

## MMP1 Polyclonal Antibody

Catalog number: 10371-2-AP

Size: 57 µg/150 µl

Source: Rabbit

Isotype: IgG

Synonyms:

MMP1; CLG, CLGN, Fibroblast collagenase, Interstitial collagenase, Matrix metalloproteinase 1, MMP 1, MMP1

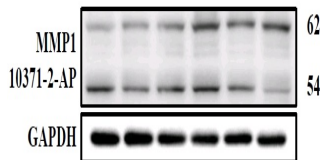
### Background

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 X. 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).

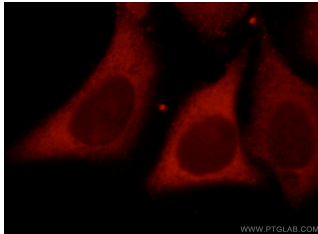
### Applications

|                                 |                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Tested applications:</b>     | ELISA, WB, IF, IP, FC, IHC                                                                                      |
| <b>Cited applications:</b>      | WB                                                                                                              |
| <b>Species specificity:</b>     | Human, Mouse, Rat; other species not tested.                                                                    |
| <b>Cited species:</b>           | Human, mouse, rabbit                                                                                            |
| <b>Calculated MMP1 MW:</b>      | 54 kDa                                                                                                          |
| <b>Observed MMP1 MW:</b>        | 52-56 kDa, 62 kDa                                                                                               |
| <b>Positive WB detected in</b>  | A549 cells, A375 cells, HepG2 cells, Jurkat cells, mouse skeletal muscle tissue, NIH/3T3 cells, rat skin tissue |
| <b>Positive IP detected in</b>  | A549 cells                                                                                                      |
| <b>Positive IHC detected in</b> | Human cervical cancer tissue, rat testis tissue                                                                 |
| <b>Positive IF detected in</b>  | HepG2 cells                                                                                                     |
| <b>Positive FC detected in</b>  | HepG2 cells                                                                                                     |
| <b>Recommended dilution:</b>    | WB: 1:200-1:2000<br>IP: 1:500-1:5000<br>IHC: 1:20-1:200<br>IF: 1:20-1:200<br>FC: N/A                            |

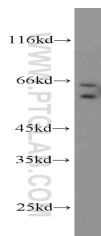
Cell line: NIH3T3



WB results of MMP1 antibody (10371-1-AP, 1:500) with NIH3T3 cells, 62 kDa for pro-MMP1 and 54 kDa for Active MMP1. Data from Dr. Hui-Wen Chiu, Taipei Medical University.



Immunofluorescent analysis of HepG2 cells, using MMP1 antibody 10371-2-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



A549 cells were subjected to SDS PAGE followed by western blot with 10371-2-AP (MMP1 antibody) at dilution of 1:1000

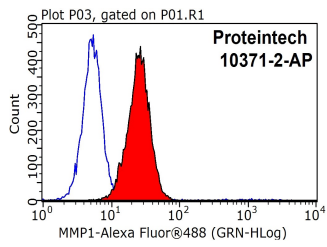
### Immunogen information

|                                  |                                                       |
|----------------------------------|-------------------------------------------------------|
| <b>Immunogen:</b>                | Ag0547                                                |
| <b>GenBank accession number:</b> | BC013875                                              |
| <b>Gene ID (NCBI):</b>           | 4312                                                  |
| <b>Full name:</b>                | Matrix metalloproteinase 1 (interstitial collagenase) |

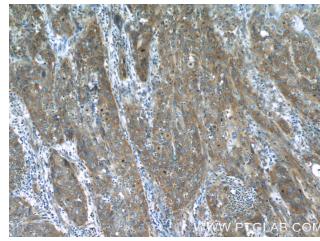
### Product information

|                             |                                                                     |
|-----------------------------|---------------------------------------------------------------------|
| <b>Purification method:</b> | Antigen affinity purification                                       |
| <b>Storage:</b>             | PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C. |

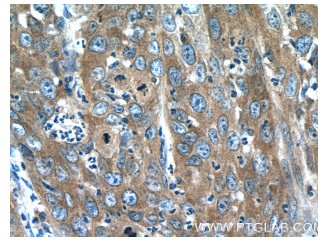
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation



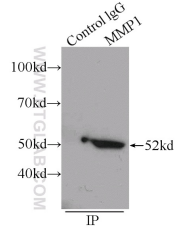
**1X10<sup>6</sup> HepG2 cells were stained with 0.2ug MMP1 antibody (10371-2-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.**



**Immunohistochemistry of paraffin-embedded human cervical cancer tissue slide using 10371-2-AP( MMP1 Antibody) at dilution of 1:200 (under 10x lens)**



**Immunohistochemistry of paraffin-embedded human cervical cancer tissue slide using 10371-2-AP( MMP1 Antibody) at dilution of 1:200 (under 40x lens)**



**IP Result of anti-MMP1 (IP:10371-2-AP, 4ug; Detection:10371-2-AP 1:1000) with A549 cells lysate 1200ug.**