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MMP9 Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM1975b

Specification

MMP9 Antibody - Product Information

Application	**WB,E**
Primary Accession	P14780
Other Accession	NP_004985.2
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgM**
Calculated MW	**78458**

MMP9 Antibody - Additional Information

Gene ID 4318

Other Names
Matrix metalloproteinase-9, MMP-9, 92 kDa gelatinase, 92 kDa type IV collagenase, Gelatinase B, GELB, 67 kDa matrix metalloproteinase-9, 82 kDa matrix metalloproteinase-9, MMP9, CLG4B

Target/Specificity
Purified His-tagged MMP9 protein(Fragment) was used to produced this monoclonal antibody.

Dilution
WB~~1:500-1:2000
E~~Use at an assay dependent concentration.

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MMP9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MMP9 Antibody - Protein Information

Name MMP9

Synonyms CLG4B

Function Matrix metalloproteinase that plays an essential role in local proteolysis of the

extracellular matrix and in leukocyte migration (PubMed:12879005, PubMed:1480034, PubMed:2551898). Could play a role in bone osteoclastic resorption (By similarity). Cleaves KiSS1 at a Gly-|-Leu bond (PubMed:12879005). Cleaves NINJ1 to generate the Secreted ninjurin-1 form (PubMed:32883094). Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N- terminal one quarter fragments (PubMed:1480034). Degrades fibronectin but not laminin or Pz-peptide.

Cellular Location
Secreted, extracellular space, extracellular matrix

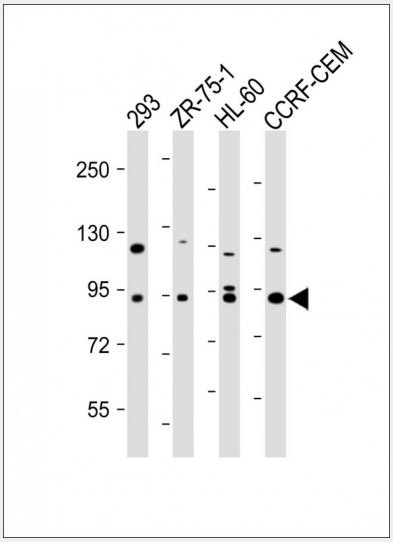
Tissue Location
Detected in neutrophils (at protein level) (PubMed:7683678). Produced by normal alveolar macrophages and granulocytes.

MMP9 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MMP9 Antibody - Images



All lanes : Anti-MMP9 Antibody at 1:500-1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: ZR-75-1 whole cell lysate Lane 3: HL-60 whole cell lysate Lane 4: CCRF-CEM whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgM, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 78 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

MMP9 Antibody - Background

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. The enzyme encoded by this gene degrades type IV and V collagens. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling. [provided by RefSeq].

MMP9 Antibody - References

Lacchini, R., et al. Clin. Chim. Acta 411 (23-24), 1940-1944 (2010) :
Chambers, M.A., et al. Biochem. Biophys. Res. Commun. 400(3):403-408(2010)
Beeghly-Fadiel, A., et al. Breast Cancer Res. Treat. (2010) In press :
Szczudlik, P., et al. Neurol. Neurochir. Pol. 44(4):350-357(2010)
Mossbock, G., et al. Mol. Vis. 16, 1764-1770 (2010) :

MMP9 Antibody - Citations

- Urinary peptidomics reveals proteases involved in idiopathic membranous nephropathy
- Circ_0046599 Promotes the Development of Hepatocellular Carcinoma by Regulating the miR-1258/RPN2 Network
- MicroRNA-324-5p suppresses the migration and invasion of MM cells by inhibiting the SCF E3 ligase.
- Matrix metalloproteinase inhibitors enhance the efficacy of frontline drugs against Mycobacterium tuberculosis.