

Product Name: MMP-19 Rabbit Polyclonal Antibody
Catalog #: APRab13985



Summary

Production Name	MMP-19 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC, WB, ELISA
Reactivity	Human, Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	MMP19
Alternative Names	MMP19; MMP18; RASI; Matrix metalloproteinase-19; MMP-19; Matrix metalloproteinase RASI; Matrix metalloproteinase-18; MMP-18
Gene ID	4327.0
SwissProt ID	Q99542. The antiserum was produced against synthesized peptide derived from human MMP-19. AA range: 11-60

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000..
Molecular Weight	57kD

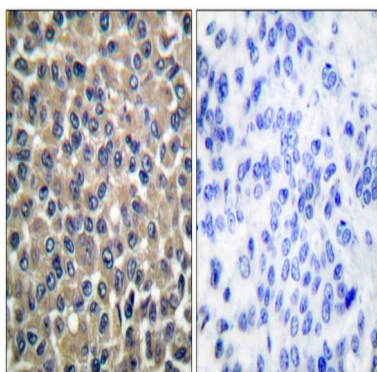
Background

This gene encodes a member of a family of proteins that are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. The encoded protein is secreted as an inactive proprotein, which is activated upon cleavage by extracellular proteases. Alternative splicing results in multiple transcript variants for this gene. [provided by RefSeq, Jan 2013],alternative products:Additional isoforms seem to exist,catalytic activity:Cleaves aggrecan at the 360-Ser-|-Phe-361 site.,cofactor:Binds 1 zinc ion per subunit.,cofactor:Calcium.,disease:May play a role in pathological processes participating in rheumatoid arthritis (RA)-associated joint tissue destruction. Autoantigen anti-MMP19 are frequent in RA patients.,domain:The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.,enzyme regulation:Strongly inhibited by TIMP-2, TIMP-3 and TIMP-4, while TIMP-1 is less efficient.,function:Endopeptidase that degrades various components of the extracellular matrix, such as aggrecan and cartilage oligomeric matrix protein (comp), during development, haemostasis and pathological conditions (arthritic disease). May also play a role in neovascularization or angiogenesis. Hydrolyzes collagen type IV, laminin, nidogen, nascin-C isoform, fibronectin, and type I gelatin.,PTM:Activated by autolytic cleavage after Lys-97.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,tissue specificity:Expressed in mammary gland, placenta, lung, pancreas, ovary, small intestine, spleen, thymus, prostate, testis colon, heart and blood vessel walls. Not detected in brain and peripheral blood leukocytes. Also expressed in the synovial fluid of normal and rheumatoid patients.,

Research Area

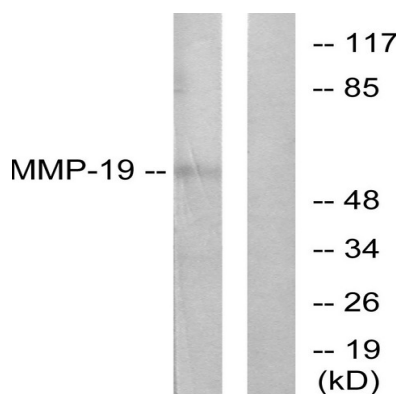
Angiogenesis

Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using MMP-19 Antibody. The picture on the right is blocked with the synthesized peptide.

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Western blot analysis of lysates from HUVEC cells, using MMP-19 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using MMP-19 Polyclonal Antibody diluted at 1 : 500

Note

For research use only.