] (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

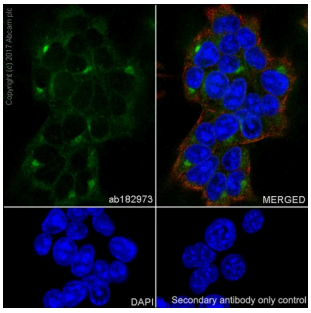
(HRP) was used for detection (1/5000). Blocking/Diluting buffer and concentration: 5% NFDM/TBST.



Flow Cytometry (Intracellular) - Anti-PAI1 antibody [EPR17272-21] (ab182973)

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.

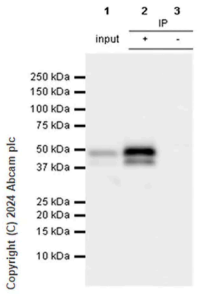


Immunocytochemistry/ Immunofluorescence - Anti-PAI1 antibody [EPR17272-21] (ab182973)

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 at 1/1000 dilution.



Immunoprecipitation - Anti-PAI1 antibody [EPR17272-21] (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

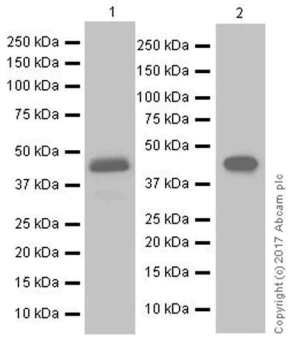
Lanes 1 - 3:
Immunoprecipitation - Anti-PAI1 antibody [EPR17272-21] - BSA and Azide free (ab226864)

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] (ab182973)

PAI1 Western blot staining using rabbit Anti-PAI1 antibody

Blocking and dilution buffer: 5% NFDM/TBST
Exposure times.

Lane 1: 1 second

Lane 2: 3 seconds

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

Lane 1:
Hepa1-6 (mouse hepatoma epithelial cell line) whole cell lysate at 10 µg

Lane 2:
HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate at 10 µg

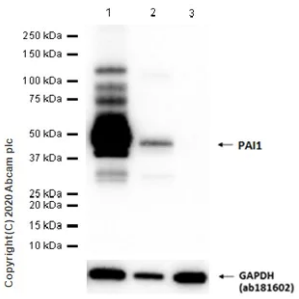
Secondary

All lanes:
Western blot - 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



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

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:
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

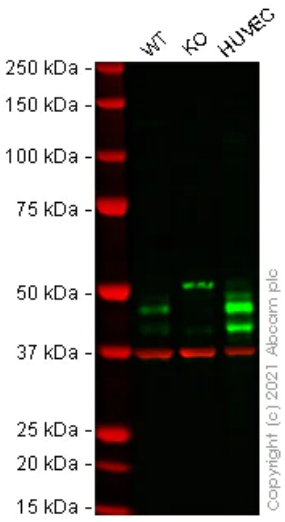
Secondary

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] (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

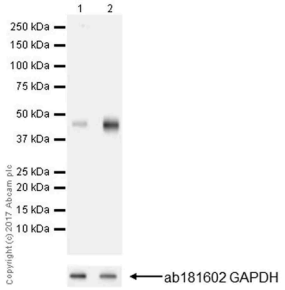
Lane 2:
SERPINE1 knockout A549 cell lysate at 20 µg

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] (ab182973)

PAI1 Western blot staining using rabbit Anti-PAI1 antibody

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).

All lanes:
Western blot - 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 at 20 µg

Lane 2:
HepG2 grown in serum-free media for 18 hours, then treated with 10ng/ml TGFβ for 24 hours, whole cell lysate at 20 µg

Secondary

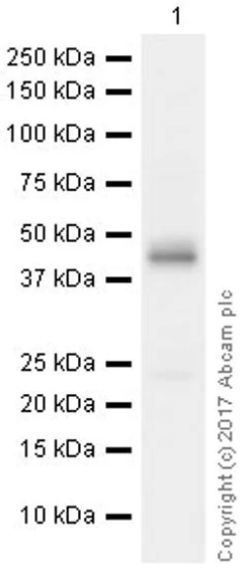
All lanes:

Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 45 kDa

Observed band size: 45 kDa

Exposure time: 180s



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

Blocking and dilution buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-PAI1 antibody [EPR17272-21] (ab182973) at 1/1000 dilution

All lanes:
Mouse lung (7 days supernatant) at 10 µL

Secondary

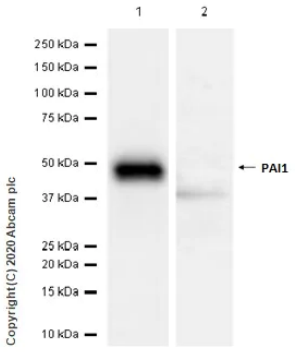
All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Developed using the ECL technique.

Predicted band size: 45 kDa

Observed band size: 45 kDa

Exposure time: 3s



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

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

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.