

# **Anti-MMP-9 Antibody**

Catalog # ABO12354

## **Specification**

## **Anti-MMP-9 Antibody - Product Information**

Application WB
Primary Accession P14780
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Matrix metalloproteinase-9(MMP9) detection. Tested with WB, ELISA in Human.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# **Anti-MMP-9 Antibody - Additional Information**

# **Gene ID 4318**

#### **Other Names**

Matrix metalloproteinase-9, MMP-9, 3.4.24.35, 92 kDa gelatinase, 92 kDa type IV collagenase, Gelatinase B, GELB, 67 kDa matrix metalloproteinase-9, 82 kDa matrix metalloproteinase-9, MMP9, CLG4B

### **Calculated MW**

78458 MW KDa

# **Application Details**

ELISA, 0.1-0.5 μg/ml, Human, -<br/>br>Western blot, 0.1-0.5 μg/ml, Human<br/>br>

### **Subcellular Localization**

Secreted, extracellular space, extracellular matrix.

### **Tissue Specificity**

Produced by normal alveolar macrophages and granulocytes.

#### **Protein Name**

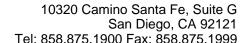
Matrix metalloproteinase-9

# Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human MMP-9 (633-667aa WRFDVKAQMVDPRSASEVDRMFPGVPLDTHDVFQY), different from the related mouse sequence by fourteen amino acids, and from the related rat sequence by sixteen amino acids.





Purification

Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

# **Anti-MMP-9 Antibody - Protein Information**

Name MMP9

**Synonyms** CLG4B

### **Function**

Matrix metalloproteinase that plays an essential role in local proteolysis of the extracellular matrix and in leukocyte migration (PubMed:<a href="http://www.uniprot.org/citations/12879005" target="\_blank">12879005</a>, PubMed:<a href="http://www.uniprot.org/citations/1480034" target="\_blank">1480034</a>, PubMed:<a href="http://www.uniprot.org/citations/2551898" target="\_blank">2551898</a>). Could play a role in bone osteoclastic resorption (By similarity). Cleaves KiSS1 at a Gly-|-Leu bond (PubMed:<a href="http://www.uniprot.org/citations/12879005" target="\_blank">12879005</a>). Cleaves NINJ1 to generate the Secreted ninjurin-1 form (PubMed:<a href="http://www.uniprot.org/citations/32883094" target="\_blank">32883094</a>). Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments (PubMed:<a href="http://www.uniprot.org/citations/1480034" target="\_blank">1480034</a>). Degrades fibronectin but not laminin or Pz-peptide.

#### **Cellular Location**

Secreted, extracellular space, extracellular matrix

### **Tissue Location**

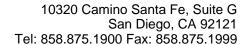
Detected in neutrophils (at protein level) (PubMed:7683678). Produced by normal alveolar macrophages and granulocytes.

### **Anti-MMP-9 Antibody - Protocols**

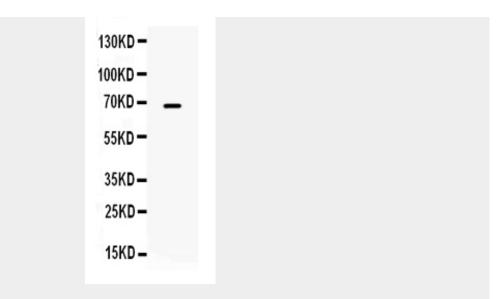
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-MMP-9 Antibody - Images







Anti- MMP-9 Picoband antibody, ABO12354, Western blottingAll lanes: Anti MMP-9 (ABO12354) at 0.5ug/mlWB: SW620 Whole Cell Lysate at 40ugPredicted bind size: 67KDObserved bind size: 67KD

# Anti-MMP-9 Antibody - Background

Matrix metallopeptidase 9 (MMP-9), also known as 92 kDa type IV collagenase, 92 kDa gelatinase or gelatinase B (GELB), is an enzyme that in humans is encoded by the MMP9 gene. Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes. Most MMPs 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.