

For Research Use Only

MMP2 Polyclonal antibody

Catalog Number: 10373-2-AP

Featured Product

924 Publications



Basic Information

Catalog Number:

10373-2-AP

Size:

150ul, Concentration: 550 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0549

GenBank Accession Number:

BC002576

GeneID (NCBI):

4313

UNIPROT ID:

P08253

Full Name:

matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)

Calculated MW:

72 kDa

Observed MW:

62-72 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, pig, rabbit, bovine, fish

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 : HT-1080 cells, MCF-7 cells, U-87 MG cells, HepG2 cells, U-251 cells, J774A.1 cells

IP : MCF-7 cells,

IHC : human gliomas tissue, human placenta tissue, human prostate cancer tissue, human heart tissue, human oesophagus tissue, human breast cancer tissue

IF/ICC : HepG2 cells,

Background Information

MMP2, also named as CLG4A, Gelatinase Am, TBE-1 and PEX, belongs to the peptidase M10A family. It is ubiquitous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. MMP2 contributes to myocardial oxidative stress by regulating the activity of GSK3beta. It cleaves GSK3beta in vitro. MMP2 can be cleaved into PEX chain (~60kd). Western blot analysis showed that the 72 kDa and 62/65 kDa proteinase activities were pro-MMP2 and the active enzyme, respectively (PMID:11112697, PMID: 30867536).

Notable Publications

Author	Pubmed ID	Journal	Application
Yanlin Cao	34593020	Arthritis Res Ther	WB
Samana Batool	30274346	Int J Mol Sci	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

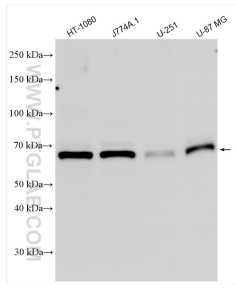
For technical support and original validation data for this product please contact:

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

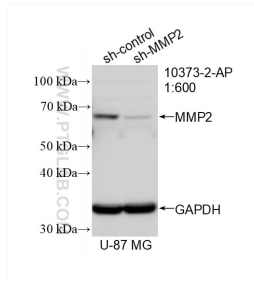
E: proteintech@ptglab.com
W: ptglab.com

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

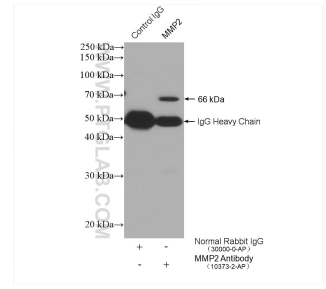
Selected Validation Data



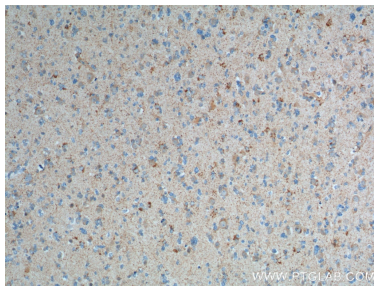
Various lysates were subjected to SDS PAGE followed by western blot with 10373-2-AP (MMP2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



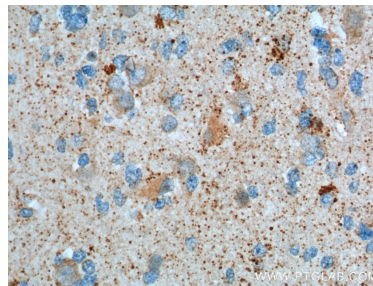
WB result of MMP2 antibody (10373-2-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-MMP2 transfected U-87 MG cells.



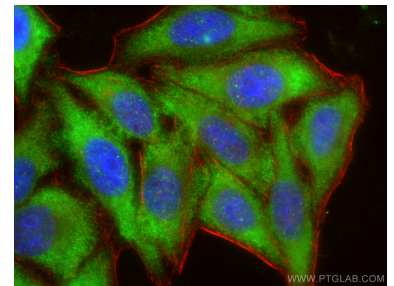
IP result of anti-MMP2 (IP:10373-2-AP, 4ug;
Detection:10373-2-AP 1:300) with MCF-7 cells
lysate 2400 ug.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10373-2-AP (MMP2 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 10373-2-AP (MMP2 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MMP2 antibody (10373-2-AP) at dilution of 1:400 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).