

Rabbit anti-Human, Rat MMP1 Polyclonal Antibody | anti-MMP1 antibody

MMP1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326102	Rabbit	Human, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

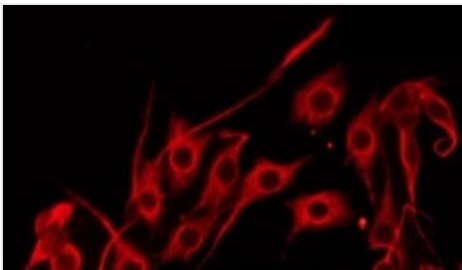
PRODUCT SYNONYMS

MMP1; Polyclonal Antibody; MMP1 Antibody; 27 kDa interstitial collagenase; CLG; CLGN; collagenase; fibroblast; interstitial; Fibroblast collagenase; Interstitial collagenase; Matrix metalloproteinase 1 (interstitial collagenase); Matrix metalloproteinase 1; Matrix Metalloproteinase 1; Matrix metalloproteinase-1; MMP 1; MMP-1; MMP1_HUMAN; OTTHUMP00000045866; anti-MMP1 antibody

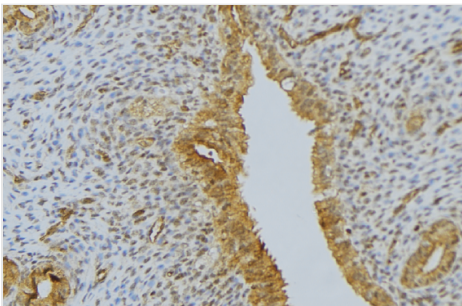
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MMP1 antibody detects endogenous levels of total MMP1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	469
Applicable Applications for anti-MMP1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human ARRB2
Subcellular Location	Secreted > Extracellular Space > Extracellular Matrix.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

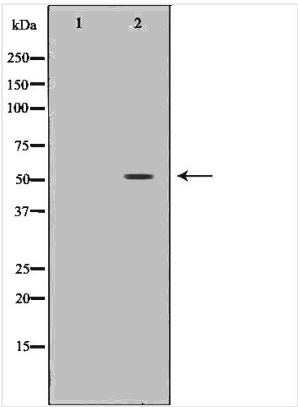
IMAGES



IF (Immunofluorescence)
AAA326102 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)
AAA326102 at 1/100 staining Human uterus tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of Huvec whole cell lysates, using MMP1 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MMP1 antibody

Description: Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Mar 2009]
Function: Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X (PubMed:2557822, PubMed:2153297, PubMed:1645757). In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity (PubMed:16807369).
Subunit Structure: Interacts with HIV-1 Tat.
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. Tyrosine phosphorylated in platelets by PKDCC/VLK.
Similarity: 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. Belongs to the peptidase M10A family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505215
NCBI GeneID	4312

NCBI Accession #	NP_002412.1
NCBI GenBank Nucleotide #	NM_002421.3
UniProt Accession #	P03956 ; P08156
Molecular Weight	Observed: 54 kDa Predicted: 55 kDa
NCBI Official Full Name	interstitial collagenase isoform 1 preproprotein
NCBI Official Synonym Full Names	matrix metalloproteinase 1
NCBI Official Symbol	MMP1
NCBI Official Synonym Symbols	CLG; CLGN
NCBI Protein Information	interstitial collagenase
UniProt Protein Name	Interstitial collagenase
UniProt Gene Name	MMP1
UniProt Synonym Gene Names	CLG; MMP-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mmp1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326102>