

# **MMP14 Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51350

## **Specification**

## **MMP14 Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, E
P50281
Human, Mouse, Rat
Rabbit
Polyclonal
53 KDa

### **MMP14** Antibody - Additional Information

**Gene ID 4323** 

#### **Other Names**

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

## **Dilution**

WB~~1:1000 E~~N/A

#### **Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

## Storage

Store at -20 °C. Stable for 12 months from date of receipt

# **MMP14** Antibody - Protein Information

# Name MMP14

### **Function**

Endopeptidase that degrades various components of the extracellular matrix such as collagen (PubMed:<a href="http://www.uniprot.org/citations/8015608" target="\_blank">8015608</a>). Essential for pericellular collagenolysis and modeling of skeletal and extraskeletal connective tissues during development (By similarity). Activates progelatinase A/MMP2, thereby acting as a positive regulator of cell growth and migration (PubMed:<a href="http://www.uniprot.org/citations/22065321" target="\_blank">22065321</a>

href="http://www.uniprot.org/citations/22065321" target="\_blank">22065321</a>, PubMed:<a href="http://www.uniprot.org/citations/8015608" target="\_blank">8015608</a>). Involved in the formation of the fibrovascular tissues in association with pro-MMP2 (PubMed:<a

 $href="http://www.uniprot.org/citations/12714657" target="\_blank">12714657</a>, PubMed:<a href="http://www.uniprot.org/citations/22065321" target="\_blank">22065321</a>). May be involved in actin cytoskeleton reorganization by cleaving PTK7 (PubMed:<a$ 

href="http://www.uniprot.org/citations/20837484" target=" blank">20837484</a>). Acts as a



regulator of Notch signaling by mediating cleavage and inhibition of DLL1 (PubMed:<a href="http://www.uniprot.org/citations/21572390" target="\_blank">21572390</a>). Cleaves ADGRB1 to release vasculostatin-40 which inhibits angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/22330140" target="\_blank">22330140</a>). Acts as a negative regulator of the GDF15-GFRAL aversive response by mediating cleavage and inactivation of GFRAL (PubMed:<a href="http://www.uniprot.org/citations/35177851" target="blank">35177851</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Melanosome. Cytoplasm Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065). Forms a complex with BST2 and localizes to the cytoplasm (PubMed:17081065)

#### **Tissue Location**

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

### **MMP14 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
- Cell Culture

## **MMP14 Antibody - Images**

# **MMP14 Antibody - 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.

# **MMP14 Antibody - 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.