10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MMP16 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6200a

Product Information

Application	IHC-P, WB, E
Primary Accession	P51512
Other Accession	O35548, Q9WTR0, NP_072086
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2031
Calculated MW	69521
Antigen Region	154-183

Additional Information

Gene ID	4325
Other Names	Matrix metalloproteinase-16, MMP-16, 3424-, MMP-X2, Membrane-type matrix metalloproteinase 3, MT-MMP 3, MTMMP3, Membrane-type-3 matrix metalloproteinase, MT3-MMP, MT3MMP, MMP16, MMPX2
Target/Specificity	This MMP16 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 154-183 amino acids from the N-terminal region of human MMP16.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MMP16 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MMP16 (HGNC:7162)
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. Isoform short 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.
Cellular Location	[Isoform Long]: Cell membrane; Single-pass type I membrane protein; Extracellular side. Note=Localized at the cell surface of melanoma cells
Tissue Location	Expressed in heart, brain, placenta, ovary and small intestine. Isoform Short is found in the ovary

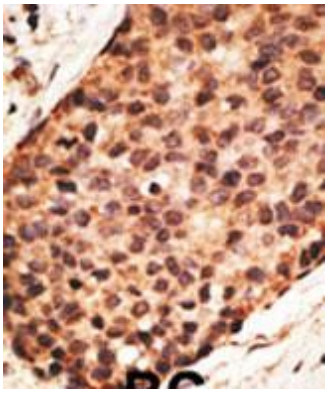
Background

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 MMPs are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene for MMP16 produces two transcripts, which encode a membrane-bound form and a soluble form of the protein. Both forms of the protein activate MMP2 by cleavage. This gene was once referred to as MT-MMP2, but was renamed as MT-MMP3 or MMP16.

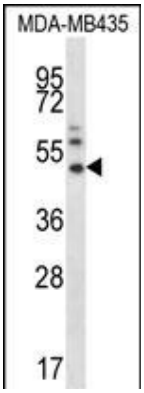
References

Jung, M., et al., Prostate 55(2):89-98 (2003).
Nagase, H., et al., J. Biol. Chem. 274(31):21491-21494 (1999).
Matsumoto, S., et al., Biochim. Biophys. Acta 1354(2):159-170 (1997).
Sato, H., et al., Genomics 39(3):412-413 (1997).
Mattei, M.G., et al., Genomics 40(1):168-169 (1997).

Images



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



MMP16 Antibody (E169) (Cat. #AP6200a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the MMP16 antibody detected the MMP16 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.