MMP14 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	MMP14, Blocking Peptide
Full Product Name	MMP14 Blocking Peptide
Product Gene Name	MMP14 blocking peptide
Product Synonym Names	Matrix metallopeptidase 14 (membrane inserted); Matrix metalloproteinase 14; Matrix metalloproteinase-14; Membrane type 1 matrix metalloproteinase; Membrane type 1 metalloprotease; Membrane type matrix metalloproteinase 1; Membrane-type matrix metalloproteinase 1; Membrane-type-1 matrix metalloproteinase; MMP 14; MMP X1; MMP-14; MMP-X1; Mmp14; MMP14_HUMAN; MMPX1; MT MMP 1; MT-MMP 1; MT1 MMP; MT1-MMP; MT1MMP; MTMMP 1; MTMMP1
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	MMP14 peptide (MBS9626371) is used for blocking the activity of MMP14 antibody (MBS9607658)
Molecular Weight	65,894 Da
Chromosome Location	Chromosome: 14; NC_000014.8 (23305793..23316803). Location: 14q11-q12
OMIM	600754
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for MMP14 blocking peptide	Blocking/Control
Related Product Information for MMP14 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of MMP14 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for MMP14 purchase	MBS9626371 is a blocking peptide targeting MMP14.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MMP14. It may not necessarily be applicable to this product.

NCBI GI #	4826834
NCBI GeneID	4323
NCBI Accession #	NP_004986.1

UniProt Primary Accession #	P50281
UniProt Secondary Accession #	Q6GSF3; Q92678; A8K5L0
UniProt Related Accession #	P50281
GenBank Nucleotide #	NM_004995.3
NCBI Official Full Name	matrix metalloproteinase-14 preproprotein
NCBI Official Synonym Full Names	matrix metallopeptidase 14 (membrane-inserted)
NCBI Official Symbol	MMP14
NCBI Official Synonym Symbols	1; MMP-14; MMP-X1; MT-MMP; MT1MMP; MTMMP1; MT1-MMP; MT-MMP 1
UniProt Protein Name	Matrix metalloproteinase-14
UniProt Synonym Protein Names	MMP-X1; Membrane-type matrix metalloproteinase 1; MT-MMP 1; MTMMP1; Membrane-type-1 matrix metalloproteinase
Protein Family	Matrix metalloproteinase
UniProt Gene Name	MMP14
UniProt Synonym Gene Names	MMP-14; MT-MMP 1; MTMMP1; MT1-MMP; MT1MMP
UniProt Entry Name	MMP14_HUMAN
NCBI Protein Information	matrix metalloproteinase-14; membrane type 1 metalloprotease; membrane-type matrix metalloproteinase 1; membrane-type-1 matrix metalloproteinase; matrix metalloproteinase 14 (membrane-inserted)
NCBI Summary for MMP14	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. [provided by RefSeq, Jul 2008]
UniProt Comments for MMP14	MMP14: 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. Up-regulated by NANOS1. Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors. Belongs to the peptidase M10A family. Protein type: Protease; EC 3.4.24.80; Motility/polarity/chemotaxis; Membrane protein, integral Chromosomal Location of Human Ortholog: 14q11.2 Cellular Component: extracellular matrix; focal adhesion; integral to plasma membrane; Golgi lumen; cytoplasm; melanosome; plasma membrane Molecular Function: integrin binding; protein binding; protease activator activity; zinc ion binding; metalloendopeptidase activity; calcium ion binding; transcription factor activity Biological Process: extracellular matrix organization and biogenesis; tissue remodeling; male gonad development; negative regulation of focal adhesion formation; embryonic cranial skeleton morphogenesis; proteolysis; positive regulation of cell growth; collagen catabolic process; extracellular matrix disassembly; branching morphogenesis of a tube; regulation of transcription, DNA-dependent; ovarian follicle development; response to mechanical stimulus; response to estrogen stimulus; endothelial cell proliferation; response to hypoxia; zymogen activation; angiogenesis; response to oxidative stress; astrocyte cell migration; lung development; endochondral ossification; positive regulation of cell migration Disease: Winchester Syndrome
Research Articles on MMP14	**1.** Methyl jasmonate attenuates MMP-14 expression via decreasing the Sp1 expression and binding on MMP-14 promoter, thus inhibiting the migration, invasion and angiogenesis of gastric cancer cells.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/mmp14/9626371