

MMP14 Antibody

Rabbit Polyclonal Antibody Catalog # ALS16580

Specification

MMP14 Antibody - Product Information

Application IHC, WB **Primary Accession** P50281 Other Accession 4323 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype **IgG** Calculated MW 65894

MMP14 Antibody - Additional Information

Gene ID 4323

Other Names

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

Reconstitution & Storage

PBS, pH 7.4, 0.02% sodium azide. Store at -20°C for up to one year.

Precautions

MMP14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:20837484). 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:12714657). Cleaves ADGRB1 to release vasculostatin-40 which inhibits angiogenesis (PubMed:22330140).

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

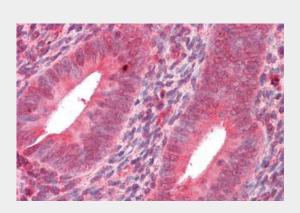
Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

MMP14 Antibody - Protocols

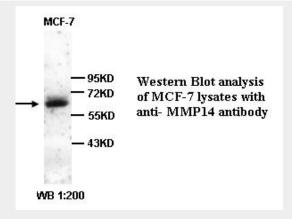
Provided below are standard protocols that you may find useful for product applications.

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

MMP14 Antibody - Images



Human Uterus: Formalin-Fixed, Paraffin-Embedded (FFPE)



Western Blot analysis of MCF-7 lysates with anti-MMP14 antibody

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. Involved in the formation of the fibrovascular tissues in association with pro-



MMP2.

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.