

MMP16 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6200a

Specification

MMP16 Antibody (N-term) - Product Information

Application WB, IHC-P,E **Primary Accession** P51512

Other Accession 035548, Q9WTR0, NP 072086

Reactivity Human Predicted Mouse, Rat Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG 69521

Calculated MW Antigen Region 154-183

MMP16 Antibody (N-term) - 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

WB~~1:1000 IHC-P~~1:50~100

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.

MMP16 Antibody (N-term) - Protein Information

Name MMP16 (<u>HGNC:7162</u>)

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

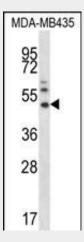
Expressed in heart, brain, placenta, ovary and small intestine. Isoform Short is found in the ovary

MMP16 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

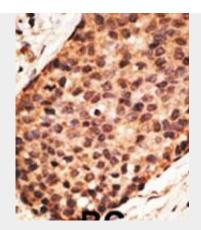
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

MMP16 Antibody (N-term) - Images



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).





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 (N-term) - 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.

MMP16 Antibody (N-term) - 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).