

For Research Use Only

# MMP1 Polyclonal antibody

Catalog Number:10371-2-AP

Featured Product

269 Publications



## Basic Information

**Catalog Number:**

10371-2-AP

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG0547

**GenBank Accession Number:**

BC013875

**GeneID (NCBI):**

4312

**UNIPROT ID:**

P03956

**Full Name:**

matrix metalloproteinase 1  
(interstitial collagenase)

**Calculated MW:**

54 kDa

**Observed MW:**

45-48 kDa, 55-62 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB: 1:2000-1:10000

IHC: 1:200-1:800

IF-P: 1:200-1:800

IF/ICC: 1:50-1:500

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IF-P, ELISA

**Cited Applications:**

WB, IHC, IF

**Species Specificity:**

human, mouse

**Cited Species:**

human, mouse, rat, rabbit, monkey, bovine

**Positive Controls:**

**WB:** U-251 cells, NIH/3T3 cells, U-87 MG cells, MDA-MB-231 cells

**IHC:** human skin cancer tissue,

**IF-P:** mouse stomach tissue,

**IF/ICC:** MCF-7 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

MMP1, also named as CLG, belongs to the peptidase M10A family. MMP is the main enzyme that cleaves fibrillar collagen, namely types I, II, III, VII, and XI. It is involved in cell migration and invasion, and is frequently up-regulated in cancer cells. It can be cleavage to two major forms (22 kDa and 27 kDa) by undergoing autolytic, and the 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. The sizes of pro-MMP-1 and active MMP-1 from human synovial fibroblasts have been reported as 52 to 56 kDa, depending on glycosylation, and 41 to 45 kDa, respectively. In addition, a band of 62-kDa observed in the current study is pro-MMP-1 (PMID:9418730).

## Notable Publications

| Author       | Pubmed ID | Journal              | Application |
|--------------|-----------|----------------------|-------------|
| Wei-Lin Teng | 34679686  | Antioxidants (Basel) | WB          |
| Wenbin Pei   | 34650433  | Front Pharmacol      | WB          |
| Hana Nopia   | 36167912  | Biometals            | WB          |

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

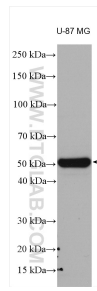
T: 4006900926

E: Proteintech-CN@ptglab.com

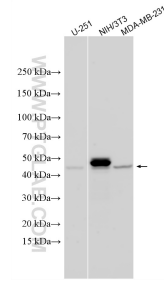
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

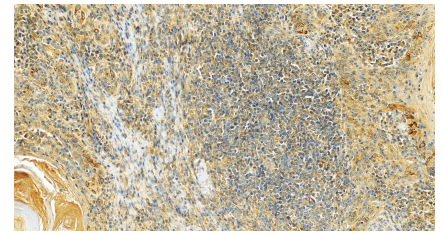
## Selected Validation Data



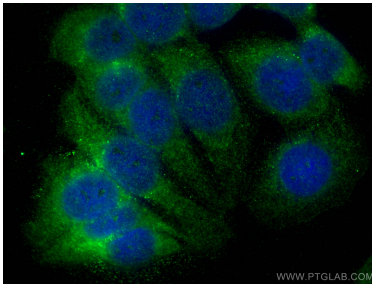
U-87 MG cells were subjected to SDS PAGE followed by western blot with 10371-2-AP (MMP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



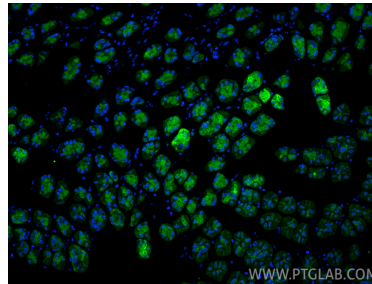
Various lysates were subjected to SDS PAGE followed by western blot with 10371-2-AP (MMP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human skin cancer tissue slide using 10371-2-AP (MMP1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using MMP1 antibody (10371-2-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse stomach tissue using MMP1 antibody (10371-2-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).