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Rabbit Anti-MMP1 antibody

SL0463R

Product Name:	MMP1
Chinese Name:	基质金属蛋白酶-1抗体
Alias:	27 kDa interstitial collagenase; CLGN; CLG; collagenase, fibroblast; Fibroblast collagenase; Interstitial collagenase; Matrix metallopeptidase 1 (interstitial collagenase); Matrix metalloproteinase-1; Matrix metalloprotease 1; Matrix Metalloproteinase 1; MMP-1; MMP1_HUMAN; OTTHUMP00000045866; MMP 1.
文献引用 PubMed :	**Specific References(5)**|SL0463R has been referenced in 5 publications. **[IF=2.47]**Luo, Yang, et al. "The inhibitory effect of salmon calcitonin on intervertebral disc degeneration in an ovariectomized rat model." European Spine Journal (2014): 1-11.**IHC-P;Rat**. PubMed:25304649 **[IF=1.26]**Mohamed, Nesma Sultan, et al. "Impact of Three Different Mouthwashes on the Incidence of Gingival Overgrowth Induced by Cyclosporine-A; A Randomized Controlled Experimental Animal Study." Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology (2015).**other;Rat**. PubMed:26153120 **[IF=1.38]**Elkabir, Mohammed Ali, et al. "Efficacy of azithromycin and metronidazole combined therapy on rats' gingival overgrowth induced by cyclosporine-A: An experimental animal study." Journal of Oral Biology and Craniofacial Research (2016).**IHC-P;Rat**. PubMed:27761387 **[IF=3.40]**Ding, Feng, et al. "Osteopontin stimulates matrix metalloproteinase expression through the nuclear factor-κB signaling pathway in rat temporomandibular joint and

	condylar chondrocytes." Am J Transl Res 9.2 (2017): 316-329.**WB;Rat**. PubMed:28337262 **[IF=2.66]**Song, Huiping, et al. "Effects of alendronateon lumbar intervertebral disc degeneration with bone loss in ovariectomized rats." The Spine Journal (2017).**IHC-P;Rat**. PubMed:28288923
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=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.
Molecular weight:	27/41/54kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse MMP1 (27 kDa interstitial collagenase):401-464/464
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	The matrix metalloproteinases (MMPs) are a family of at least eighteen secreted and membrane bound zincendopeptidases. Collectively, these enzymes can degrade all the components of the extracellular matrix, including fibrillar and non fibrillar collagens, fibronectin, laminin and basement membrane glycoproteins. In general, a signal peptide, a propeptide, and a catalytic domain containing the highly conserved zinc binding site characterizes the structure of the MMPs. In addition, fibronectin like repeats, a hinge region, and a C terminal hemopexin like domain allow categorization of MMPs into the collagenase, gelatinase, stomelysin and membrane type MMP subfamilies. All MMPs are synthesized as proenzymes, and most of them are secreted from the cells as proenzymes. Thus, the activation of these proenzymes is a critical step that leads to extracellular matrix breakdown. MMPs are considered to play an important role in wound healing, apoptosis, bone elongation, embryo development, uterine involution, angiogenesis and tissue remodeling, and in diseases such as multiple sclerosis, Alzheimer's, malignant gliomas, lupus, arthritis, periodontis, glumerulonephritis, atherosclerosis, tissue ulceration, and in cancer cell invasion and metastasis.

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).

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

SWISS:
P03956

Gene ID:
17386

Database links:

Entrez Gene: 281308Cow

Entrez Gene: 4312Human

Entrez Gene: 17386Mouse

Entrez Gene: 397320Pig

Entrez Gene: 100009110Rabbit

Omim: 120353Human

SwissProt: P28053Cow

SwissProt: P03956Human

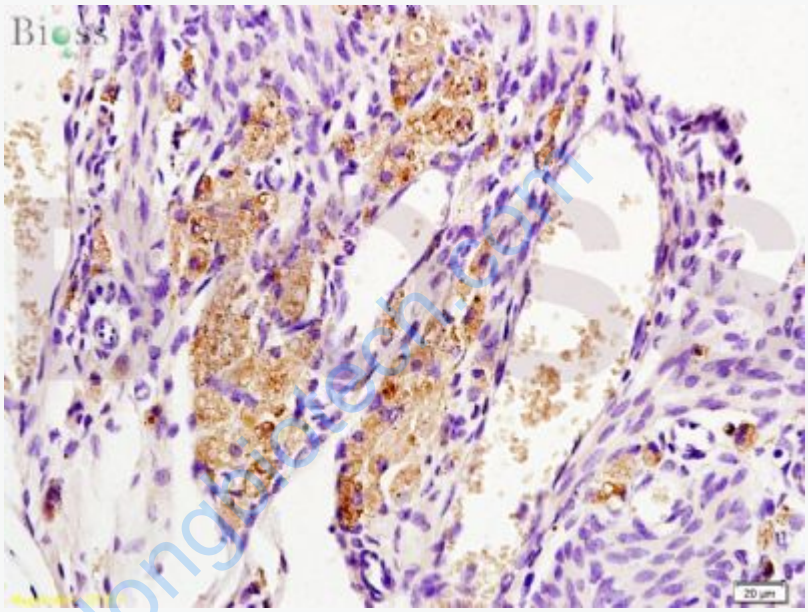
SwissProt: P33435Mouse

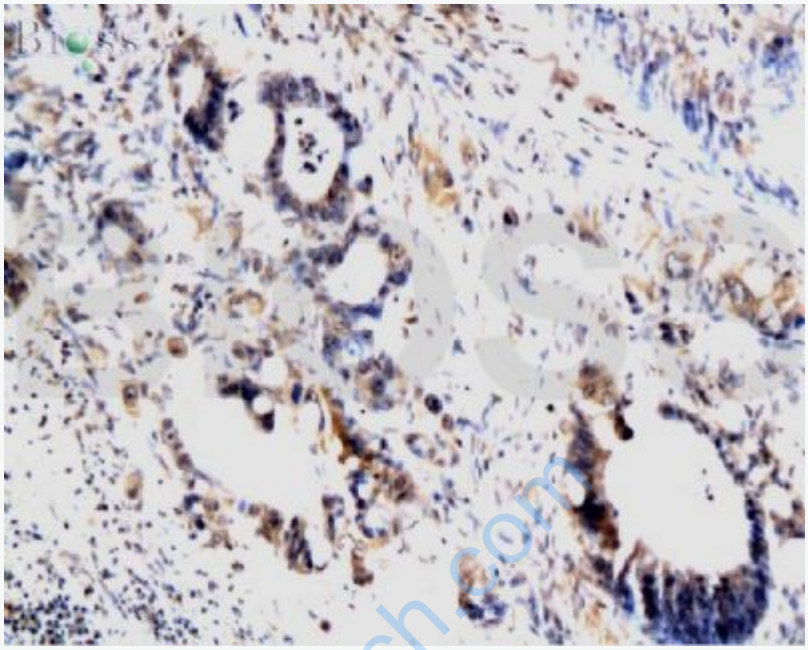
SwissProt: P21692Pig

SwissProt: P13943Rabbit

Unigene: 83169Human

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

	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，因而它在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:	 Tissue/cell: mouse endometrium; 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℃ for 20 min; Incubation: Anti-MMP-1 Polyclonal Antibody, Unconjugated(SL0463R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human colon carcinoma; 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℃ for 20 min;

Incubation: Anti-MMP-1 Polyclonal Antibody, Unconjugated(SL0463R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining