

Anti-MMP-9 Antibody

Catalog # ABO10680

Specification

Anti-MMP-9 Antibody - Product Information

ApplicationWBPrimary AccessionP14780HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Matrix metalloproteinase-9(MMP9) detection. Tested with WB 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 Western blot, 0.1-0.5 μg/ml, Human, Rat

Subcellular Localization Secreted, extracellular space, extracellular matrix .

Tissue Specificity Produced by normal alveolar macrophages and granulocytes.

Protein Name Matrix metalloproteinase-9(MMP-9)

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human MMP-9(689-705aa NQVDQVGYVTYDILQCP), different from the related mouse sequence by two amino acids, and from the related rat sequence by three 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.

Sequence Similarities Belongs to the peptidase M10A family.

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:12879005, PubMed:1480034, PubMed:2551898). Could play a role in bone osteoclastic resorption (By similarity). Cleaves KiSS1 at a Gly-|-Leu bond (PubMed:12879005). Cleaves NINJ1 to generate the Secreted ninjurin-1 form (PubMed:32883094). Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter Nterminal one quarter fragments (PubMed:1480034). 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.

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

Anti-MMP-9 Antibody - Images





Anti-MMP-9 antibody, ABO10680, Western blottingLane 1: Rat Embryo Tissue LysateLane 2: MM453 Cell LysateLane 3: HELA Cell LysateLane 4: SMMC Cell LysateLane 5: JURKAT Cell LysateLane 6: HT1080 Cell Lysate

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.