For Research Use Only

MMP13 Polyclonal antibody

Catalog Number:18165-1-AP Featured Product 587 Publications

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Basic Information

Catalog Number:
18165-1-AP

Concentration:
800 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG12653

GenBank Accession Number:
BC074808

GeneID (NCBI):
4322

UNIPROT ID:
P45452

Full Name:
matrix metallopeptidase 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, CoIP

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

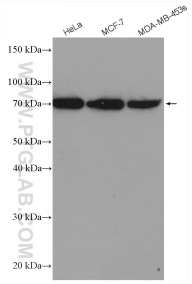
Author	Pubmed ID	Journal	Application
Yangfei Yi	36178080	Orthop Surg	WB,IHC
Yanlin Cao	34593020	Arthritis Res Ther	WB
Yangke Cai	29097832	Dis Markers	WB

Storage

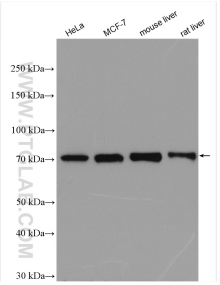
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

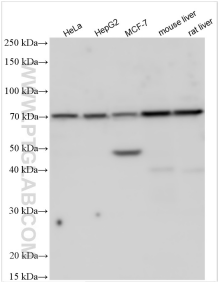
Selected Validation Data



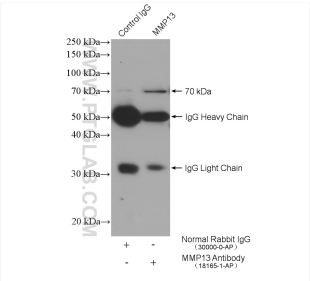
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



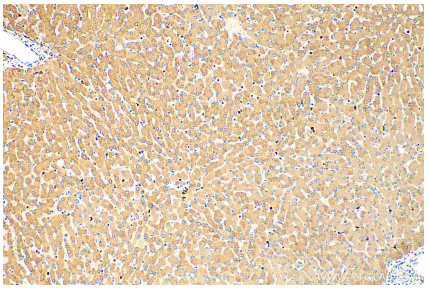
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



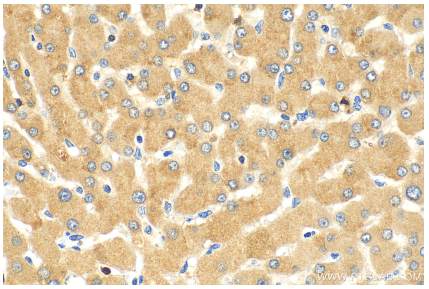
Various lysates were subjected to SDS PAGE followed by western blot with 18165-1-AP (MMP13 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



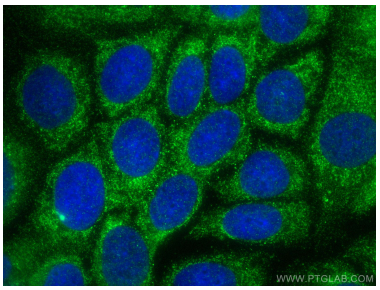
IP result of anti-MMP13 (IP:18165-1-AP, 4ug; Detection:18165-1-AP 1:300) with MCF-7 cells lysate 2480 ug.



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).