Product Name: MMP-16 Rabbit Polyclonal Antibody
Catalog #: APRab13983

Summary

Production Name	MMP-16 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human,Mouse,Rat

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	MMP16
Alternative Names	MMP16; MMPX2; Matrix metalloproteinase-16; MMP-16; MMP-X2; Membrane-type matrix metalloproteinase 3; MT-MMP 3; MTMMP3; Membrane-type-3 matrix metalloproteinase; MT3-MMP; MT3MMP
Gene ID	4325.0
SwissProt ID	P51512.The antiserum was produced against synthesized peptide derived from human MMP-16. AA range:551-600

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000..
Molecular Weight	70kD

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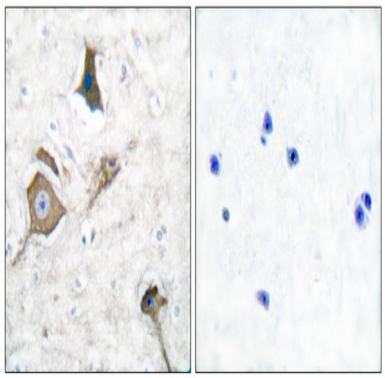
Background

Proteins of the matrix metalloproteinase (MMP) 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. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The encoded protein activates MMP2 by cleavage. This gene was once referred to as MT-MMP2, but was renamed as MT-MMP3 or MMP16. [provided by RefSeq, Oct 2010],cofactor:Binds 1 zinc ion per subunit.,cofactor:Calcium.,developmental stage:Expressed in tissues undergoing reconstruction. Present in fetal tissues, especially in brain. Expression seems to decline with advanced development.,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:TIMP-2 shows little inhibitory activity compared to TIMP-1. TIMP-1 seems to have less binding affinity than TIMP-2 for the short isoform.,function:Endopeptidase that degrades various components of the extracellular matrix, such as collagen type III and fibronectin. Activates progelatinase A. Involved in the matrix remodeling of blood vessels. The short isoform cleaves fibronectin and also collagen type III, but at lower rate. It has no effect on type I, II, IV and V collagen. However, upon interaction with CSPG4, it may be involved in degradation and invasion of type I collagen by melanoma cells.,PTM:The precursor is cleaved by a furin endopeptidase.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,subcellular location:Localized at the cell surface of melanoma cells.,subunit:Interacts with CSPG4 through CSPG4 chondroitin sulfate glycosaminoglycan.,tissue specificity:Expressed in heart, brain, placenta, ovary and small intestine. The short isoform is found in the ovary.,

Research Area

Angiogenesis

Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using MMP-16 Antibody. The picture on the right is blocked with the synthesized peptide.

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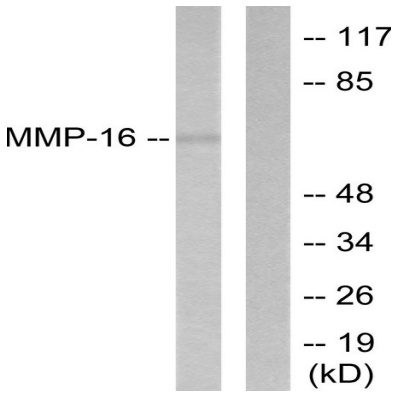
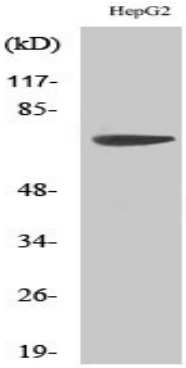


Western blot analysis of lysates from HepG2 cells, using MMP-16 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using MMP-16 Polyclonal Antibody diluted at 1： 500

Note

For research use only.