

For Research Use Only

# MMP2 Monoclonal antibody

Catalog Number: 66366-1-Ig

Featured Product

75 Publications



## Basic Information

<b>Catalog Number:</b> 66366-1-Ig	<b>GenBank Accession Number:</b> BC002576	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop and 510 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 4313	<b>CloneNo.:</b> 2B10D1
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P08253	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:150-1:600
<b>Isotype:</b> IgG1	<b>Full Name:</b> matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)	
<b>Immunogen Catalog Number:</b> AG25039	<b>Calculated MW:</b> 72 kDa	
	<b>Observed MW:</b> 55-74 kDa	

## Applications

**Tested Applications:**  
WB, IHC, FC (Intra), ELISA

**Cited Applications:**  
WB, IHC, IF

**Species Specificity:**  
human, mouse, rat, pig

**Cited Species:**  
human, mouse, rat, pig

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

**Positive Controls:**

**WB :** U-251 cells, human placenta tissue, MCF-7 cells, pig heart tissue, rat heart tissue, U-87 MG cells

**IHC :** human breast cancer tissue,

## Background Information

MMP2, also named as CLG4A, Gelatinase Am, TBE-1 and PEX, belongs to the peptidase M10A family. It is ubiquitous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. MMP2 contributes to myocardial oxidative stress by regulating the activity of GSK3beta. It cleaves GSK3beta in vitro. MMP2 can be cleaved into PEX chain (~60kd). Western blot analysis showed that the 72 kDa and 62 kDa proteinase activities were pro-MMP2 and the active enzyme, respectively (PMID:11112697).

## Notable Publications

Author	Pubmed ID	Journal	Application
Wenjing Guo	33117682	Front Oncol	WB
Wei Zhou	34646828	Front Cell Dev Biol	WB
Yu-Feng Liu	34603071	Front Physiol	WB, IHC

## Storage

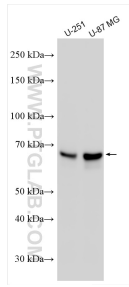
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

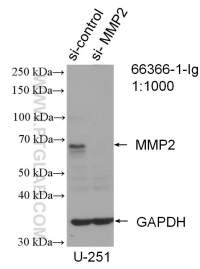
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

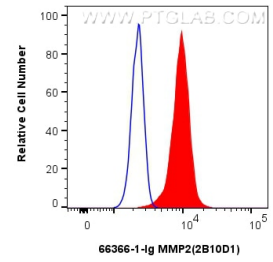
## Selected Validation Data



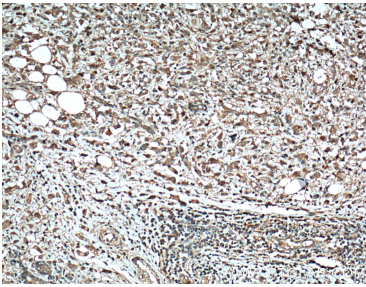
Various lysates were subjected to SDS PAGE followed by western blot with 66366-1-Ig (MMP2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



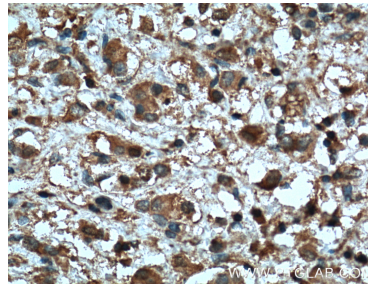
WB result of MMP2 antibody (66366-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MMP2 transfected U-251 cells.



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.4  $\mu$ g MMP2 Monoclonal antibody (66366-1-Ig, Clone:2B10D1) and Coralite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.4  $\mu$ g Mouse IgG1 isotype control Mouse McAb (66360-1-Ig, Clone: 1F8D3) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66366-1-Ig (MMP2 antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66366-1-Ig (MMP2 antibody) at dilution of 1:300 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).