

Product datasheet

Anti-TIMP1 antibody [EPR1550] ab109125

KO VALIDATED

Recombinant

RabMAb

[27 References](#) [9 Images](#)

Overview

Product name	Anti-TIMP1 antibody [EPR1550]
Description	Rabbit monoclonal [EPR1550] to TIMP1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HeLa cell lysate; HT1080 + TPA, HL60+TPA, PBMC lysates, human prostate lysate; Human liver tissue; TIMP1 recombinant protein
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), PBS, 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR1550
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109125 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

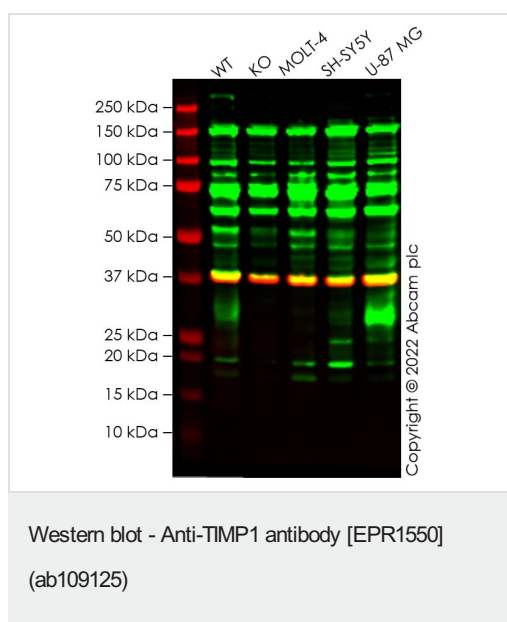
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 23 kDa.
IHC-P		1/8000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> . For unpurified use at 1/250 - 1/500.

Application notes Is unsuitable for Flow Cyt, ICC/IF or IP.

Target

Function	Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. Also mediates erythropoiesis in vitro; but, unlike IL-3, it is species-specific, stimulating the growth and differentiation of only human and murine erythroid progenitors. Known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-11, MMP-12, MMP-13 and MMP-16. Does not act on MMP-14.
Sequence similarities	Belongs to the protease inhibitor I35 (TIMP) family. Contains 1 NTR domain.
Post-translational modifications	The activity of TIMP1 is dependent on the presence of disulfide bonds.
Cellular localization	Secreted.

Images



All lanes : Anti-TIMP1 antibody [EPR1550] (ab109125) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : TIMP1 knockout HeLa cell lysate

Lane 3 : MOLT-4 cell lysate

Lane 4 : SH-SY5Y cell lysate

Lane 5 : U-87 MG cell lysate

Lysates/proteins at 20 µg per lane.

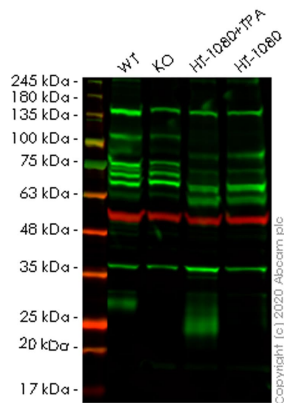
Performed under reducing conditions.

Predicted band size: 23 kDa

Observed band size: 30 kDa

False colour image of Western blot: Anti-TIMP1 antibody [EPR1550] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab109125 was shown to bind specifically to TIMP1. A band was observed at 30 kDa in wild-type HeLa cell lysates with no signal observed at this size in TIMP1 knockout cell line [ab264022](#) (knockout cell lysate [ab260091](#)). The identity of bands observed at higher molecular weights has not been determined. To generate this image, wild-type and TIMP1 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary

antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-TIMP1 antibody [EPR1550] (ab109125)

All lanes : Anti-TIMP1 antibody [EPR1550] (ab109125) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : TIMP1 knockout HeLa cell lysate

Lane 3 : HT-1080 treated with 200ng/ml 12-O-Tetradecanoylphorbol-13-acetate (TPA) for 24 hours, cell lysate

Lane 4 : Untreated HT-1080 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

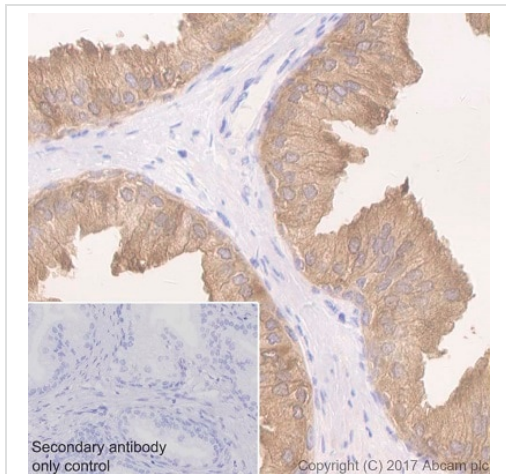
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Predicted band size: 23 kDa

Observed band size: 26 kDa

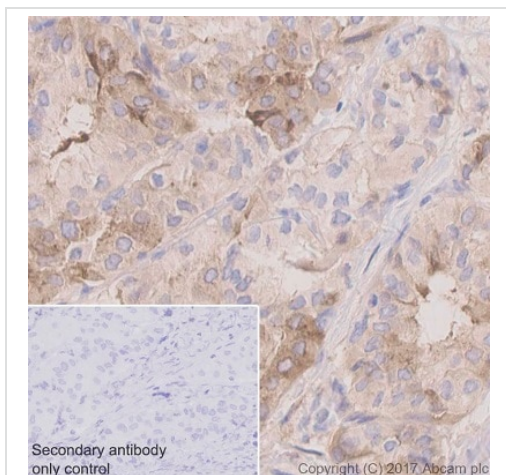
Lanes 1-4: Merged signal (red and green). Green - ab109125 observed at 26 kDa. Red - loading control [ab7291](#) observed at 50 kDa.

ab109125 Anti-TIMP1 antibody [EPR1550] was shown to specifically react with TIMP1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab261740](#) (knockout cell lysate [ab257291](#)) was used. Wild-type and TIMP1 knockout samples were subjected to SDS-PAGE. ab109125 and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



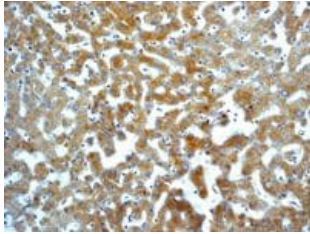
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIMP1 antibody [EPR1550] (ab109125)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human prostatic hyperplasia tissue sections labeling TIMP1 with purified ab109125 at 1:8000 dilution (0.21 µg/ml). Heat mediated antigen retrieval was performed using EDTA buffer, pH 9.0. Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



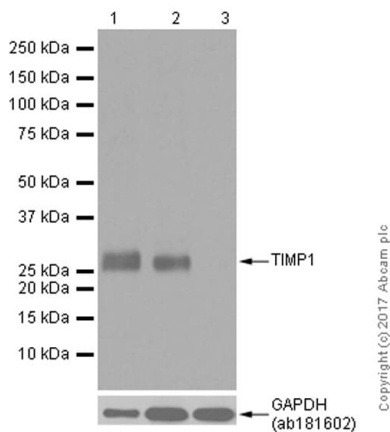
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIMP1 antibody [EPR1550] (ab109125)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue sections labeling TIMP1 with purified ab109125 at 1:8000 dilution (0.21 µg/ml). Heat mediated antigen retrieval was performed using EDTA buffer, pH 9.0. Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIMP1 antibody [EPR1550] (ab109125)

Unpurified ab109125, at 1/250 dilution staining TIMP1 in paraffin-embedded human liver tissue, by Immunohistochemistry.



Western blot - Anti-TIMP1 antibody [EPR1550] (ab109125)

All lanes : Anti-TIMP1 antibody [EPR1550] (ab109125) at 1/1000 dilution (purified)

Lane 1 : Human prostate lysates at 20 μ g

Lane 2 : HT-1080 (Human fibrosarcoma epithelial cell) treated with 200ng/ml TPA for 24 hours whole cell lysates at 15 μ g

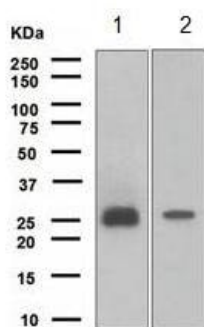
Lane 3 : Untreated with HT-1080 (Human fibrosarcoma epithelial cell) whole cell lysates at 15 μ g

Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 23 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-TIMP1 antibody [EPR1550] (ab109125)

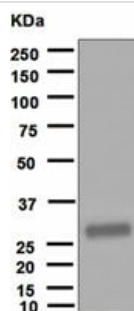
All lanes : Anti-TIMP1 antibody [EPR1550] (ab109125) at 1/1000 dilution (unpurified)

Lane 1 : HL60+TPA cell lysates

Lane 2 : PBMC cell lysates

Lysates/proteins at 10 μ g per lane.

Predicted band size: 23 kDa



Anti-TIMP1 antibody [EPR1550] (ab109125) at 1/1000 dilution
(unpurified) + TIMP1 recombinant protein at 10 µg

Predicted band size: 23 kDa

Western blot - Anti-TIMP1 antibody [EPR1550]
(ab109125)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-TIMP1 antibody [EPR1550] (ab109125)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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