

Product datasheet

Anti-MMP3 antibody ab53015

★★★★★ [7 Abreviews](#) [111 References](#) [5 Images](#)

Overview

Product name	Anti-MMP3 antibody
Description	Rabbit polyclonal to MMP3
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide derived from human MMP3 Peptide available as ab134501 .
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS</p>
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab53015 in the following tested applications.

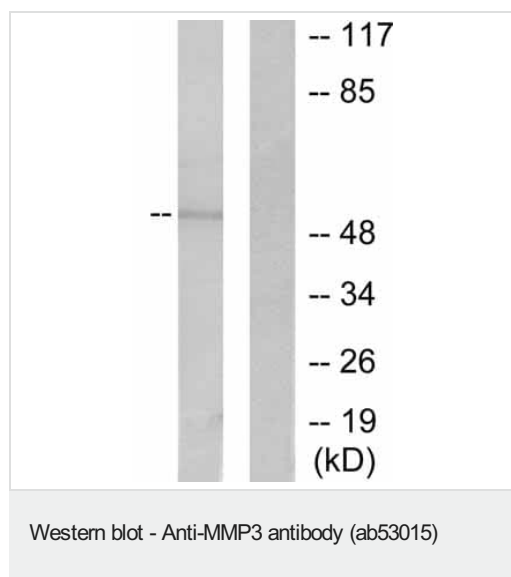
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (3)	1/50 - 1/100.
WB	★★★★★ (2)	1/500 - 1/1000. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa).
ICC/IF	★★★★★ (1)	Use a concentration of 5 µg/ml.

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.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



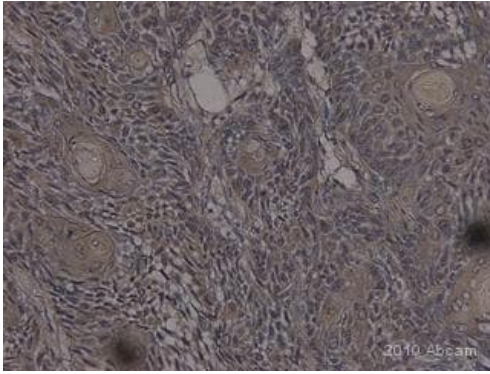
All lanes : Anti-MMP3 antibody (ab53015) at 1/500 dilution

Lane 1 : Extracts from 293 cells, untreated.

Lane 2 : Extracts from 293 cells, treated with the immunising peptide.

Predicted band size: 54 kDa

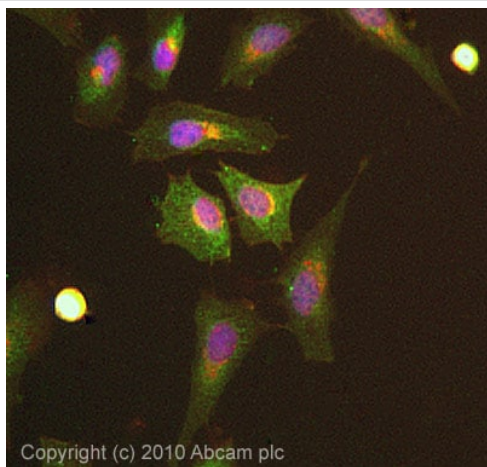
Observed band size: 54 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MMP3 antibody (ab53015)

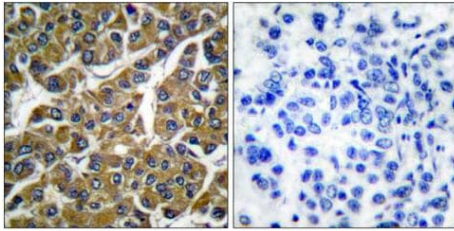
This image is courtesy of an anonymous abreview.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lymphoma labeling MMP3 with ab53015 at 1/100 dilution. Tissue was fixed with formaldehyde; heat-mediated antigen retrieval was performed using citrate buffer (pH 6.0). The tissue was blocked with 1% serum for 1 hour at 25°C. A biotin conjugated polyclonal goat anti-rabbit secondary antibody was used at 1/200 dilution.



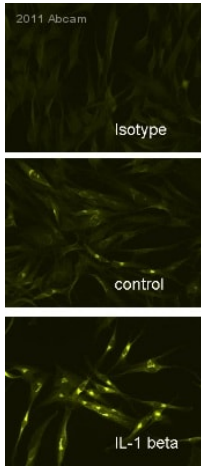
Immunocytochemistry/ Immunofluorescence - Anti-MMP3 antibody (ab53015)

ICC/IF image of ab53015 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab53015, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MMP3 antibody (ab53015)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using MMP3 antibody at a dilution of 1/50. Left: without immunizing peptide; Right: with immunizing peptide.



Immunocytochemistry/ Immunofluorescence - Anti-MMP3 antibody (ab53015)

This image is courtesy of an Abreview submitted by Torsten Lowin.

Top image: Isotype control Middle image: Unstimulated cells
Bottom image: IL-1 beta stimulated cells (24 hours, 10 ng/ml)

ab53015 staining MMP3 in Human synovial fibroblasts by Immunocytochemistry/ Immunofluorescence. Cells were fixed in formaldehyde and permeabilized in methanol for 15 minutes at -20°C prior to blocking in 1% BSA for 1 hour at 25°C. The primary antibody was diluted 1/1000 and incubated with the sample for 2 hours at 25°C. The secondary antibody was Cy5®-conjugated Goat anti-Rabbit polyclonal, diluted 1/200.

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