

## MMP-1 Mouse mAb

CatalogNo: YM0445

### Key Features

#### Host Species

- Mouse

#### Reactivity

- Human

#### Applications

- WB,IHC,IF,FC,ELISA

#### MW

- 54kD (Calculated)

### Storage

**Storage\*** -15°C to -25°C/1 year(Do not lower than -25°C)

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

### Recommended Dilution Ratios

**WB 1:500-1:2000**

**IHC 1:200-1:1000**

**IF 1:200-1:1000**

**Flow Cyt 1:200-1:400**

**ELISA 1:10000**

**Not yet tested in other applications.**

### Basic Information

**Clonality** Monoclonal

**Clone Number** 12F9

### Immunogen Information

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

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

---

## | Target Information

**Gene name** MMP1

**Protein Name** Interstitial collagenase

Organism	Gene ID	UniProt ID
Human	<a href="#">4312</a> ;	<a href="#">P03956</a> ;

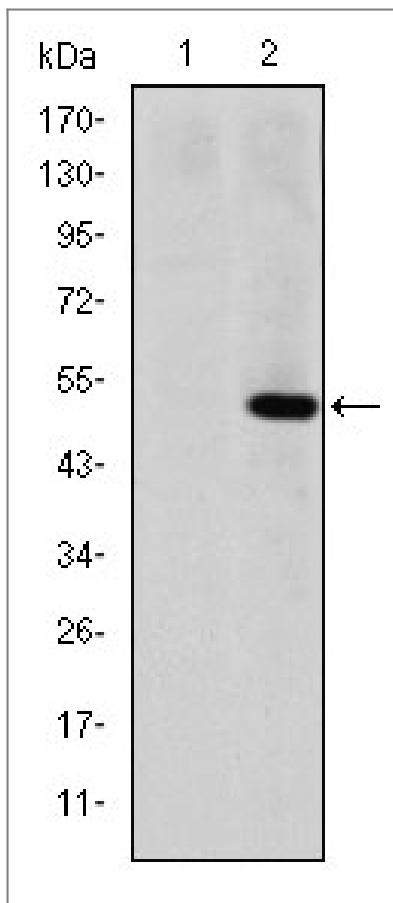
**Cellular Localization** Secreted, extracellular space, extracellular matrix .

**Tissue specificity** Fibroblast,Ovary,Synovial cell,Synovial membrane,Thyroid,

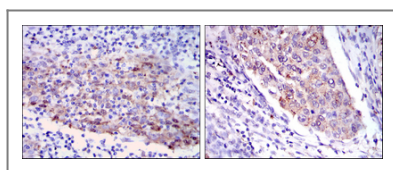
**Function** Catalytic activity: Cleavage of the triple helix of collagen at about three-quarters of the length of the molecule from the N-terminus, at 775-Gly-I-Ile-776 in the alpha-1(I) chain. Cleaves synthetic substrates and alpha-macroglobulins at bonds where P1' is a hydrophobic residue., cofactor: Binds 2 zinc ions per subunit., cofactor: Binds 4 calcium ions per subunit., Domain: 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., Domain: 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)., enzyme regulation: Can be activated without removal of the activation peptide., 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., online information: Collagenase entry, PTM: 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., similarity: Contains 4 hemopexin-like domains., subunit: Interacts with HIV-1 Tat.,

---

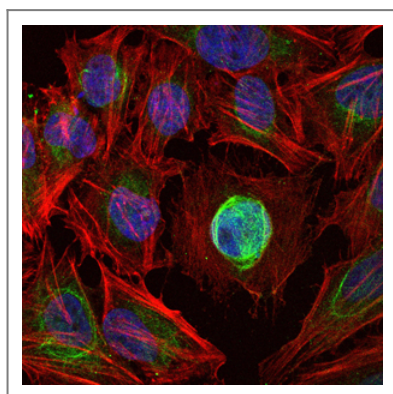
## | Validation Data



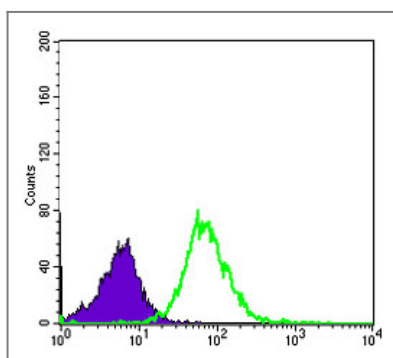
Western Blot analysis using MMP-1 Monoclonal Antibody against HEK293 (1) and MMP1-hlgGfc transfected HEK293 (2) cell lysate.



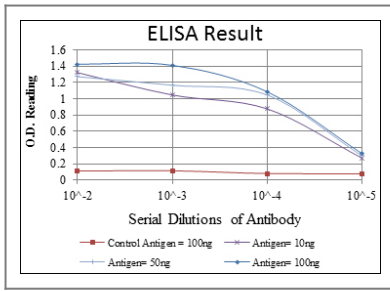
Immunohistochemistry analysis of paraffin-embedded human cervical cancer tissues (left) and human kidney cancer tissues (right) with DAB staining using MMP-1 Monoclonal Antibody.



Immunofluorescence analysis of HeLa cells using MMP-1 Monoclonal Antibody. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HeLa cells using MMP-1 Monoclonal Antibody (green) and negative control (purple).



## Contact information

Orders: order.cn@immunoway.com  
 Support: support.cn@immunoway.com  
 Telephone: 400-8787-807(China)  
 Website: <http://www.immunoway.com.cn>  
 Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**MMP-1 Mouse mAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)