

For Research Use Only

# MMP-9 (N-terminal) Polyclonal antibody

Catalog Number: 10375-2-AP

Featured Product

1219 Publications



## Basic Information

Catalog Number:

10375-2-AP

Concentration:

400 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0552

GenBank Accession Number:

BC006093

GeneID (NCBI):

4318

UNIPROT ID:

P14780

Full Name:

matrix metalloproteinase 9  
(gelatinase B, 92kDa gelatinase,  
92kDa type IV collagenase)

Calculated MW:

707 aa, 78 kDa

Observed MW:

92 kDa, 67 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:3000

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF, ColP, ELISA

Species Specificity:

human

Cited Species:

human, mouse, rat, pig, rabbit, bovine, hamster, fish

**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: Jurkat cells, HEK-293 cells, LNCaP cells, HepG2  
cells, Raji cells, MDA-MB-231 cells

IHC: human breast cancer tissue, human cervical  
cancer tissue

IF/ICC: HepG2 cells,

## Background Information

Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, tissue remodeling, and disease processes, such as arthritis or metastasis. Most MMPs are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. Matrix metalloproteinase 9 (gelatinase B, 92 kDa gelatinase, 92 kDa type IV collagenase) (MMP9, synonyms: GELB, CLG4B) degrades collagens type IV and V. Studies in rhesus monkeys suggest that MMP9 is involved in IL-8-induced mobilization hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling. The pro-MMP9 is 92 kDa, and it can be detected a processed form of 68 kDa. This protein can exist as a dimer of 180 kDa (PMID:7492685).

## Notable Publications

Author	Pubmed ID	Journal	Application
Dayun Feng	36179025	Sci Adv	IF
Yu Chen	36240716	Tissue Cell	WB, IHC
Samana Batool	30274346	Int J Mol Sci	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:

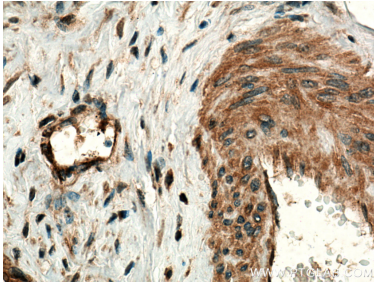
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

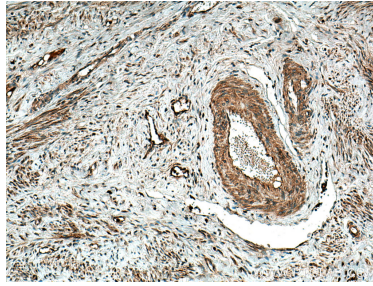
W: [ptgcn.com](http://ptgcn.com)

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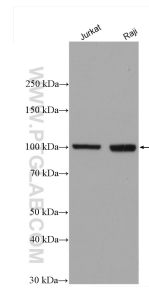
## Selected Validation Data



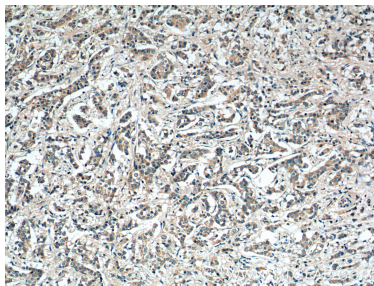
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 10375-2-AP (MMP9 (N-terminal) antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



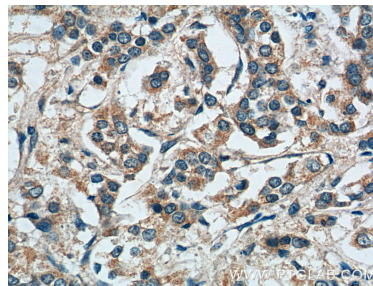
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 10375-2-AP (MMP9 (N-terminal) antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



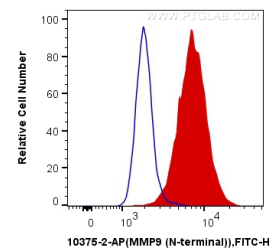
Various lysates were subjected to SDS PAGE followed by western blot with 10375-2-AP (MMP9 (N-terminal) antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



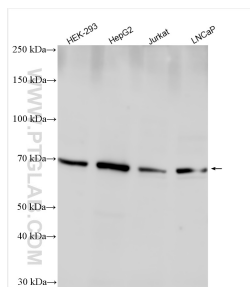
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10375-2-AP (MMP9 (N-terminal) antibody) at dilution of 1:200 (under 10x lens).



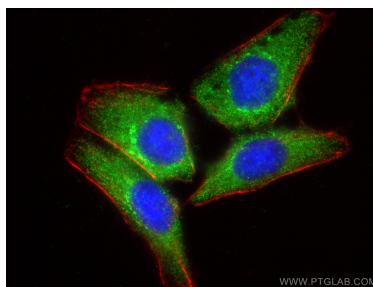
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10375-2-AP (MMP9 (N-terminal) antibody) at dilution of 1:200 (under 40x lens).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human MMP9 (N-terminal) (10375-2-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 10375-2-AP (MMP9 (N-terminal) antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MMP9 (N-terminal) antibody (10375-2-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).