

## Recombinant MMP9 Monoclonal Antibody

catalog number: **AN301378L**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

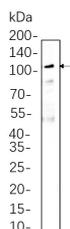
### Description

<b>Reactivity</b>	Mouse;Rat
<b>Immunogen</b>	Recombinant Mouse MMP9 protein
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG,k
<b>Clone</b>	B1145
<b>Purification</b>	Protein A
<b>Buffer</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

### Applications

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

### Data



Western Blot with Recombinant MMP9 Monoclonal Antibody at dilution of 1:1000 dilution. Lane A: Mouse lung whole cell lysate.

**Observed-MW:80 kDa-92 kDa**  
**Calculated-MW:78 kDa**

### Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	Ice bag

### Background

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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).,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.

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