ELK Biotechnology

# MMP9 (Cleaved-Phe107) rabbit pAb

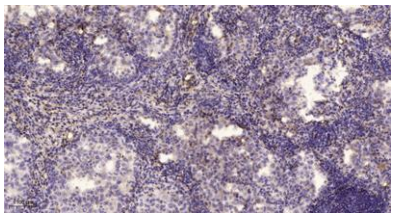
## Cat No.:ES20032

**For research use only**

**Overview**

| | |
|---|---|
| **Product Name** | MMP9 (Cleaved-Phe107) rabbit pAb |
| **Host species** | Rabbit |
| **Applications** | WB;IHC |
| **Species Cross-Reactivity** | Human;Rat;Mouse; |
| **Recommended dilutions** | WB 1:500-2000;IHC-p 1:50-300 |
| **Immunogen** | Synthesized peptide derived from human MMP9 (Cleaved-Phe107) |
| **Specificity** | This antibody detects endogenous levels of Human MMP9 (Cleaved-Phe107, protein was cleaved amino acid sequence between 106-107 ) |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Storage** | Store at -20°C. Avoid repeated freeze-thaw cycles. |
| **Protein Name** | MMP9 (Cleaved-Phe107) |
| **Gene Name** | MMP9 CLG4B |
| **Cellular localization** | Secreted, extracellular space, extracellular matrix . |
| **Purification** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Clonality** | Polyclonal |
| **Concentration** | 1 mg/ml |
| **Observed band** | 66 78kD |
| **Human Gene ID** | 4318 |
| **Human Swiss-Prot Number** | P14780 |
| **Alternative Names** | Matrix metalloproteinase-9 (MMP-9;EC 3.4.24.35;92 kDa gelatinase;92 kDa type IV collagenase;Gelatinase B;GELB) [Cleaved into: 67 kDa matrix metalloproteinase-9; 82 kDa matrix metalloproteinase-9] |
| **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.,



Immunohistochemical analysis of paraffin-embedded human lung cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).

+86-27-59760950 ELKbio@ELKbiotech.com www.elkbiotech.com

23-2, No.388 Gaoxin 2nd Road,Wuhan East Lake Hi-tech Development Zone, Hubei , P.R.C