

**Anti-MMP16 Antibody**  
Catalog # ABO10578**Specification****Anti-MMP16 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P51512</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit 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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human MMP16(582-598aa, YTVFQFKRKGTTPRHILY), 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 reconstitution, 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 ([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**

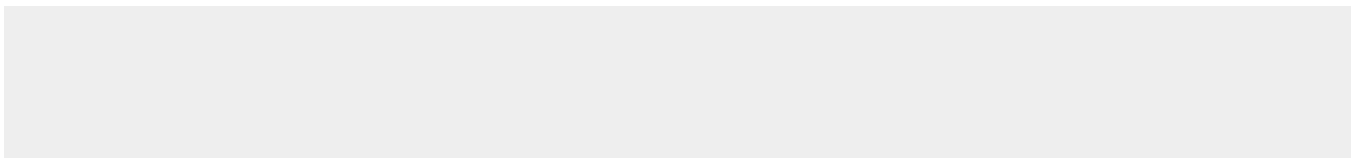
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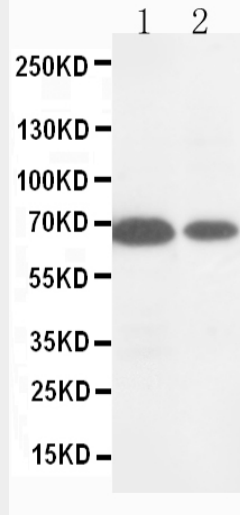
### **Anti-MMP16 Antibody - Protocols**

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

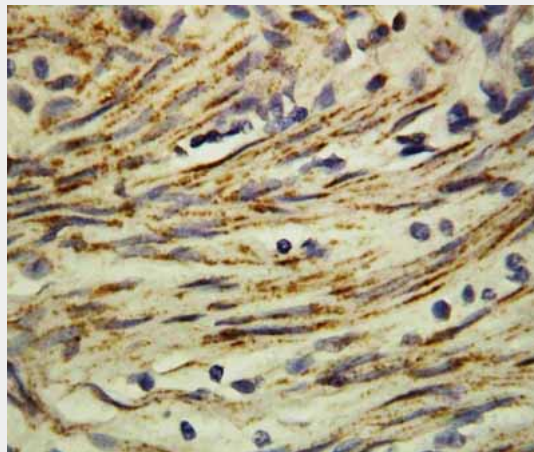
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Anti-MMP16 Antibody - Images**





Anti-MMP16 antibody, ABO10578, Western blotting Lane 1: HELA Cell Lysate Lane 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.