

Product datasheet

Anti-MMP1 antibody ab38929

★★★★★ [6 Abreviews](#) [53 References](#) [1 Image](#)

Overview

Product name	Anti-MMP1 antibody
Description	Rabbit polyclonal to MMP1
Host species	Rabbit
Specificity	This antibody binds to MMP1, but does not cross react with the other MMP family members (MMP2, MMP3, MMP9).
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to MMP1 . based on the hemopexin domain of the human sequence (Peptide available as ab41003)
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). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
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 ab38929 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	★★★★★ (3)	1/5000. Predicted molecular weight: 54 kDa. When used against the reduced protein this antibody identifies bands at 53 Kd and 51 Kd (the pro-form), as well as the initial active forms. Dilution optimised using Chromogenic detection.

Target

Function

Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity.

Sequence similarities

Belongs to the peptidase M10A family.
Contains 4 hemopexin-like domains.

Domain

There are two distinct domains in this protein; the catalytic N-terminal, and the C-terminal which is involved in substrate specificity and in binding TIMP (tissue inhibitor of metalloproteinases). 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.

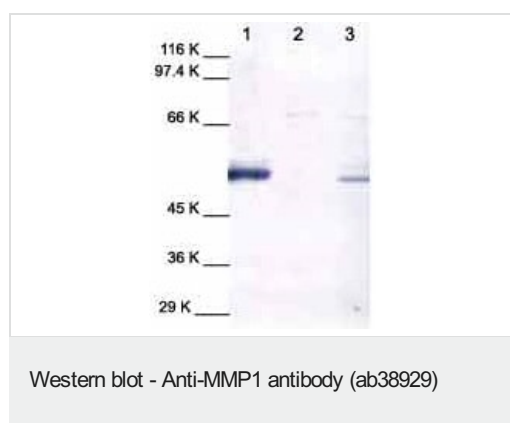
Post-translational modifications

Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase.

Cellular localization

Secreted > extracellular space > extracellular matrix.

Images



All lanes : Anti-MMP1 antibody (ab38929)

Lane 1 : Human MMP1.

Lane 2 : Cell Media from human chondrosarcoma (no treatment).

Lane 3 : Cell Media from human chondrosarcoma (treated with TPA).

Predicted band size: 54 kDa

Observed band size: 53 kDa

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

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