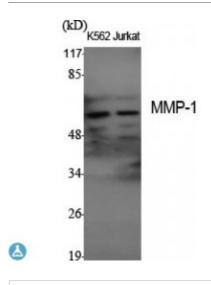


## **Anti-MMP-1 antibody**



**Description** Rabbit polyclonal to MMP-1.

Model STJ94157

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human MMP-1

**Immunogen Region** 380-460 aa, C-terminal

**Gene ID** <u>4312</u>

Gene Symbol MMP1

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

**Specificity** MMP-1 Polyclonal Antibody detects endogenous levels of MMP-1 protein.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Interstitial collagenase Fibroblast collagenase Matrix metalloproteinase-1

MMP-1 22 kDa interstitial collagenase 27 kDa interstitial collagenase

Molecular Weight 54 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:7155OMIM:120353</u>

Alternative Names Interstitial collagenase Fibroblast collagenase Matrix metalloproteinase-1

MMP-1 22 kDa interstitial collagenase 27 kDa interstitial collagenase

**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.

Sequence and Domain Family There are two distinct domains in this protein; the catalytic N-terminal, and

the C-terminal which is involved in substrate specificity and in binding TIMP (tissue inhibitor of metalloproteinases).; The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide

release activates the enzyme.

**Cellular Localization** Secreted, extracellular space, extracellular matrix

**Post-translational** 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. Tyrosine phosphorylated in platelets by PKDCC/VLK.

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Modifications

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