

For Research Use Only

# MMP1 Polyclonal antibody

Catalog Number: 10371-2-AP

Featured Product

108 Publications



## Basic Information

<b>Catalog Number:</b> 10371-2-AP	<b>GenBank Accession Number:</b> BC013875	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 700 µg/ml by Nanodrop and 380 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 4312	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IF 1:20-1:200
<b>Source:</b> Rabbit	<b>Full Name:</b> matrix metalloproteinase 1 (interstitial collagenase)	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 54 kDa	
<b>Immunogen Catalog Number:</b> AG0547	<b>Observed MW:</b> 52-56 kDa, 62 kDa	

## Applications

<b>Tested Applications:</b> FC, IF, WB, ELISA	<b>Positive Controls:</b> WB : U-87 MG cells, NIH/3T3 cells
<b>Cited Applications:</b> IF, IHC, WB	<b>IF :</b> HepG2 cells,
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> bovine, human, mouse, rabbit, rat	

## 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 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).

## Notable Publications

Author	Pubmed ID	Journal	Application
Wei-Lin Teng	34679686	Antioxidants (Basel)	WB
Wenbin Pei	34650433	Front Pharmacol	WB
Weijie Wen	30222953	Arch Biochem Biophys	WB

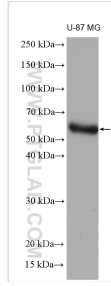
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

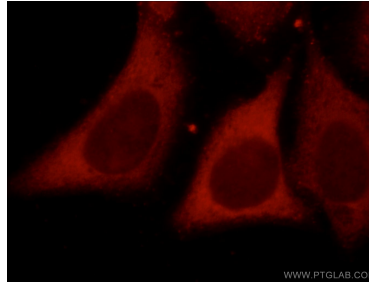
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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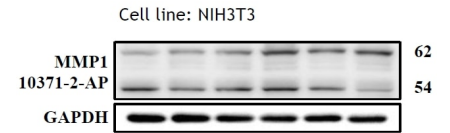
## Selected Validation Data



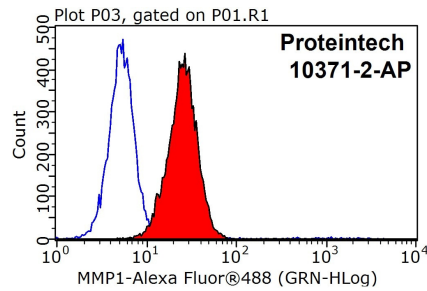
U-87 MG cells were subjected to SDS PAGE followed by western blot with 10371-2-AP (MMP1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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



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.



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.