

For Research Use Only

MMP12 Polyclonal antibody

Catalog Number: 22989-1-AP **28 Publications**



Basic Information

Catalog Number: 22989-1-AP	GenBank Accession Number: BC112301	Purification Method: Antigen affinity purification
Size: 350 µg/ml	GeneID (NCBI): 4321	Recommended Dilutions: WB 1:500-1:3000 IHC 1:20-1:200
Source: Rabbit	UNIPROT ID: P39900	
Isotype: IgG	Full Name: matrix metalloproteinase 12 (macrophage elastase)	
Immunogen Catalog Number: AG19068	Calculated MW: 470 aa, 54 kDa	
	Observed MW: 54 kDa, 45 kDa	

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls:
Cited Applications: WB, IF, IHC	WB: mouse brain tissue, rat brain tissue
Species Specificity: human, mouse, rat	IHC: human lung cancer tissue, human breast cancer tissue, human lung tissue
Cited Species: 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	

Background Information

MMP12(Matrix metalloproteinase-12) is a 54 kDa proenzyme that is processed into a 45 kDa and then a 22 kDa 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

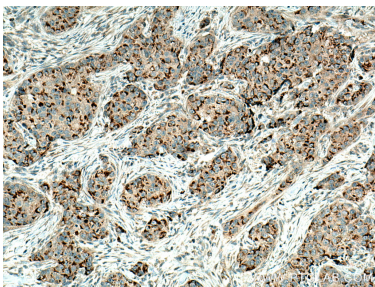
Storage

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

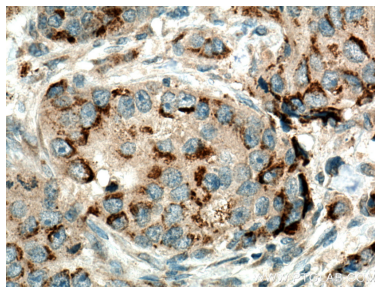
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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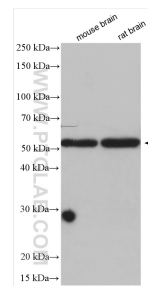
Selected Validation Data



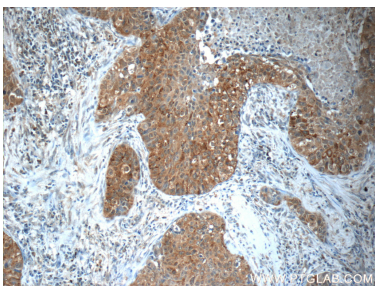
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 22989-1-AP (MMP12 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



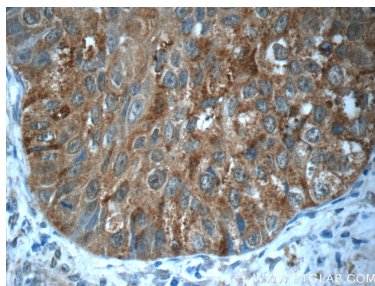
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 22989-1-AP (MMP12 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



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