

### **MMP14 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51349

### **Specification**

### **MMP14 Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Antigen Region

WB
P50281
Human, Mouse, Rat
Rabbit
Polyclonal
63 KDa
481 - 540

# **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

# **Target/Specificity**

KLH conjugated synthetic peptide derived from human MMP14

#### **Dilution**

WB~~ 1:1000

#### **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. 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**

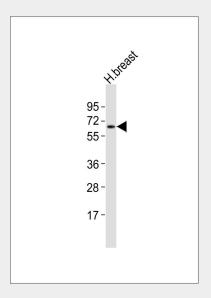
Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

## **MMP14 Antibody - Protocols**

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

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

### **MMP14 Antibody - Images**

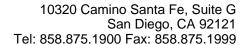


Anti-MMP14 Antibodyat 1:1000 dilution + human breast lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 66 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# 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.