# abcam

### Product datasheet

# Anti-MMP3 antibody [EP1186Y] ab52915



★★★★★ 3 Abreviews 53 References 9 Images

#### Overview

**Product name** Anti-MMP3 antibody [EP1186Y]

Rabbit monoclonal [EP1186Y] to MMP3 **Description** 

**Host species** Rabbit

79% identities with MMP10 Specificity

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

**Species reactivity** Reacts with: Mouse, Rat, Human

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

sequence is proprietary.

Positive control Human gastric carcinoma tissue.

General notes

A trial size is available to purchase for this antibody.

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

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

#### **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, 0.05% BSA

**Purity** Protein A purified

Clonality Monoclonal
Clone number EP1186Y

**Isotype** IgG

# **Applications**

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		1/1000 - 1/20000. Detects a band of approximately 50 kDa (predicted molecular weight: 54 kDa).
IHC-P	****	1/50.
ICC/IF		1/100 - 1/250.

#### **Target**

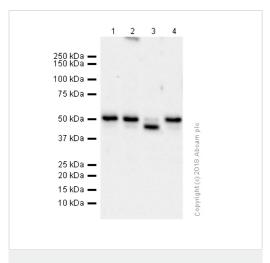
Function	Can degrade fibronectin, laminin, gelatins of type I, III, IV, and V; collagens III, IV, X, and IX, and cartilage proteoglycans. Activates procollagenase.
Sequence similarities	Belongs to the peptidase M10A family.  Contains 4 hemopexin-like domains.
Domain	The conserved cysteine present in 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.

Secreted > extracellular space > extracellular matrix.

# **Images**

**Cellular localization** 



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**

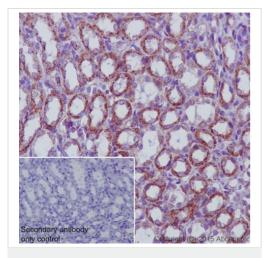
**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

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

why is the actual band size different from the predicted?

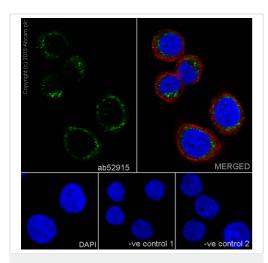
Exposure time: 84 seconds

Blocking and diluting buffer: 5% NFDM/TBST.

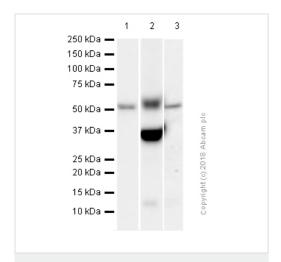


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP3 antibody
[EP1186Y] (ab52915)

Immunohistochemical staining of paraffin embedded rat kidney with purified ab52915 at a working dilution of 1/50. The secondary antibody used is ab97051, 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 anti-tubulin) 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  $\mu$ g/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) (ab97051) at 1/20000 dilution

Predicted band size: 54 kDa

Observed band size: 50 kDa why is the actual band size different

from the predicted?

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  $\mu$ 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.

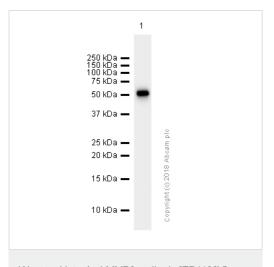
#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) 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  $\mu$ g/ml (purified) + Rat kidney lysate at 20  $\mu$ g

#### Secondary

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

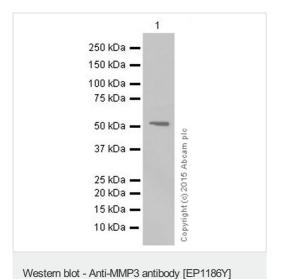
Predicted band size: 54 kDa

Observed band size: 50 kDa why is the actual band size different

from the predicted?

Exposure time: 15 seconds

Blocking and diluting buffer: 5% NFDM/TBST



(ab52915)

econdary antibody

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

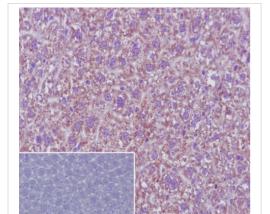
#### Secondary

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

Predicted band size: 54 kDa

Observed band size: 50 kDa why is the actual band size different

from the predicted?

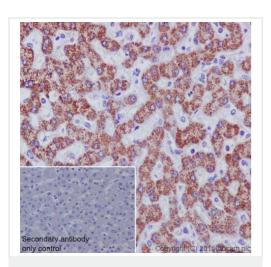


Dilution buffer: 5% NFDM/TBST

Blocking 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 ab97051, 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.

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