

## **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 <u>P50281</u> 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 (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>, 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>). 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**

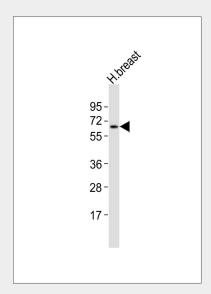
Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

#### MMP14 Antibody - Protocols

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

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

#### MMP14 Antibody - Images



Anti-MMP14 Antibodyat 1:1000 dilution + human breast lysates Lysates/proteins at 20 µg 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.