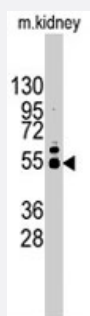


MMP12 polyclonal antibody

Catalog # PAB4781

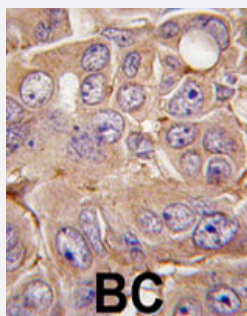
Size 400 uL

Applications



Western Blot (Tissue lysate)

Western blot analysis of MMP12 polyclonal antibody (Cat # PAB4781) in mouse kidney tissue lysate (35 ug/lane). MMP12 (arrow) was detected using the purified polyclonal antibody (1 : 240 dilution).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with MMP12 polyclonal antibody (Cat # PAB4781), 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.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of MMP12.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human MMP12.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification

Recommend Usage	ELISA (1:1000) Western Blot (1:100-500) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

Western blot analysis of MMP12 polyclonal antibody (Cat # PAB4781) in mouse kidney tissue lysate (35 ug/lane). MMP12 (arrow) was detected using the purified polyclonal antibody (1 : 240 dilution).

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — MMP12

Entrez GeneID	4321
Protein Accession#	MM12_HUMAN
Gene Name	MMP12
Gene Alias	HME, MGC138506, MME
Gene Description	matrix metalloproteinase 12 (macrophage elastase)
Omim ID	601046
Gene Ontology	Hyperlink

Gene Summary

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]

Other Designations

macrophage elastase|macrophage metalloelastase|matrix metalloproteinase 12|matrix metalloproteinase 12 (macrophage elastase)

Publication Reference

- [Crystal structure of human macrophage elastase \(MMP-12\) in complex with a hydroxamic acid inhibitor.](#)

Nar H, Werle K, Bauer MM, Dollinger H, Jung B.

Journal of Molecular Biology 2001 Sep; 312(4):743.

- [Substrate specificity determinants of human macrophage elastase \(MMP-12\) based on the 1.1 Å crystal structure.](#)

Lang R, Kocourek A, Braun M, Tschesche H, Huber R, Bode W, Maskos K.

Journal of Molecular Biology 2001 Sep; 312(4):731.

- [Hydrolysis of a broad spectrum of extracellular matrix proteins by human macrophage elastase.](#)

Gronski TJ Jr, Martin RL, Kobayashi DK, Walsh BC, Holman MC, Huber M, Van Wart HE, Shapiro SD.

The Journal of Biological Chemistry 1997 May; 272(18):12189.

Application: WB-Re, Recombinant proteins

Disease

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [alpha 1-Antitrypsin Deficiency](#)
- [Alpha-1-antitrypsin deficiency](#)
- [Amyotrophic lateral sclerosis](#)
- [Anoxia](#)

- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Colorectal Neoplasms](#)
- [Coronary Aneurysm](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Fetal Membranes](#)
- [Fibrosis](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Hepatitis C](#)
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- [Liver Cirrhosis](#)

- [Lung Neoplasms](#)
- [Metabolic Syndrome X](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Sclerosis](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasms](#)
- [Obstetric Labor](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Periodontitis](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)
- [Pulmonary Disease](#)
- [Renal Insufficiency](#)
- [Stomach Neoplasms](#)
- [Subarachnoid Hemorrhage](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Varicose Ulcer](#)
- [Werner syndrome](#)