

MMP14 Antibody (C-term)
Mouse Monoclonal Antibody (Mab)
Catalog # AW5500

Specification

MMP14 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	P50281
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	H=66 KDa
Isotype	IgM
Antigen Source	HUMAN

MMP14 Antibody (C-term) - Additional Information

Gene ID 4323

Antigen Region
485-519

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

Target/Specificity

This MMP14 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 470-519 amino acids from the C-terminal region of human MMP14.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MMP14 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MMP14 Antibody (C-term) - 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 extracellular 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: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.

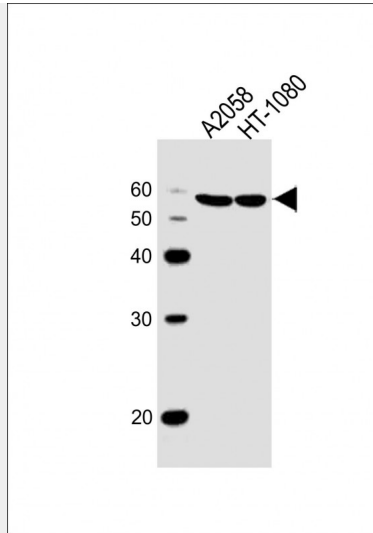
MMP14 Antibody (C-term) - Protocols

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

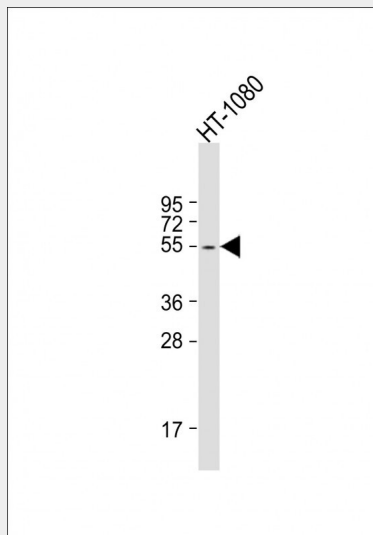
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MMP14 Antibody (C-term) - Images





All lanes : Anti-MMP14 Antibody (C-term) at 1:1000 dilution Lane 1: A2058 whole cell lysates Lane 2: HT-1080 whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-mouse IgG (H+L), Peroxidase conjugated at 1/5,000 dilution Predicted band size : 66 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-MMP14 Antibody (C-term) at 1:1000 dilution + HT-1080 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 161 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

MMP14 Antibody (C-term) - Background

Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. However, the protein encoded by this gene is a member of the membrane-type MMP (MT-MMP) subfamily; each member of this subfamily contains a potential transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. This protein activates MMP2 protein, and this activity may be involved in tumor invasion.

MMP14 Antibody (C-term) - References

Onimaru, M., et al. Arterioscler. Thromb. Vasc. Biol. 30(4):818-826(2010)
Wipff, J., et al. J. Rheumatol. 37(3):599-602(2010)
Liao, M.C., et al. Biochemistry 49(6):1127-1136(2010)