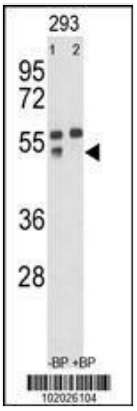
MMP12 Antibody – Rabbit Polyclonal

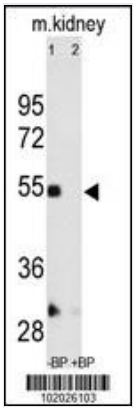
PRODUCT OVERVIEW

Product Name	MMP12, Polyclonal Antibody
Full Product Name	MMP12, CT (Macrophage Metalloelastase, MME, Matrix Metalloproteinase-12, MMP-12, Macrophage Elastase, ME, hME, HME) (PE)
Product Gene Name	anti-MMP12 antibody
Product Synonym Gene Name	MM12
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with R-Phycoerythrin (PE).
Purity/Purification	Purified by Protein G Affinity Chromatography.
Specificity	Recognizes human MMP12.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: PE conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	54,002 Da
Chromosome Location	Chromosome: 11; NC_000011.9 (102733464..102745764, complement). Location: 11q22.3
OMIM	601046
3D Structure	ModBase 3D Structure for P39900
Immunogen	Synthetic peptide selected from the C-terminal region of human MMP12 (KLH).
Conjugate	PE
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-MMP12 antibody	Antibodies; Matrix Metalloproteinases
Applications Tested/Suitable for anti-MMP12 antibody	Immunohistochemistry (IHC), FLISA, Western Blot (WB)
Application Notes for anti-MMP12 antibody	IHC: 1:50-1:100 FLISA: 1:1,000 WB: 1:100-1:500 Applications are based on unconjugated antibody.
Related Product Information for anti-MMP12 antibody	MBS6487072 is an antibody targeting MMP12. Also known as MMP12, CT (Macrophage Metalloelastase, MME, Matrix Metalloproteinase-12, MMP-12, Macrophage Elastase, ME, hME, HME) (PE). Reactive in Human. Host: Rabbit.

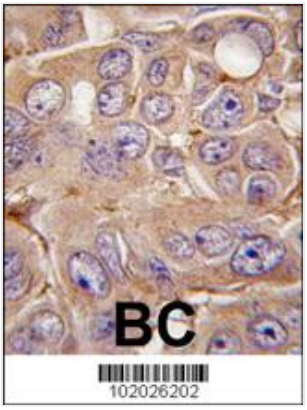
Product References and Citations for anti-MMP12 antibody	1. Nar, H., et al., J. Mol. Biol. 312(4):743-751 (2001). 2. Lang, R., et al., J. Mol. Biol. 312(4):731-742 (2001). 3. Gronski, T.J. Jr., et al., J. Biol. Chem. 272(18):12189-12194 (1997). 4. Shapiro, S.D., et al., J. Biol. Chem. 268(32):23824-23829 (1993).
Other Notes	Small volumes of anti-MMP12 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



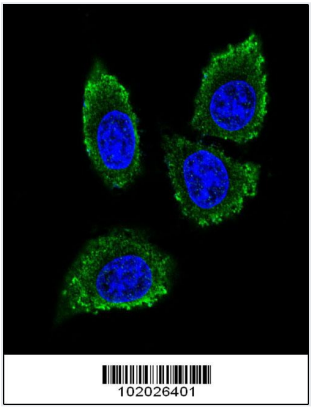
Western Blot (WB) of anti-MMP12 antibody
Western blot analysis of anti-hMMP12-R406 Pab pre-incubated without(lane 1) and with(lane 2) blocking peptide in 293 cell line lysate. MMP12(arrow) was detected using the purified Pab;



Western Blot (WB) of anti-MMP12 antibody
Western blot analysis of anti-hMMP12-R406 Pab pre-incubated without(lane 1) and with(lane 2) blocking peptide in mouse kidney tissue lysates. MMP12(arrow) was detected using the purified Pab.



Immunohistochemistry (IHC) of anti-MMP12 antibody
Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with MMP12 antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Immunofluorescence (IF) of anti-MMP12 antibody
Confocal immunofluorescent analysis of MMP12 Antibody (C-term) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MMP12. It may not necessarily be applicable to this product.

NCBI GI #	73858572
NCBI GeneID	4321
NCBI Accession #	NP_002417.2
UniProt Primary Accession #	P39900
UniProt Secondary Accession #	Q2M1L9; B2R9X8; B7ZLF6
UniProt Related Accession #	P39900
GenBank Nucleotide #	NM_002426.4
NCBI Official Full Name	macrophage metalloelastase preproprotein

NCBI Official Synonym Full Names	matrix metallopeptidase 12 (macrophage elastase)
NCBI Official Symbol	MMP12
NCBI Official Synonym Symbols	ME; HME; MME; MMP-12
UniProt Protein Name	Macrophage metalloelastase
UniProt Synonym Protein Names	Macrophage elastase; ME; hME; Matrix metalloproteinase-12
Protein Family	Macrophage metalloelastase
UniProt Gene Name	MMP12
UniProt Synonym Gene Names	HME; MME; ME; hME; MMP-12
UniProt Entry Name	MMP12_HUMAN
NCBI Protein Information	macrophage metalloelastase; matrix metalloproteinase 12 (macrophage elastase)
NCBI Summary for MMP12	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. It is thought that the protein encoded by this gene is cleaved at both ends to yield the active enzyme, but this processing has not been fully described. The enzyme degrades soluble and insoluble elastin. It may play a role in aneurysm formation and studies in mice suggest a role in the development of emphysema. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. [provided by RefSeq, Jul 2008]
UniProt Comments for MMP12	MMP12: May be involved in tissue injury and remodeling. Has significant elastolytic activity. Can accept large and small amino acids at the P1' site, but has a preference for leucine. Aromatic or hydrophobic residues are preferred at the P1 site, with small hydrophobic residues (preferably alanine) occupying P3. Belongs to the peptidase M10A family. Protein type: Secreted, signal peptide; Secreted; EC 3.4.24.65; Protease Chromosomal Location of Human Ortholog: 11q22.3 Cellular Component: proteinaceous extracellular matrix; extracellular region Molecular Function: zinc ion binding; metalloendopeptidase activity; endopeptidase activity; calcium ion binding Biological Process: extracellular matrix disassembly; collagen catabolic process; extracellular matrix organization and biogenesis; positive regulation of epithelial cell proliferation involved in wound healing; proteolysis; wound healing, spreading of epidermal cells
Research Articles on MMP12	**1.** the endogenous matrix metalloprotease-12 active form can be detected with a novel broad spectrum activity-based probe
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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