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MMP14 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP19882b

Specification

MMP14 Blocking Peptide (C-term) - Product Information

Primary Accession	P50281
Other Accession	Q10739, Q9XT90, P53690, NP_004986.1

MMP14 Blocking Peptide (C-term) - 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
The synthetic peptide sequence is selected from aa 510-523 of HUMAN MMP14

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MMP14 Blocking Peptide (C-term) - Protein Information

Name MMP14

Function

MMP14 Blocking Peptide (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 Blocking Peptide (C-term) - References

Sakr, M.A., et al. Cancer Sci. 101(11):2368-2374(2010)
Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :
Chun, T.H., et al. Diabetes 59(10):2484-2494(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :

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 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides