

For Research Use Only

# MMP14 / MT1-MMP Polyclonal antibody

Catalog Number: 29111-1-AP

2 Publications



## Basic Information

<b>Catalog Number:</b> 29111-1-AP	<b>GenBank Accession Number:</b> BC064803	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 400 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4323	<b>Recommended Dilutions:</b> WB 1:500-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P50281	IHC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> matrix metalloproteinase 14 (membrane-inserted)	IF/ICC 1:50-1:500
<b>Immunogen Catalog Number:</b> AG30755	<b>Calculated MW:</b> 66 kDa	
	<b>Observed MW:</b> 66-70 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : A549 cells,
<b>Cited Applications:</b> WB	IHC : human colon cancer tissue,
<b>Species Specificity:</b> Human, mouse	IF/ICC : A549 cells,
<b>Cited Species:</b> human, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

MMP14, also named as MT1-MMP, is a key matrix metalloproteinase (MMP) family member which plays a crucial role in tumor growth, invasion and metastasis. MT1-MMP is a cell membrane-bound proteinase, and it enhances degradation of collagen IV, a major component of the basement membrane, by forming a complex with tissue inhibitor of metalloproteinase-2 (TIMP-2) to activate pro-MMP-2. MT1-MMP can influence venous invasion, intrahepatic metastasis, and patient outcome in hepatocellular carcinoma (HCC). MT1-MMP was reported to be present in centromere and could lead to chromosome instability in MDCK cells, indicating that MT1-MMP may have more novel functions in the intracellular compartments. In western blotting, pro-MMP14 (65 kDa) and MMP14 (51 kDa) bands showed with the truncated MMP14 (45, 42, 35, 20 kDa) forms (PMID:12097451).

## Notable Publications

Author	Pubmed ID	Journal	Application
Dongdong Zheng	36382024	Bioact Mater	WB
Xuefeng He	39009952	Appl Biochem Biotechnol	WB

## Storage

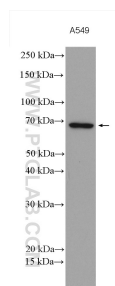
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

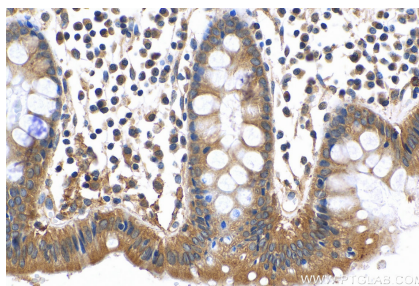
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

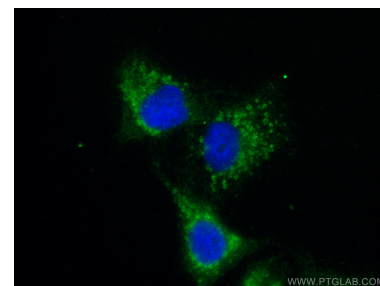
## Selected Validation Data



A549 cells were subjected to SDS PAGE followed by western blot with 29111-1-AP (MMP14 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 29111-1-AP (MMP14 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed A549 cells using MMP14 antibody (29111-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).