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MMP9 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1975b

Product Information

Application	WB, E
Primary Accession	P14780
Other Accession	NP_004985.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Clone Names	331CT17.4.4
Calculated MW	78458

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~~1:500~1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) 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.

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.

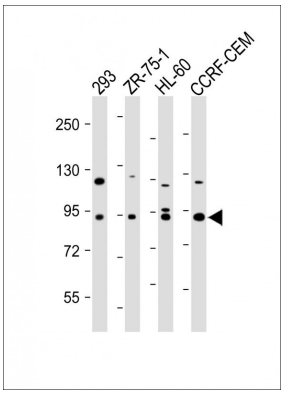
Background

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].

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) :

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.

Citations

- 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.
- Urinary peptidomics reveals proteases involved in idiopathic membranous nephropathy

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.