



## Rabbit Anti-MMP1 antibody

SL0424R

<b>Product Name:</b>	MMP1
<b>Chinese Name:</b>	基质金属蛋白酶-1抗体
<b>Alias:</b>	27 kDa interstitial collagenase; CLGN; CLG; collagenase, fibroblast; Fibroblast collagenase; Interstitial collagenase; MMP 1; MMP-1; MMP; Fibroblast collagenase; Interstitial collagenase; Matrix metalloproteinase 1 (interstitial collagenase); Matrix metalloproteinase 1; Matrix metalloproteinase-1; MMP1_HUMAN; OTTHUMP00000045866; Matrix Metalloproteinase 1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Cow,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	27/41/54kDa
<b>Cellular localization:</b>	Extracellular matrixSecretory protein
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human MMP1:401-469/469
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Mar 2009]

**Function:**

Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity.

**Subunit:**

Interacts with HIV-1 Tat.

**Subcellular Location:**

Secreted, extracellular space, extracellular matrix (Probable).

**Post-translational modifications:**

Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase.

**Similarity:**

Belongs to the peptidase M10A family.  
Contains 4 hemopexin-like domains.

**SWISS:**

P03956

**Gene ID:**

4312

**Database links:**

[Entrez Gene: 281308](#)Cow

[Entrez Gene: 4312](#)Human

[Entrez Gene: 17386](#)Mouse

[Entrez Gene: 397320](#)Pig

[Entrez Gene: 100009110](#)Rabbit

[Omim: 120353](#)Human

[SwissProt: P28053](#)Cow

[SwissProt: P03956](#)Human

[SwissProt: P33435](#)Mouse

[SwissProt: P21692](#)Pig

[SwissProt: P13943](#)Rabbit

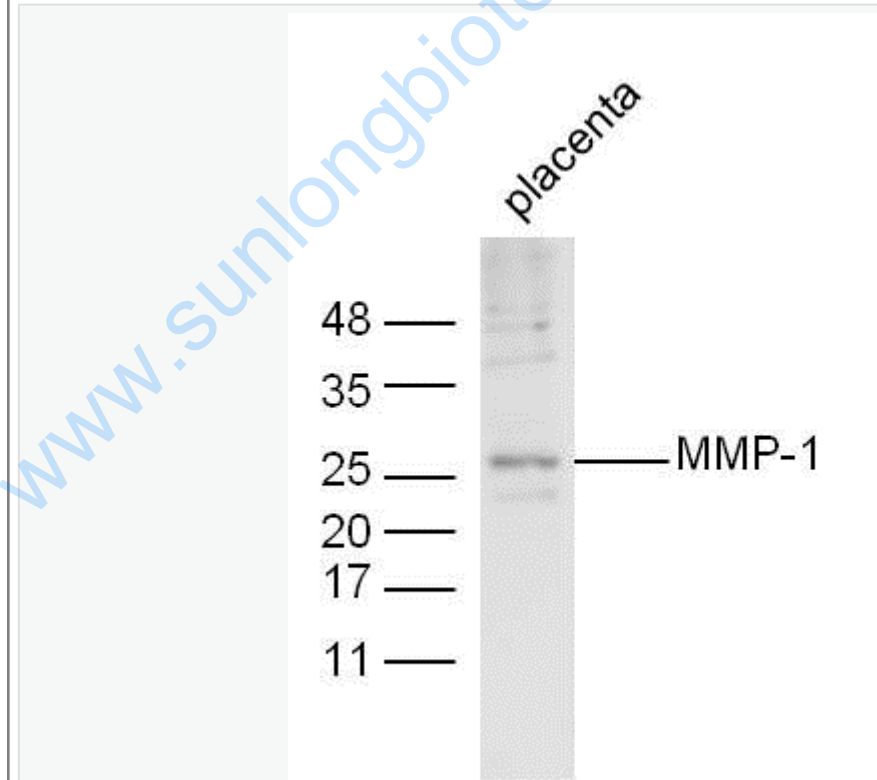
[Unigene: 83169](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Synthesis and Degradation (Synthesis and Degradation) 基质金属蛋白酶(matrix metalloproteinases, MMPs)是一族依赖锌离子而降解各种Extracellular matrix的蛋白酶, 亦称IV型胶原酶或称明胶酶A, 其主要功能为降解IV型胶原, 因而在Tumour细胞突破基底膜屏障和浸润转移中起重要作用。目前主要用于各种恶性Tumour(如乳腺癌、胃肠道癌、卵巢癌、膀胱癌等)中的基底膜检测与Tumour转移浸润的研究。

Picture:



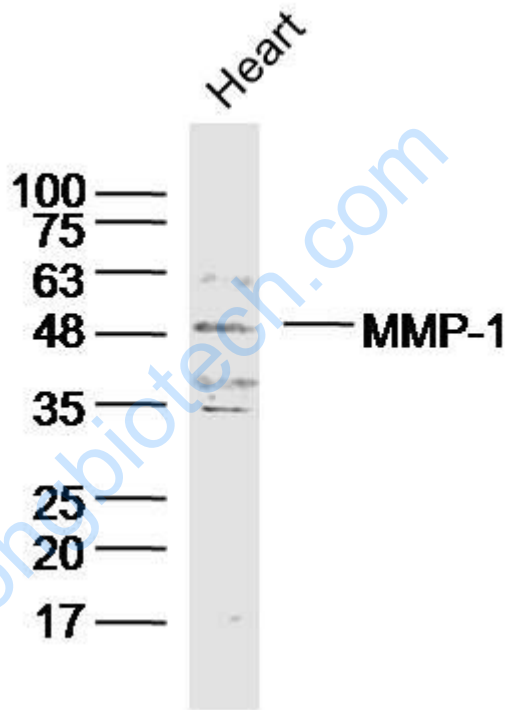
Sample: Placenta (Mouse) Lysate at 30 ug

Primary: Anti- MMP-1 (SL0424R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 27 kD

Observed band size: 27 kD



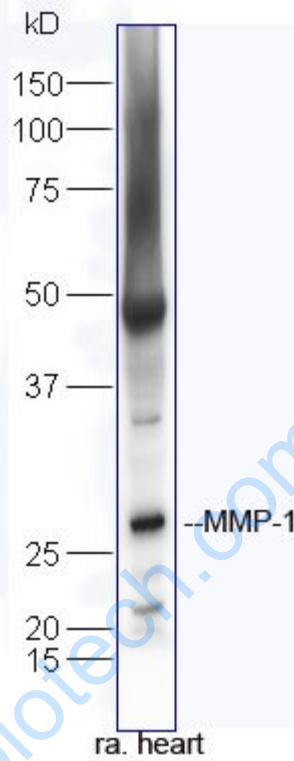
Sample: Heart (Mouse) Lysate at 40 ug

Primary: Anti-MMP-1 (SL0424R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 27/54kD

Observed band size: 50kD



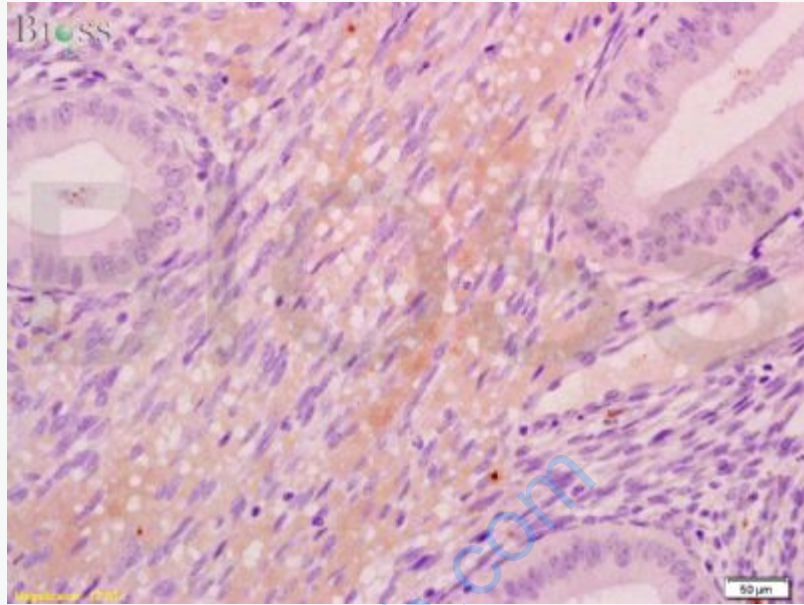
Sample: Heart (Rabbit) Lysate at 30 ug

Primary: Anti-MMP-1 (SL0424R) at 1:300;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL0424R) at 1: 5000;

Predicted band size: 24 kD

Observed band size: 27 kD



Tissue/cell: human breast cancer; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MMP-1 Polyclonal Antibody, Unconjugated(SL0424R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining