



MMP9 Rabbit mAb

Catalog No	YP-rAb-18113
Isotype	IgG
Reactivity	Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	MMP9 CLG4B
Protein Name	MMP9 (Cleaved-Met94)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1000; WB 1:500-5000; IF 1:200-1000; ELISA 1:5000-20000; IP 1:50-200 Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	Matrix metalloproteinase-9 ; MMP-9 ; 92 kDa gelatinase ; 92 kDa type IV collagenase ; Gelatinase B ; GELB ; [Cleaved into: 67 kDa matrix metalloproteinase-9 ; 82 kDa matrix metalloproteinase-9]
Observed Band	80kD-92kD
Calculated Molecular Weight	78kD
Cell Pathway	Membranous
Tissue Specificity	Detected in neutrophils (at protein level) (PubMed:7683678). Produced by normal alveolar macrophages and granulocytes.
Function	skeletal system development, immune system development, leukocyte differentiation, myeloid leukocyte differentiation, proteolysis, regulation of cell death, positive regulation of cell death, hemopoiesis, myeloid cell differentiation, extracellular matrix organization, macrophage differentiation, regulation of cell migration, positive regulation of cell migration, collagen catabolic process, collagen metabolic process, regulation of locomotion, positive regulation of locomotion, regulation of apoptosis, extracellular structure organization, positive regulation of apoptosis,regulation of programmed cell death, positive regulation of programmed cell death, multicellular organismal metabolic process, multicellular organismal catabolic process, multicellular organismal macromolecule metabolic process,hemopoietic or lymphoid organ development, regulation of cell motion,





positive regulation of cell motion, regulation of keratinocyte migration, positive regulation of keratinocyte migration,

Background

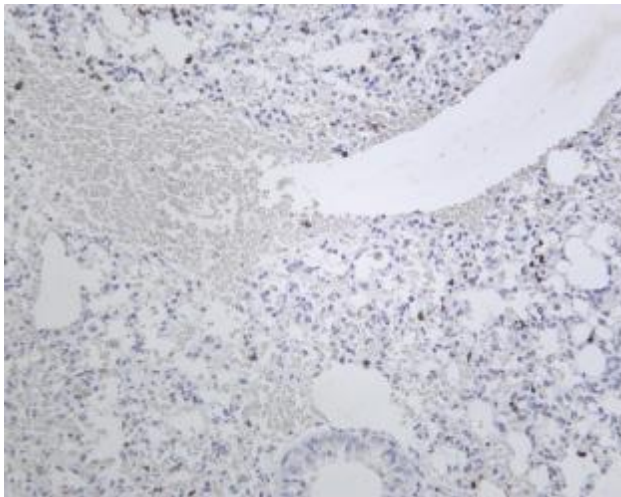
catalytic activity: Cleavage of gelatin types I and V and collagen types IV and V., **cofactor:** Binds 2 zinc ions per subunit., **cofactor:** Binds 3 calcium ions per subunit., **disease:** Defects in MMP9 may be a cause of susceptibility to lumbar disk herniation (LDH) [MIM:603932]. LDH is the predominant cause of low-back pain and unilateral leg pain., **domain:** 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., **enzyme regulation:** Inhibited by histatin-3 1/24 (histatin-5)., **function:** May play an essential role in local proteolysis of the extracellular matrix and in leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly-I-Leu bond. Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. Degrades fibronectin but not laminin or Pz-peptide., **induction:** Activated by 4-aminophenylmercuric acetate and phorbol ester., **miscellaneous:** In the arthritis patient this enzyme might contribute to the pathogenesis of joint destruction and might constitute a useful marker of disease status., **PTM:** N- and O-glycosylated., **PTM:** Processing of the precursor yields different active forms of 64, 67 and 82 kDa. Sequentially processing by MMP3 yields the 82 kDa matrix metalloproteinase-9., **similarity:** Belongs to the peptidase M10A family., **similarity:** Contains 3 fibronectin type-II domains., **similarity:** Contains 4 hemopexin-like domains., **subunit:** Exists as monomer, disulfide-linked homodimer, and as a heterodimer with a 25 kDa protein. Macrophages and transformed cell lines produce only the monomeric form., **tissue specificity:** Produced by normal alveolar macrophages and granulocytes.,

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

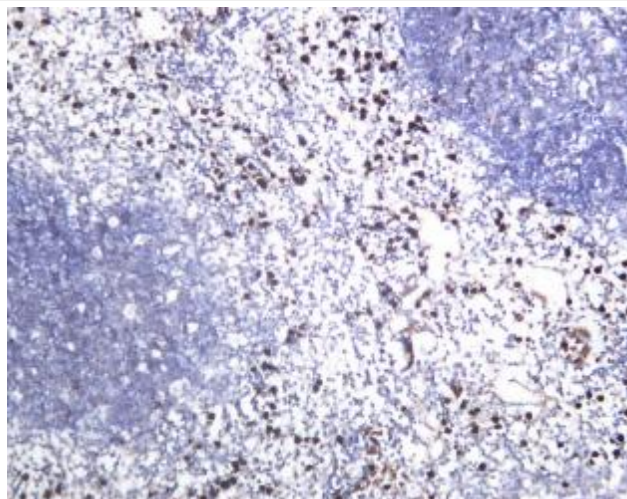
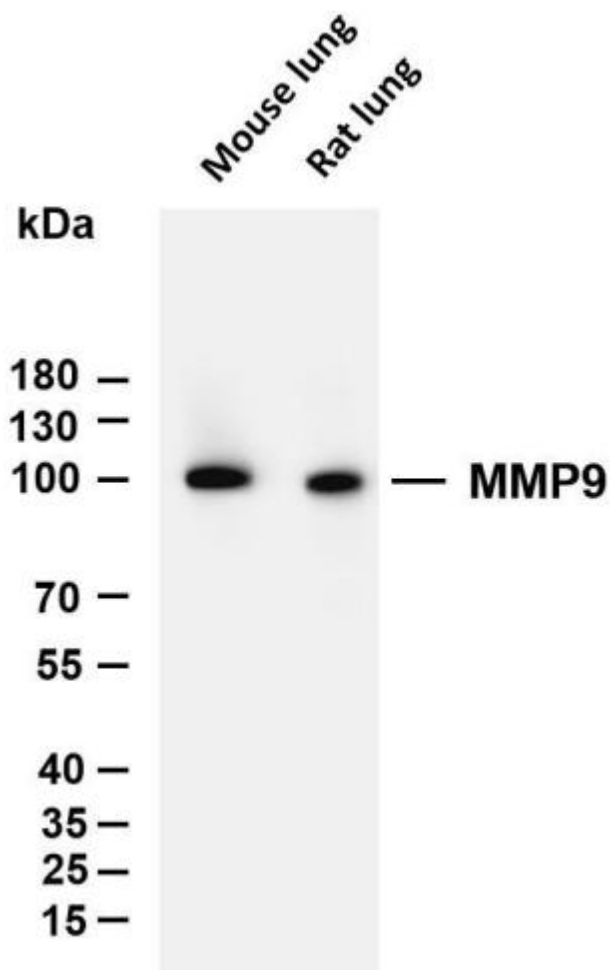


Mouse lung tissue was stained with Anti-MMP9 rabbit Antibody



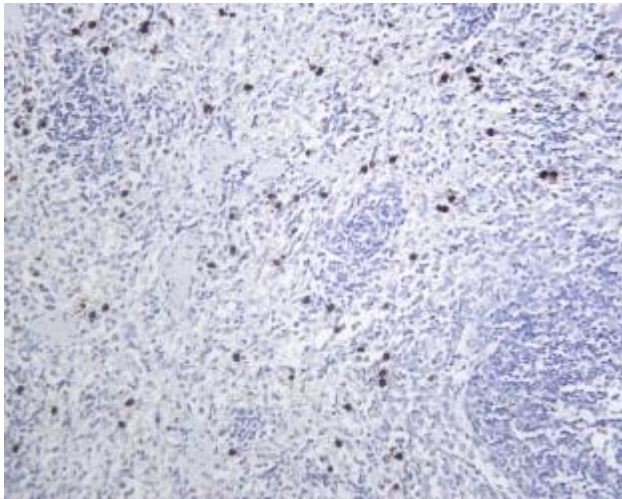


Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-MMP9 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Mouse lung Lane 2: Rat lung Predicted band size: 78kDa Observed band size: 80-92kDa

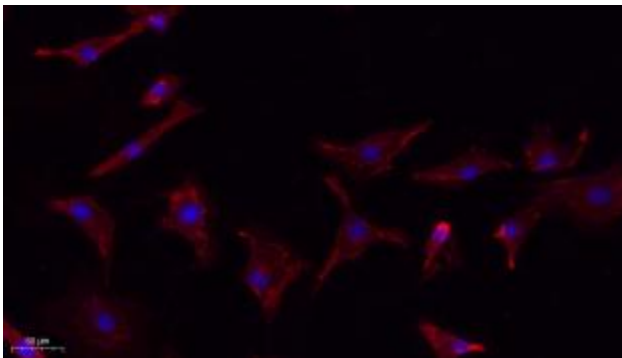


Mouse spleen tissue was stained with Anti-MMP9 rabbit Antibody





Rat spleen tissue was stained with Anti-MMP9 rabbit Antibody



Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, DAPI(blue) 10min.

