10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MMP14 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51349

Specification

MMP14 Antibody - Product Information

Application	**WB**
Primary Accession	P50281
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**63 KDa**
Antigen Region	**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 encompassing a sequence within the C-term region of human MMP14. The exact sequence is proprietary.

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:8015608). 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:22065321, PubMed:8015608). 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, PubMed:22065321). May be involved in actin cytoskeleton reorganization by cleaving PTK7 (PubMed:20837484). Acts as a regulator of Notch signaling by mediating cleavage and inhibition of DLL1 (PubMed:21572390). Cleaves ADGRB1 to release vasculostatin-40 which inhibits angiogenesis (PubMed:22330140). Acts as a negative regulator of the GDF15-GFRAL aversive response by mediating cleavage and inactivation of GFRAL (PubMed:35177851).

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)

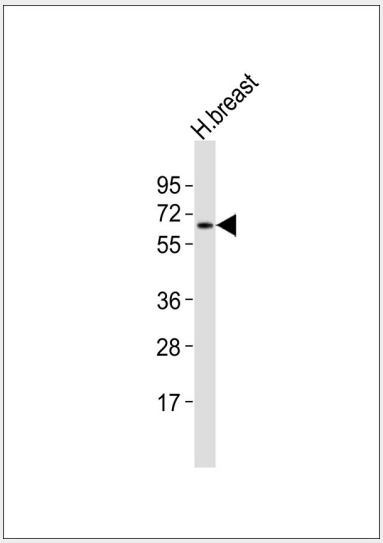
Tissue Location
Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

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



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.