

Anti-MMP-1 Antibody

Catalog # ABO12411

#### Specification

# Anti-MMP-1 Antibody - Product Information

ApplicationWBPrimary AccessionP03956HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Interstitial collagenase(MMP1) detection. Tested with WB in Human.

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

## Anti-MMP-1 Antibody - Additional Information

Gene ID 4312

**Other Names** Interstitial collagenase, 3.4.24.7, Fibroblast collagenase, Matrix metalloproteinase-1, MMP-1, 22 kDa interstitial collagenase, 27 kDa interstitial collagenase, MMP1, CLG

Calculated MW 54007 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human<br>

Subcellular Localization Secreted, extracellular space, extracellular matrix .

**Protein Name** Interstitial collagenase

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

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human MMP1 (194-231aa DAHFDEDERWTNNFREYNLHRVAAHELGHSLGLSHSTD).

**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-1 Antibody - Protein Information

Name MMP1

Synonyms CLG

Function

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Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X (PubMed:<a href="http://www.uniprot.org/citations/1645757" target="_blank">1645757</a>, PubMed:<a href="http://www.uniprot.org/citations/2153297" target="_blank">2153297</a>, PubMed:<a href="http://www.uniprot.org/citations/2557822" target="_blank">2557822</a>). In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity (PubMed:<a href="http://www.uniprot.org/citations/2657822" target="_blank">2657822</a>).
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**Cellular Location** Secreted, extracellular space, extracellular matrix

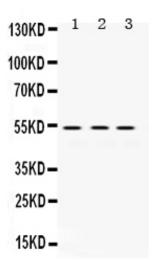
## **Anti-MMP-1 Antibody - Protocols**

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

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

Anti-MMP-1 Antibody - Images





Anti- MMP1 Picoband antibody, ABO12411, Western blottingAll lanes: Anti MMP1 (ABO12411) at 0.5ug/mlLane 1: SMMC Whole Cell Lysate at 40ugLane 2: 22RV1 Whole Cell Lysate at 40ugLane 3: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 54KDObserved bind size: 54KD

#### Anti-MMP-1 Antibody - Background

Matrix metalloproteinase-1 (MMP-1), also known as interstitial collagenase and fibroblast collagenase, is an enzyme that in humans is encoded by the MMP1 gene. MMP-1 was the first vertebrate collagenase both purified to homogeneity as a protein, and cloned as a cDNA. 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. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. It is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.