MMP9 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6214a

Specification

<table>
<thead>
<tr>
<th>Application</th>
<th>WB, IHC-P,E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Accession</td>
<td>P14780</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Human, Mouse</td>
</tr>
<tr>
<td>Host</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Isotype</td>
<td>Rabbit Ig</td>
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<tr>
<td>Antigen Region</td>
<td>644-674</td>
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</tbody>
</table>

MMP9 Antibody (C-term) - Additional Information

- **Gene ID**: 4318
- **Other Names**: Matrix metalloproteinase-9, MMP-9, 92 kDa gelatinase, 92 kDa type IV collagenase, Gelatinase B, GELB, 67 kDa matrix metalloproteinase-9, 82 kDa matrix metalloproteinase-9, MMP9, CLG4B
- **Target/Specificity**: This MMP9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 644-673 amino acids from the C-terminal region of human MMP9.
- **Dilution**
  - WB: 1:2000
  - IHC-P: 1:50-100
- **Format**: Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
- **Storage**: Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
- **Precautions**: MMP9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MMP9 Antibody (C-term) - Protein Information

All lanes: Anti-MMP9 Antibody (L659) at 1:2000 dilution Lane 1: NCI-H1299 whole cell lysate Lane 2: HL-60 whole cell lysate Lane 3: A431 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 78 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.
Name: MMP9  
Synonyms: CLG4B  

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-L-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.  

Cellular Location: Secreted, extracellular space, extracellular matrix  
Tissue Location: PRODUCED by normal alveolar macrophages and granulocytes  

MMP9 Antibody (C-term) - Protocols: 
Provided below are standard protocols that you may find useful for product applications.  
- Western Blot  
- Blocking Peptides  
- Dot Blot  
- Immunohistochemistry  
- Immunofluorescence  
- Immunoprecipitation  
- Flow Cytometry  
- Cell Culture  

MMP9 Antibody (C-term) - Background: 
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 MMPs are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. MMP9 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.  

MMP9 Antibody (C-term) - References: 
MMP9 Antibody (C-term) - Citations

- Effects of secreted frizzled-related protein 1 on proliferation, migration, invasion, and apoptosis of colorectal cancer cells.
- Association of MMP-2 and MMP-9 expression with recurrences in primary spontaneous pneumothorax.
- Nkx2-5 Is Expressed in Atherosclerotic Plaques and Attenuates Development of Atherosclerosis in Apolipoprotein E-Deficient Mice.
- EFEMP1 inhibits migration of hepatocellular carcinoma by regulating MMP2 and MMP9 via ERK1/2 activity.
- Ethanol-Induced TLR4/NLRP3 Neuroinflammatory Response in Microglial Cells Promotes Leukocyte Infiltration Across the BBB.
- Down-regulation of TCF21 by hypermethylation induces cell proliferation, migration and invasion in colorectal cancer.
- Calreticulin promotes migration and invasion of esophageal cancer cells by upregulating neuropilin-1 expression via STAT5A.
- High expression of Dickkopf-related protein 1 is related to lymphatic metastasis and indicates poor prognosis in intrahepatic cholangiocarcinoma patients after surgery.
- A lipoxin A4 analog ameliorates blood-brain barrier dysfunction and reduces MMP-9 expression in a rat model of focal cerebral ischemia-reperfusion injury.
- OxLDL up-regulates microRNA-29b, leading to epigenetic modifications of MMP-2/MMP-9 genes: a novel mechanism for cardiovascular diseases.