For Research Use Only

MMP12 Polyclonal antibody

Catalog Number:22989-1-AP 31 Publications



Basic Information

Catalog Number: 22989-1-AP Size:

350 μg/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG19068

GenBank Accession Number:

BC112301 GeneID (NCBI): 4321

UNIPROT ID:

P39900

Full Name: matrix metallopeptidase 12 (macrophage elastase)

Calculated MW: 470 aa. 54 kDa Observed MW:

54 kDa, 45 kDa

Cited Applications: WB, IHC, IF

Species Specificity: human, mouse, rat

human, mouse, rabbit, hamster

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Purification Method: Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:3000 IHC 1:20-1:200

Applications

Tested Applications: WB, IHC, ELISA

Cited Species:

Positive Controls:

WB: mouse brain tissue, rat brain tissue

IHC: human lung cancer tissue, human breast cancer

tissue, human lung tissue

Background Information

 $MMP12 (Matrix\ metalloproteinase-12)\ is\ a\ 54\ kDa\ proenzyme\ that\ is\ processed\ into\ a\ 45\ kDa\ and\ then\ a\ 22\ kDa\ and\ then\ a\ 24\ kDa\ a\ 24\ k$ active form(15723202). MMP9 and MMP12 promote intimal thickening by independent cleavage of N-cadherin, which elevates vascular smooth muscle cell proliferation via beta-catenin signalling. Its overexpression in myeloid lineage cells plays a key role in modulating myelopoiesis, immune suppression, and lung tumorigenesis (PMID: 21378275).

Notable Publications

Author	Pubmed ID	Journal	Application
Zhen-Huang Chen	32918999	Mol Cell Neurosci	IHC
Ruijuan Guan	31704583	Redox Biol	WB
Jian Chen	34722509	Front Cell Dev Biol	IF

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.

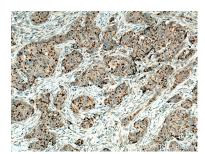
Aliquoting is unnecessary for -20°C storage

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

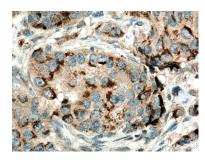
T: 4006900926 E: Proteintech-CN@ptglab.com

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

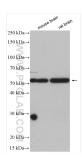
Selected Validation Data



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 22989-1-AP (MMP12 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



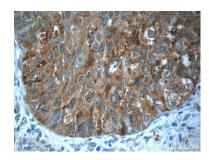
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 22989-1-AP (MMP12 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 22989-1-AP (MMP12 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 22989-1-AP (MMP12 Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 22989-1-AP (MMP12 Antibody) at dilution of 1:50 (under 40x lens).