

For Research Use Only

# MMP13 Polyclonal antibody

Catalog Number: 18165-1-AP **388 Publications**



## Basic Information

<b>Catalog Number:</b> 18165-1-AP	<b>GenBank Accession Number:</b> BC074808	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 600 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4322	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:50-1:500 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P45452	
<b>Isotype:</b> IgG	<b>Full Name:</b> matrix metalloproteinase 13	
<b>Immunogen Catalog Number:</b> AG12653	<b>Calculated MW:</b> 471 aa, 54 kDa	
	<b>Observed MW:</b> 65-70 kDa, 50-55 kDa, 40 kDa	

## Applications

<b>Tested Applications:</b> WB, IP, IF, IHC, ELISA	<b>Positive Controls:</b> <b>WB :</b> HeLa cells, MCF-7 cells, mouse liver tissue, rat liver tissue, HepG2 cells, MDA-MB-453s cells <b>IP :</b> MCF-7 cells, <b>IHC :</b> human liver tissue, human hepatocirrhosis tissue, mouse liver tissue, human liver cancer tissue, human breast cancer tissue <b>IF :</b> MCF-7 cells,
<b>Cited Applications:</b> WB, IF, IHC	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, rat, mouse, rabbit, zebrafish, pig, bovine	
<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

MMP-13(Matrix metalloproteinase-13), cleaves type I collagen and was previously thought to be the rodent analogue of human interstitial MMP-1. MMP-13 is found in hypertrophic and calcifying cartilage of mammalian growth plate. The bands seen with rat MMP-13 are consistent with a 59-kDa latent form and a 43-kDa active form reported for this enzyme, along with a smaller band at approximately 30 kDa(PMID:10771523). It also can be detected 3 bands that the glycosylated proMMP-13 (70 kDa), unglycosylated proform (55 kDa), and active MMP-13 enzyme (40kDa) by western blot(PMID:18332263).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yangfei Yi	36178080	Orthop Surg	WB,IHC
Yanlin Cao	34593020	Arthritis Res Ther	WB
Yangke Cai	29097832	Dis Markers	WB

## Storage

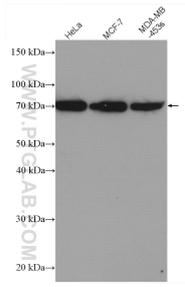
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

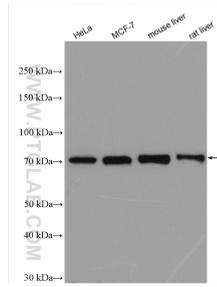
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

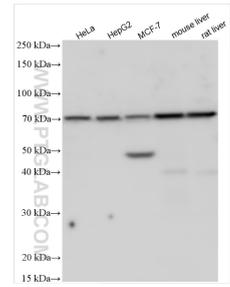
## Selected Validation Data



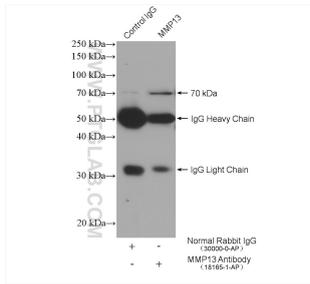
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



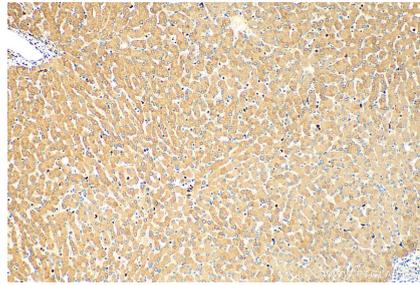
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



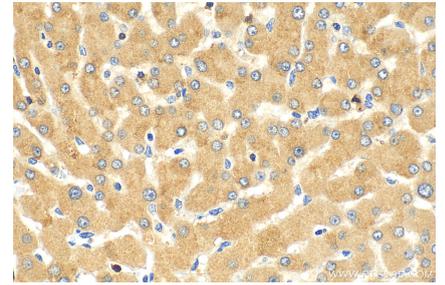
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



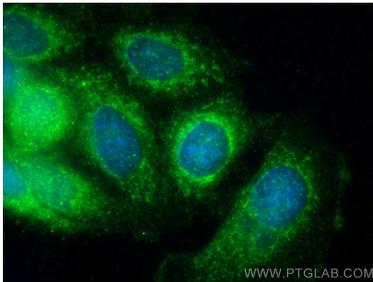
IP result of anti-MMP13 (IP:18165-1-AP, 4ug; Detection:18165-1-AP 1:300) with MCF-7 cells lysate 2480 ug.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18165-1-AP (MMP13 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 liver tissue slide using 18165-1-AP (MMP13 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using MMP13 antibody (18165-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).