

## **MMP14 Antibody (aa160-173)**

Rabbit Polyclonal Antibody Catalog # ALS12778

## **Specification**

## MMP14 Antibody (aa160-173) - Product Information

Application IHC
Primary Accession P50281
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 66kDa KDa

## MMP14 Antibody (aa160-173) - Additional Information

#### **Gene ID 4323**

#### **Other Names**

Matrix metalloproteinase-14, MMP-14, 3.4.24.80, MMP-X1, Membrane-type matrix metalloproteinase 1, MT-MMP 1, MTMMP1, Membrane-type-1 matrix metalloproteinase, MT1-MMP, MT1MMP, MMP14

# **Reconstitution & Storage**

Store at 2°C to 8°C degrees. Do not freeze.

#### Precautions

MMP14 Antibody (aa160-173) is for research use only and not for use in diagnostic or therapeutic procedures.

#### MMP14 Antibody (aa160-173) - Protein Information

#### Name MMP14

## **Function**

Endopeptidase that degrades various components of the extracellular matrix such as collagen. Activates progelatinase A. Essential for pericellular collagenolysis and modeling of skeletal and extraskeletal connective tissues during development (By similarity). May be involved in actin cytoskeleton reorganization by cleaving PTK7 (PubMed:<a

href="http://www.uniprot.org/citations/20837484" target="\_blank">20837484</a>). Acts as a positive regulator of cell growth and migration via activation of MMP15. Involved in the formation of the fibrovascular tissues in association with pro-MMP2 (PubMed:<a

href="http://www.uniprot.org/citations/12714657" target="\_blank">12714657</a>). Cleaves ADGRB1 to release vasculostatin-40 which inhibits angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/22330140" target=" blank">22330140</a>).

## **Cellular Location**

Membrane; Single-pass type I membrane protein. Melanosome. Cytoplasm. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV Forms a complex with BST2



# and localizes to the cytoplasm

## **Tissue Location**

Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

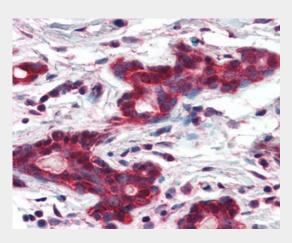
Volume 250 μl

# MMP14 Antibody (aa160-173) - Protocols

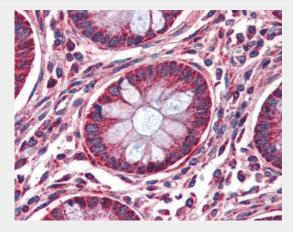
Provided below are standard protocols that you may find useful for product applications.

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

# MMP14 Antibody (aa160-173) - Images

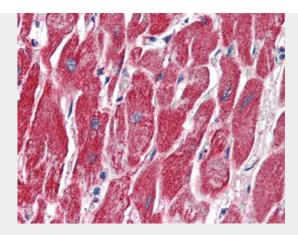


Anti-MMP14 antibody IHC of human breast.

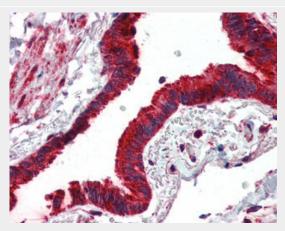


Anti-MMP14 antibody IHC of human colon.





Anti-MMP14 antibody IHC of human heart.



Anti-MMP14 antibody IHC of human lung, respiratory epithelium.

# MMP14 Antibody (aa160-173) - Background

Seems to specifically activate progelatinase A. May thus trigger invasion by tumor cells by activating progelatinase A on the tumor cell surface. May be involved in actin cytoskeleton reorganization by cleaving PTK7. Acts as a positive regulator of cell growth and migration via activation of MMP15. Involved in the formation of the fibrovascular tissues in association with pro-MMP2.

# MMP14 Antibody (aa160-173) - References

Sato H.,et al.Nature 370:61-65(1994).
Takino T.,et al.Gene 155:293-298(1995).
Okada A.,et al.Proc. Natl. Acad. Sci. U.S.A. 92:2730-2734(1995).
Will H.,et al.Eur. J. Biochem. 231:602-608(1995).
Luo G.-X.,et al.Submitted (NOV-1995) to the EMBL/GenBank/DDBJ databases.