

Summary

Production Name	MMP-13 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Rat,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% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	MMP13
Alternative Names	MMP13; Collagenase 3; Matrix metalloproteinase-13; MMP-13
Gene ID	4322.0
SwissProt ID	P45452.The antiserum was produced against synthesized peptide derived from human MMP-13. AA range:10-59

Application

Dilution Ratio	WB 1:500-1:2000, IHC-P 1:100-300, ELISA 1:20000, IF-P/IF-F/ICC/IF 1:100-300, Not yet tested in other applications.
Molecular Weight	55kDa

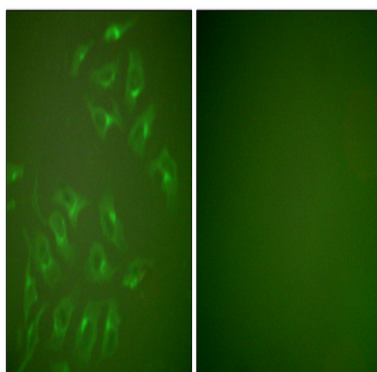
Background

This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this family 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 preproprotein is proteolytically processed to generate the mature protease. This protease cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. Mutations in this gene are associated with metaphyseal anadysplasia. This gene is part of a cluster of MMP genes on chromosome 11. [provided by RefSeq, Jan 2016],cofactor: Binds 2 zinc ions per subunit.,cofactor: Binds 4 calcium ions per subunit.,disease: Defects in MMP13 are the cause of spondyloepimetaphyseal dysplasia type 2 (SEMD2) [MIM:602111]; also known as spondyloepimetaphyseal dysplasia type Missouri. SEMDs are a heterogeneous group of skeletal disorders characterized by defective growth and modeling of the spine and long bones. The SEMDs are distinguished from the spondylometaphyseal dysplasias and the spondyloepiphyseal dysplasias by the combined involvement of the epiphyses and metaphyses. The 3 disorders have malformations of the vertebrae in common.,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.,function: Degrades collagen type I. Does not act on gelatin or casein. Could have a role in tumoral process.,similarity: Belongs to the peptidase M10A family.,similarity: Contains 4 hemopexin-like domains.,tissue specificity: Seems to be specific to breast carcinomas.,

Research Area

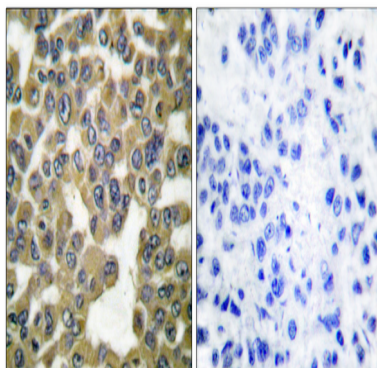
Angiogenesis

Image Data

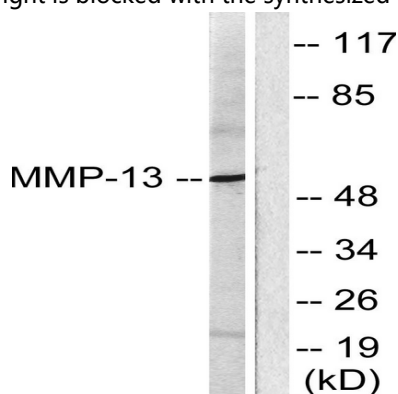


Immunofluorescence analysis of HepG2 cells, using MMP-13 Antibody. The picture on the right is blocked with the synthesized peptide.

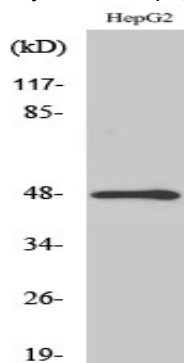
Product Name: MMP-13 Rabbit Polyclonal Antibody
Catalog #: APRab13979



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using MMP-13 Antibody. The picture on the right is blocked with the synthesized peptide.

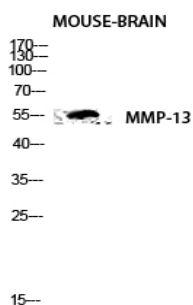


Western blot analysis of lysates from LOVO cells, using MMP-13 Antibody. The lane on the right is blocked with the synthesized peptide.

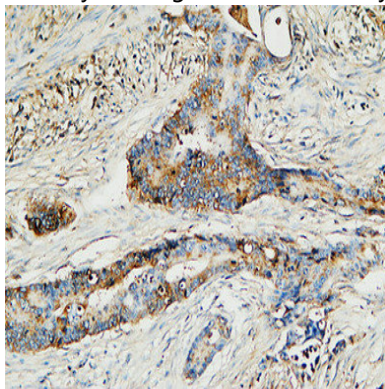


Western Blot analysis of various cells using MMP-13 Polyclonal Antibody diluted at 1: 500

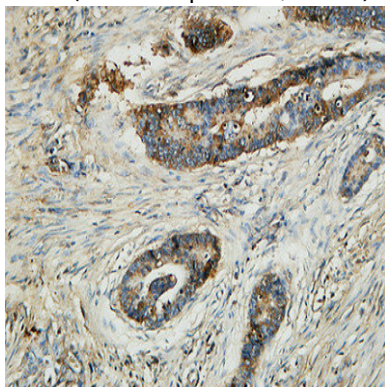
Product Name: MMP-13 Rabbit Polyclonal Antibody
Catalog #: APRab13979



Western blot analysis of mouse-brain lysis using MMP-13 antibody. Antibody was diluted at 1:500

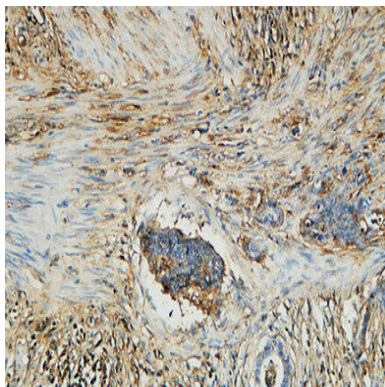


Immunohistochemical analysis of paraffin-embedded Human Colon cancer. 1, Antibody was diluted at 1:100 (4°,overnight) .
2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) .

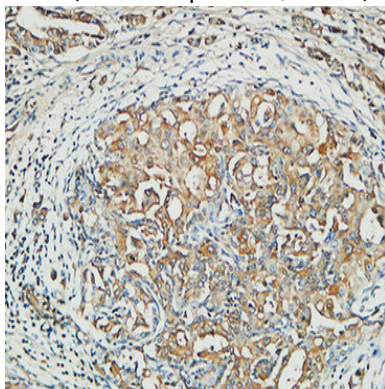


Immunohistochemical analysis of paraffin-embedded Human Colon cancer. 1, Antibody was diluted at 1:100 (4°,overnight) .
2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) .

Product Name: MMP-13 Rabbit Polyclonal Antibody
Catalog #: APRab13979



Immunohistochemical analysis of paraffin-embedded Human Colon cancer. 1, Antibody was diluted at 1:100 (4°,overnight) .
2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at
1:200 (room temperature, 30min) .



Immunohistochemical analysis of paraffin-embedded Human Mammary cancer. 1, Antibody was diluted at
1:200 (4°,overnight) . 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody
was diluted at 1:200 (room temperature, 30min) .

Note

For research use only.