abcam

Product datasheet

Anti-MMP3 antibody [EP1186Y] ab52915



★★★★ 4 Abreviews 192 References 10 Images

Overview

Product name Anti-MMP3 antibody [EP1186Y]

Description Rabbit monoclonal [EP1186Y] to MMP3

Host species Rabbit

Specificity 79% identities with MMP10

Tested applications Suitable for: WB, IHC-P, ICC/IF

Reacts with: Mouse, Rat, Human Species reactivity

Immunogen Synthetic peptide within Human MMP3 aa 450 to the C-terminus (C terminal). The exact

sequence is proprietary.

Positive control WB: Raji, HEK293; mouse lung, placenta, brain, kidney liver lysate; rat brain, liver, spleen, kidney

lysate; IHC-P: Rat kidney, mouse liver, human liver. ICC/IF: HT-29 cells.

General notes 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 production

For more information see here.

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

Properties

Form

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.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EP1186Y

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab52915 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	★★★★ <u>(1)</u>	1/1000 - 1/20000. Detects a band of approximately 50 kDa (predicted molecular weight: 54 kDa).
IHC-P	**** <u>(3)</u>	1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. We recommend using a polymer-HRP conjugated secondary antibody. Incubate with ab52915 at 4C overnight.
ICC/IF		1/100 - 1/250.

Function Can degrade fibronectin, laminin, gelatins of type I, III, IV, and V; collagens III, IV, X, and IX, and

cartilage proteoglycans. Activates procollagenase.

Sequence similarities Belongs to the peptidase M10A family.

Contains 4 hemopexin-like domains.

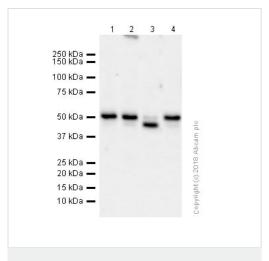
Domain The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus

inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-

peptide release activates the enzyme.

Cellular localization Secreted > extracellular space > extracellular matrix.

Images



Western blot - Anti-MMP3 antibody [EP1186Y] (ab52915)

All lanes : Anti-MMP3 antibody [EP1186Y] (ab52915) at 0.37 µg/ml (purified)

Lane 1 : Raji (Human Burkitt's lymphoma B lymphocyte)whole cell lysate

Lane 2 : HEK293 (Human embryonic kidney epithelial cell) whole cell lysate

Lane 3 : Mouse lung lysate

Lane 4 : Mouse placenta lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 54 kDa **Observed band size:** 50 kDa

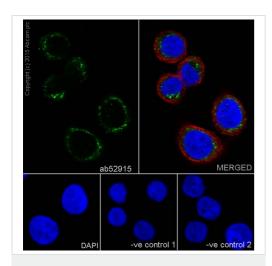
Exposure time: 84 seconds

Blocking and diluting buffer: 5% NFDM/TBST.

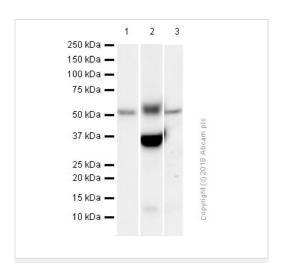
Secondary antibody only control

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP3 antibody
[EP1186Y] (ab52915)

Immunohistochemical staining of paraffin embedded rat kidney with purified ab52915 at a working dilution of 1/50. The secondary antibody used is <u>ab97051</u>, a goat anti-rabbit lgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-MMP3 antibody [EP1186Y] (ab52915)



Western blot - Anti-MMP3 antibody [EP1186Y] (ab52915)

Immunofluorescence staining of HT-29 cells with purified ab52915 at a working dilution of 1/100, counter-stained with DAPI. The secondary antibody was Alexa Fluor[®] 488 goat anti-rabbit (ab150077), used at a dilution of 1/1000. ab7291, a mouse antitubulin antibody (1/1000), was used to stain tubulin along with ab150120 (Alexa Fluor[®] 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 100% methanol and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab52915 was used at a dilution of 1/500 followed by an Alexa Fluor[®] 594 goat anti-mouse antibody (ab150120) at a dilution of 1/500. For negative control 2, ab7291 (mouse antitubulin) was used at a dilution of 1/500 followed by an Alexa Fluor[®] 488 goat anti-rabbit antibody (ab150077) at a dilution of 1/400.

All lanes : Anti-MMP3 antibody [EP1186Y] (ab52915) at 0.37 µg/ml (purified)

Lane 1 : Rat brain lysate

Lane 2 : Rat liver lysate

Lane 3 : Rat spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

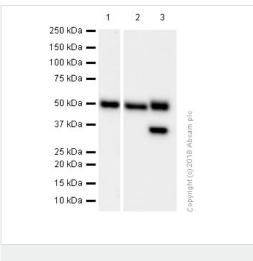
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 54 kDa
Observed band size: 50 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

Exposure time: Lane 1 & 2: 10 seconds

Lane 3: 3 minutes



Western blot - Anti-MMP3 antibody [EP1186Y] (ab52915)

All lanes : Anti-MMP3 antibody [EP1186Y] (ab52915) at 0.37 μ g/ml (purified)

Lane 1 : Mouse brain lysate
Lane 2 : Mouse kidney lysate
Lane 3 : Mouse liver lysate

Lysates/proteins at 20 µg per lane.

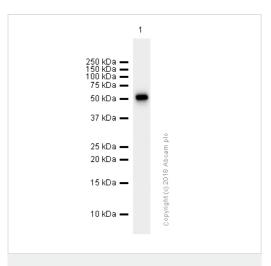
Secondary

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

Predicted band size: 54 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 3 minutes Lane 2 & 3: 4 seconds



Western blot - Anti-MMP3 antibody [EP1186Y] (ab52915)

Anti-MMP3 antibody [EP1186Y] (ab52915) at 0.37 μ g/ml (purified) + Rat kidney lysate at 20 μ g

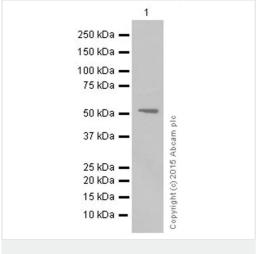
Secondary

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

Predicted band size: 54 kDa **Observed band size:** 50 kDa

Exposure time: 15 seconds

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-MMP3 antibody [EP1186Y] (ab52915)

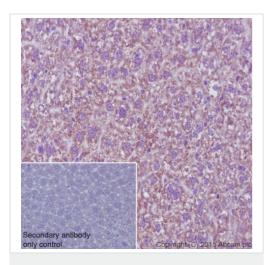
Anti-MMP3 antibody [EP1186Y] (ab52915) at 1/20000 dilution (purified) + MMP3 recombinant protein

Secondary

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

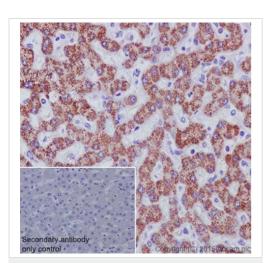
Predicted band size: 54 kDa **Observed band size:** 50 kDa

Blocking buffer: 5% NFDM/TBST Dilution buffer: 5% NFDM/TBST



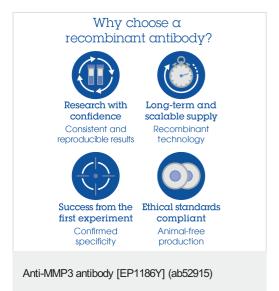
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP3 antibody
[EP1186Y] (ab52915)

Immunohistochemical staining of paraffin embedded mouse liver with purified ab52915 at a working dilution of 1/50. The secondary antibody used is **ab97051**, a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP3 antibody
[EP1186Y] (ab52915)

Immunohistochemical staining of paraffin embedded human liver with purified ab52915 at a working dilution of 1/50. The secondary antibody used is <u>ab97051</u>, a goat anti-rabbit lgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors