

Datasheet for ABIN668931
anti-MMP1 antibody (AA 401-464)[2 Images](#)[6 Publications](#)[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	MMP1
Binding Specificity:	AA 401-464
Reactivity:	Human, Mouse, Rat, Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MMP1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from rat MMP1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Pig, Rat
Purification:	Purified by Protein A.

Target Details

Target:	MMP1
Alternative Name:	MMP-1 (MMP1 Products)

Target Details

Background:	<p>Synonyms: CLGN, CLG, 27 kDa interstitial collagenase, collagenase, fibroblast, Fibroblast collagenase, Interstitial collagenase, Matrix metalloproteinase 1 interstitial collagenase, Matrix metalloproteinase-1, Matrix metalloprotease 1, Matrix Metalloproteinase 1, MMP-1, MMP1, MMP1_HUMAN, OTTHUMP00000045866, MMP 1.</p> <p>Background: 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, periodontitis, glomerulonephritis, atherosclerosis, tissue ulceration, and in cancer cell invasion and metastasis.</p>
Gene ID:	300339
UniProt:	B5DFD5

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
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Handling

Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:

Song, Luo, Wang, Li, Yang, Dai, Shen, Zhang, Zhang: "Effects of alendronate on lumbar intervertebral disc degeneration with bone loss in ovariectomized rats." in: **The spine journal : official journal of the North American Spine Society**, (2017) ([PubMed](#)).

Ding, Wang, Zhu, Zhao, Wu, Chen: "Osteopontin stimulates matrix metalloproteinase expression through the nuclear factor-κB signaling pathway in rat temporomandibular joint and condylar chondrocytes." in: **American journal of translational research**, Vol. 9, Issue 2, pp. 316-329, (2017) ([PubMed](#)).

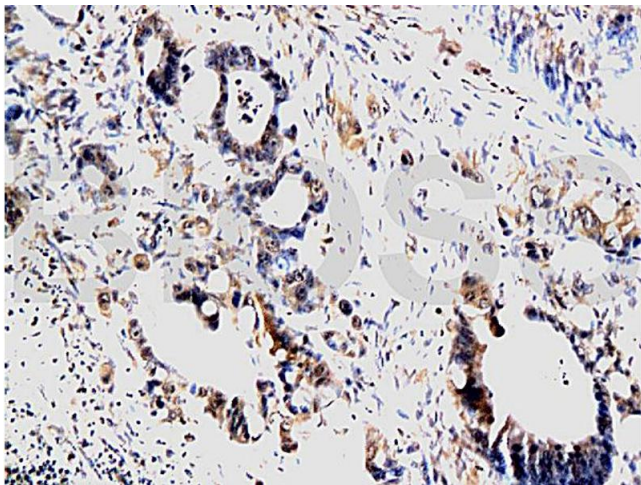
Elkabir, El-Zehery, Mourad, Soliman, Helal, Refai, Grawish: "Efficacy of azithromycin and metronidazole combined therapy on rats' gingival overgrowth induced by cyclosporine-A: An experimental animal study." in: **Journal of oral biology and craniofacial research**, Vol. 6, Issue 3, pp. 219-226, (2016) ([PubMed](#)).

Mohamed, El-Zehery, Mourad, Grawish: "Impact of three different mouthwashes on the incidence of gingival overgrowth induced by cyclosporine-A: a randomized controlled experimental animal study." in: **Oral surgery, oral medicine, oral pathology and oral radiology**, Vol. 120, Issue 3, pp. 346-56, (2015) ([PubMed](#)).

Jiang, Tian, Wang, Yan, Liu, Liu, Song, Zhang, Shen, Zhang: "Effect of calcitonin pretreatment on naturally occurring intervertebral disc degeneration in guinea pig." in: **International journal of clinical and experimental medicine**, Vol. 8, Issue 7, pp. 10367-79, (2015) ([PubMed](#)).

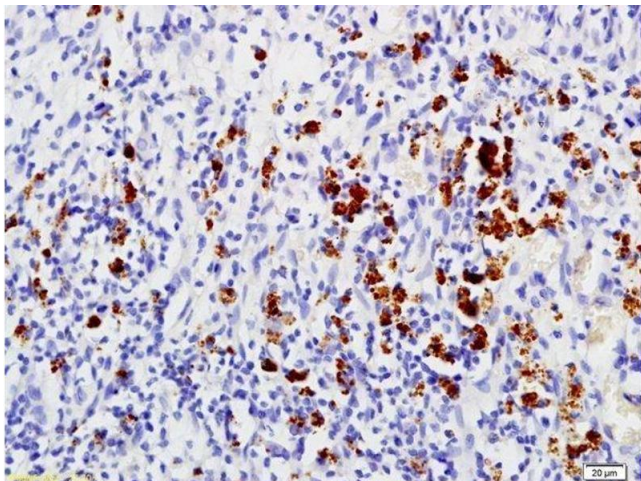
There are more publications referencing this product on: [Product page](#)

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded human colon carcinoma labeled with Anti-MMP-1 Polyclonal Antibody, Unconjugated (ABIN668931) at 1:200, followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded rat colitis labeled with Anti-MMP-1 Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining