

MMP9 (PT0044R) PT® Rabbit mAb

Catalog No :	YM8019
Reactivity :	Mouse; Rat
Applications :	WB;IHC;IF;IP;ELISA
Target :	MMP-9
Fields :	>>Endocrine resistance;>>IL-17 signaling pathway;>>TNF signaling pathway;>>Leukocyte transendothelial migration;>>Estrogen signaling pathway;>>Relaxin signaling pathway;>>Hepatitis B;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Proteoglycans in cancer;>>MicroRNAs in cancer;>>Prostate cancer;>>Bladder cancer;>>Diabetic cardiomyopathy;>>Lipid and atherosclerosis;>>Fluid shear stress and atherosclerosis
Gene Name :	MMP9 CLG4B
Protein Name :	MMP9 (Cleaved-Met94)
Human Gene Id :	4318
Human Swiss Prot No :	P14780
Mouse Gene Id :	17395
Mouse Swiss Prot No :	P41245
Rat Gene Id :	81687
Rat Swiss Prot No :	P50282
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa

Dilution : IHC 1:200-1000, WB 1:500-5000, IF 1:200-1000, ELISA 1:5000-20000, IP 1:50-200

Purification : Protein A

Storage Stability : -15°C to -25°C/1 year (Do not lower than -25°C)

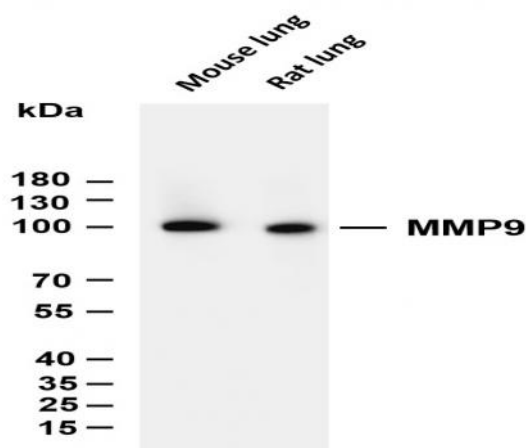
Background : catalytic activity: Cleavage of gelatin types I and V and collagen types IV and V., cofactor: Binds 2 zinc ions per subunit., cofactor: Binds 3 calcium ions per subunit., disease: Defects in MMP9 may be a cause of susceptibility to lumbar disk herniation (LDH) [MIM:603932]. LDH is the predominant 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-|-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.,

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

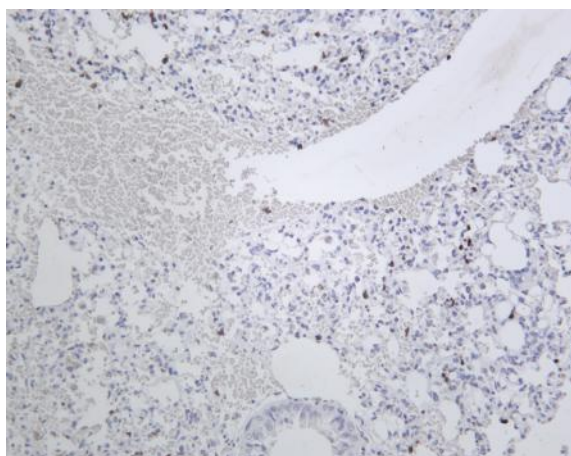
Subcellular Location : Membranous

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

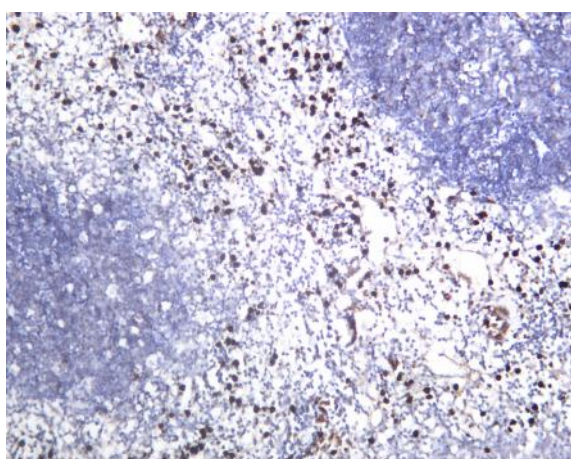
Products Images



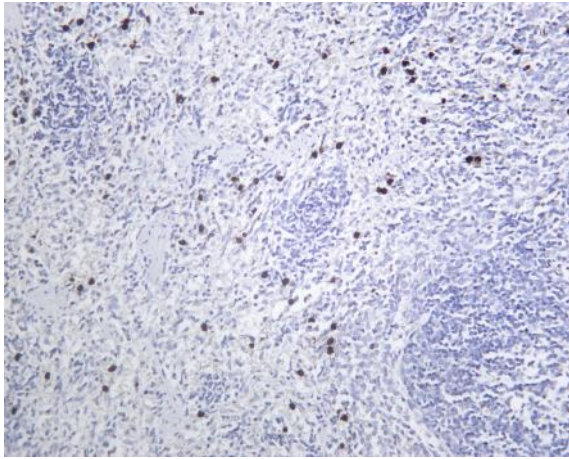
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-MMP9 (PT0044R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Mouse lung Lane 2: Rat lung Predicted band size: 78kDa Observed band size: 80-92kDa



Mouse lung tissue was stained with Anti-MMP9 (PT0044R) rabbit Antibody



Mouse spleen tissue was stained with Anti-MMP9 (PT0044R) rabbit Antibody



Rat spleen tissue was stained with Anti-MMP9 (PT0044R) rabbit Antibody