

For Research Use Only

# MMP12 Polyclonal antibody

Catalog Number: 22989-1-AP **28 Publications**



## Basic Information

<b>Catalog Number:</b> 22989-1-AP	<b>GenBank Accession Number:</b> BC112301	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 350 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4321	<b>Recommended Dilutions:</b> WB 1:500-1:3000 IHC 1:20-1:200
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P39900	
<b>Isotype:</b> IgG	<b>Full Name:</b> matrix metalloproteinase 12 (macrophage elastase)	
<b>Immunogen Catalog Number:</b> AG19068	<b>Calculated MW:</b> 470 aa, 54 kDa	
	<b>Observed MW:</b> 54 kDa, 45 kDa	

## Applications

### Tested Applications:

IHC, WB, ELISA

### Cited Applications:

WB,IHC,IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rabbit, hamster

**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 : mouse brain tissue, rat brain tissue

IHC : human lung cancer tissue, human breast cancer tissue, human lung tissue

## Background Information

MMP12(Matrix metalloproteinase-12) is a 54 kDa proenzyme that is processed into a 45 kDa and then a 22 kDa active form(15723202). MMP9 and MMP12 promote intimal thickening by independent cleavage of N-cadherin, which elevates vascular smooth muscle cell proliferation via beta-catenin signalling. Its overexpression in myeloid lineage cells plays a key role in modulating myelopoiesis, immune suppression, and lung tumorigenesis(PMID: 21378275).

## Notable Publications

Author	Pubmed ID	Journal	Application
Zhen-Huang Chen	32918999	Mol Cell Neurosci	IHC
Ruijuan Guan	31704583	Redox Biol	WB
Jian Chen	34722509	Front Cell Dev Biol	IF

## 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

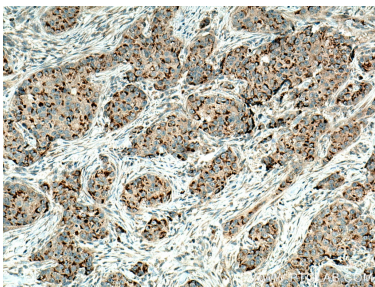
For technical support and original validation data for this product please contact:

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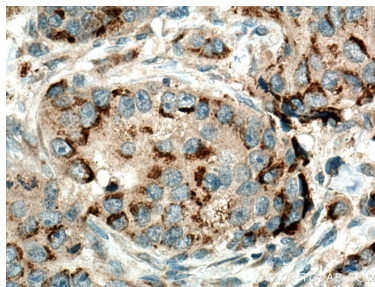
E: proteintech@ptglab.com  
W: ptglab.com

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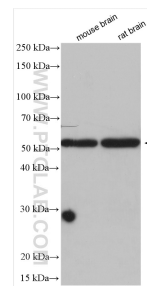
## Selected Validation Data



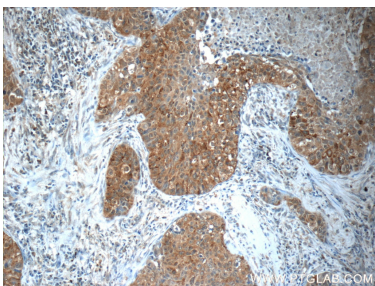
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 22989-1-AP (MMP12 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



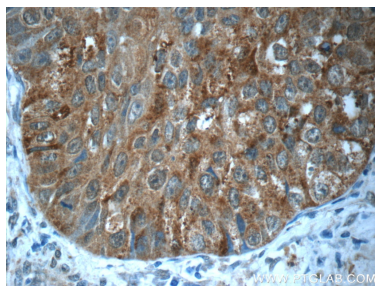
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 22989-1-AP (MMP12 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 22989-1-AP (MMP12 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22989-1-AP (MMP12 Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22989-1-AP (MMP12 Antibody) at dilution of 1:50 (under 40x lens).