



# MMP-9 Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-02639
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	MMP9
<b>Protein Name</b>	Matrix metalloproteinase-9
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MMP-9. AA range:651-700
<b>Specificity</b>	MMP-9 Monoclonal Antibody detects endogenous levels of MMP-9 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	MMP9; CLG4B; Matrix metalloproteinase-9; MMP-9; 92 kDa gelatinase; 92 kDa type IV collagenase; Gelatinase B; GELB
<b>Observed Band</b>	Calculated MW: 78kD; Observed MW:100kD
<b>Cell Pathway</b>	Secreted, extracellular space, extracellular matrix .
<b>Tissue Specificity</b>	Detected in neutrophils (at protein level) (PubMed:7683678). Produced by normal alveolar macrophages and granulocytes.
<b>Function</b>	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 qua

**Background**

matrix metalloproteinase 9(MMP9) Homo sapiens 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, Jul 2008],

**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.



## Products Images

