

Product datasheet

Anti-MMP9 antibody ab38898

★★★★★ [46 Abreviews](#) [955 References](#) [1 Image](#)

Overview

Product name	Anti-MMP9 antibody
Description	Rabbit polyclonal to MMP9
Host species	Rabbit
Specificity	<p>The antibody binds to MMP-9, but does not cross react with the other MMP family members (MMP-1, MMP-2, MMP-3).</p> <p>In our hands, no signal or a very weak signal was observed in WB in native human samples (BLAST of full length mouse protein sequence showed 72% homology with the Human MMP9 sequence).</p> <p>Treatment increasing the expression of MMP-9 is recommended when using this antibody.</p>
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Recombinant fragment
Immunogen	Full length protein corresponding to Mouse MMP9.
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. Store at +4°C short term (1-2 weeks). Store at -20°C.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab38898 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	★★★★★ (20)	1/1000. Detects a band of approximately 92 kDa. When using colorimetric substrates such as BCIP/NBT use at a 1/5000 dilution (for chemiluminescent substrates). Detects a band of approximately 92-95 kDa (pro-form) and 82kDa (active form) (Human samples). Mouse MMP9 is larger, and on SDS PAGE gels runs about 102-105 kDa. Dilution optimised using Chromogenic detection.

Target

Function

May play an essential role in local proteolysis of the extracellular matrix and in leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly-Leu bond. Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. Degrades fibronectin but not laminin or Pz-peptide.

Tissue specificity

Produced by normal alveolar macrophages and granulocytes.

Involvement in disease

Intervertebral disc disease
Metaphyseal anadysplasia 2

Sequence similarities

Belongs to the peptidase M10A family.
Contains 3 fibronectin type-II domains.
Contains 4 hemopexin repeats.

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.

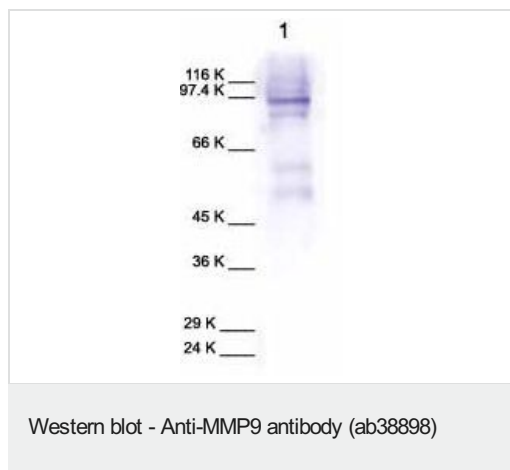
Post-translational modifications

Processing of the precursor yields different active forms of 64, 67 and 82 kDa. Sequentially processing by MMP3 yields the 82 kDa matrix metalloproteinase-9.
N- and O-glycosylated.

Cellular localization

Secreted, extracellular space, extracellular matrix.

Images



Anti-MMP9 antibody (ab38898) + Human MMP9

Observed band size: 88,92 kDa

Ab38898 detects a band at 92 Kd (pro-form) and a band at 88 Kd (active form). Mouse MMP9 is slightly larger than human MMP9, and the antibody detects a band at about 105 Kd. It is recommended to concentrate samples by Gelatin-agarose affinity chromatography prior to Western blot usage. A recommended starting concentration for Western blots is 1:1000 when using colorimetric substrates such as BCIP/NBT, and 1:5000 for chemiluminescent substrates. Higher concentration of antibody may be needed for non-human samples.

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

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