

Anti-MMP16 Antibody

Catalog # ABO10578

Specification

Anti-MMP16 Antibody - Product Information

ApplicationWB, IHC-P, IHC-FPrimary AccessionP51512HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Matrix metalloproteinase-16(MMP16) detection. Tested with WB,IHC-P, IHC-F in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MMP16 Antibody - Additional Information

Gene ID 4325

Other Names Matrix metalloproteinase-16, MMP-16, 3.4.24.-, MMP-X2, Membrane-type matrix metalloproteinase 3, MT-MMP 3, MTMMP3, Membrane-type-3 matrix metalloproteinase, MT3-MMP, MT3MMP, MMP16, MMPX2

Calculated MW 69521 MW KDa

Application Details Immunohistochemistry(Frozen Section), 0.5-1 μg/ml, Human, Rat, Mouse
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Isoform Long: Cell membrane ; Single-pass type I membrane protein ; Extracellular side . Localized at the cell surface of melanoma cells.

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

Protein Name Matrix metalloproteinase-16(MMP-16)

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen



A synthetic peptide corresponding to a sequence at the C-terminus of human MMP16(582-598aa, YTVFQFKRKGTPRHILY), identical to the related rat and mouse sequences.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the peptidase M10A family.

Anti-MMP16 Antibody - 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

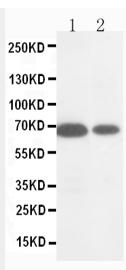
Anti-MMP16 Antibody - Protocols

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

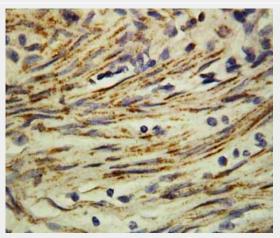
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-MMP16 Antibody - Images





Anti-MMP16 antibody, ABO10578, Western blottingLane 1: HELA Cell LysateLane 2: COLO320 Cell Lysate



Anti-MMP16 antibody, ABO10578, IHC(P)IHC(P): Human Rectal Cancer Tissue

Anti-MMP16 Antibody - Background

The matrix metalloproteinase 16(MMP16) protein consists of 604 amino acids and has a characteristic MMP domain structure, which gene is mapped on human chromosome 8q21. Additionally, MMP16 has a C-terminal extension containing a potential transmembrane domain, similar to MMP14, MMP15, and MMP17. Furthermore, it is membrane-bound and is a member of the membrane-type MMPs that are a subclass in the MMP family since the other members lack a C-terminal transmembrane domain and are secreted as soluble forms. MMP16 is expressed as a 12-kb transcript in brain, placenta, heart, and some carcinoma cell lines, but is not detectably expressed in lung, kidney, liver, spleen, and muscle.