

For Research Use Only

MMP13 Polyclonal antibody

Catalog Number: 18165-1-AP

Featured Product

523 Publications



Basic Information

Catalog Number:

18165-1-AP

Size:

150ul, Concentration: 800 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG12653

GenBank Accession Number:

BC074808

GeneID (NCBI):

4322

UNIPROT ID:

P45452

Full Name:

matrix metalloproteinase 13

Calculated MW:

471 aa, 54 kDa

Observed MW:

65-70 kDa, 50-55 kDa, 40 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

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/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, rabbit, zebrafish, bovine

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: HeLa cells, MCF-7 cells, mouse liver tissue, rat liver tissue, HepG2 cells, MDA-MB-453s cells

IP: MCF-7 cells,

IHC: human liver tissue, human hepatocirrhosis tissue, mouse liver tissue, human liver cancer tissue, human breast cancer tissue

IF/ICC: MCF-7 cells,

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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

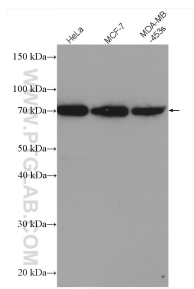
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

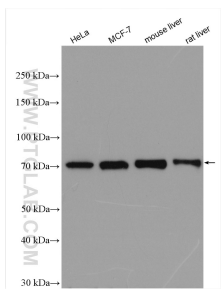
E: proteintech@ptglab.com
W: ptglab.com

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

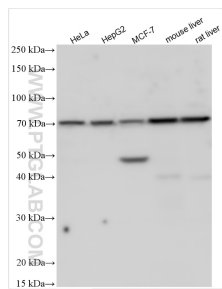
Selected Validation Data



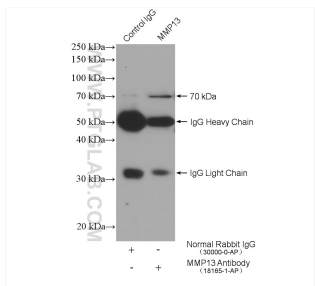
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



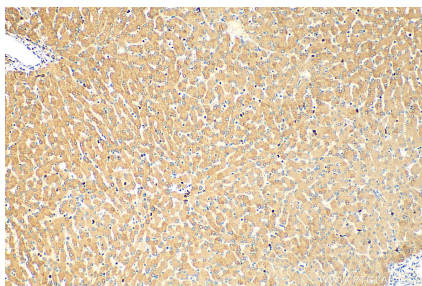
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



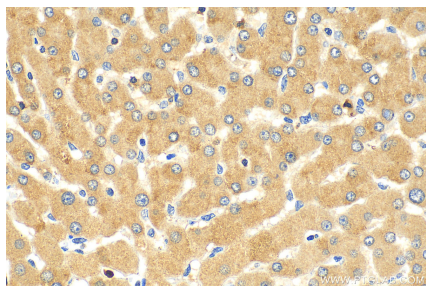
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



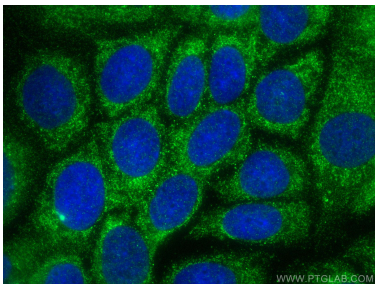
IP result of anti-MMP13 (IP:18165-1-AP, 4ug; Detection:18165-1-AP 1:300) with MCF-7 cells lysate 2480 ug.



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).