For Research Use Only

## MMP14 / MT1-MMP Polyclonal antibody

Catalog Number:29111-1-AP 2 Publications



**Purification Method:** 

WB 1:500-1:1000 IHC 1:50-1:500

IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number:

29111-1-AP

BC064803

Size:

400 µg/ml

4323

Source:

Rabbit

P50281

Isotype:

GenBank Accession Number:

BC064803

GeneID (NCBI):

4323

UNIPROT ID:

P50281

Full Name:

IgG matrix metallopeptidase 14
Immunogen Catalog Number: (membrane-inserted)

AG30755 Calculated MW:
66 kDa

Observed MW: 66-70 kDa

**Applications** 

Tested Applications: WB, IHC, IF/ICC, ELISA Cited Applications:

WB Speci

Species Specificity: Human, mouse Cited Species: human, mouse

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: A549 cells,

IHC: human colon cancer tissue,

IF/ICC: A549 cells,

## **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

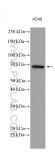
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

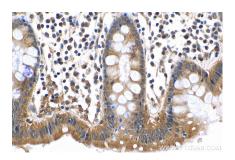
W: ptgcn.co

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

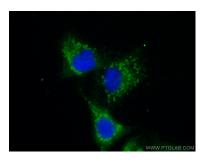
## **Selected Validation Data**



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 paraffinembedded 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).