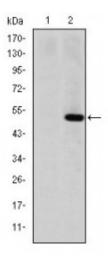


## Anti-MMP-1 antibody



**Description** Mouse monoclonal to MMP-1.

Model STJ98247

**Host** Mouse

**Reactivity** Human

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

**Immunogen** Purified recombinant fragment of human MMP-1 expressed in E. Coli.

**Gene ID** 4312

Gene Symbol MMP1

**Dilution range** WB 1:500-1:2000IHC 1:200-1:1000IF 1:200-1:1000FC 1:200-1:400ELISA

1:10000

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

**Purification** Affinity purification

Clone ID 6A5

**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

**Clonality** Monoclonal

**Conjugation** Unconjugated

Isotype IgG1

**Formulation** Ascitic fluid containing 0.03% sodium azide.

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

Database Links <u>HGNC:71550MIM: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

**Modifications** 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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