

Product datasheet for **SC116990**

MMP14 (NM_004995) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MMP14 (NM_004995) Human Untagged Clone
Tag:	Tag Free
Symbol:	MMP14
Synonyms:	MMP-14; MMP-X1; MT-MMP; MT-MMP 1; MT1-MMP; MT1MMP; MTMMP1; WNCHRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >OriGene ORF sequence for NM_004995 edited
 ATGTCTCCCGCCCAAGACCCCTCCCGTTGTCTCCTGCTCCCCCTGCTCACGCTCGGCACC
 GCGCTCGCTCCCTCGGCTCGGCCAAAGCAGCAGCTTACGCCCCGAAGCCTGGCTACAG
 CAATATGGCTACCTGCCTCCCGGGACCTACGTACCCACACACAGCGCTCACCCAGTCA
 CTCTCAGCGGCCATCGTGCCATGCAGAAGTTTTACGGCTTGAAGTAACAGGCAAAGCT
 GATGCAGACACCATGAAGGCCATGAGGCGCCCCGATGTGGTGTCCAGACAAGTTTGGG
 GCTGAGATCAAGGCCAATGTTGGAAGGAAGCGCTACGCCATCCAGGGTCTCAAATGGCAA
 CATAATGAAATCACTTTCTGCATCCAGAATTACACCCCAAGGTGGGCGAGTATGCCACA
 TACGAGGCCATTGCAAGGCGTTCGCGGTGTTGGGAGAGTGCCACACCACTGCGCTTCCGC
 GAGGTGCCCTATGCCTACATCCGTGAGGGCCATGAGAAGCAGGCCGACATCATGATCTTC
 TTTGCCGAGGGCTTCCATGGCGACAGCACGCCCTTCGATGGTGGGGCGGCTTCTGGCC
 CATGCCTACTTCCCAGGCCCAACATTGGAGGAGACACCACTTTGACTCTGCCGAGCCT
 TGGACTGCAGGAATGAGGATCTGAATGGAAATGACATCTTCTGGTGGCTGTGCACGAG
 CTGGGCCATGCCCTGGGGCTCGAGCATTCCAGTGACCCCTCGGCCATCATGGACCCTTT
 TACCAGTGGATGGACACGGAGAATTTTGTGCTGCCCGATGATGACCGCCGGGGCATCCAG
 CACTTTATGGGGTGAGTCAGGGTTCACCAAGATGCCCCCTCAACCCAGGACTACC
 TCCCGGCTTCTGTTCTGATAAACCCAAAACCCACCTATGGGCCCAACATCTGTGAC
 GGGAACTTTGACACCGTGGCCATGCTCCGAGGGGAGATGTTTGTCTTCAAGGAGCGCTGG
 TTCTGGCGGGTGAGGAATAACCAAGTGATGGATGGATACCCAATGCCATTGGCCAGTTC
 TGGCGGGGCTGCCTGCGTCCATCAACTGCCTACGAGAGGAAGGATGGCAAATTCGTC
 TTCTTCAAAGGAGACAAGCATTGGGTGTTTGTGATGAGGCGTCCCTGGAACCTGGCTACCC
 AAGCACATTAAGGAGCTGGGCCGAGGGCTGCCTACCGACAAGATTGATGCTGCTCTCTTC
 TGGATGCCCAATGAAAGACCTACTTCTCCGTGAAACAAGTACTACCGTTTCAACGAA
 GAGCTCAGGGCAGTGGATAGCGAGTACCCCAAGAACATCAAAGTCTGGGAAGGGATCCCT
 GAGTCTCCAGAGGGTCAATTCATGGGCAGCGATGAAGTCTTCACTTACTTCTACAAGGGG
 AACAAATACTGGAATTCACAACCCAGAAGCTGAAGGTAGAACCAGGGCTACCCCAAGTCA
 GCCCTGAGGGACTGGATGGGCTGCCATCGGGAGGCCGGCCGGATGAGGGGACTGAGGAG
 GAGACGGAGGTGATCATCATTGAGGTGGACGAGGAGGGCGGGGGCGGTGAGCGCGGCT
 GCCGTGGTGTGCCCGTGTCTGCTGCTCCTGGTGTGGCGGTGGGCCTTGACGTCTTC
 TTCTTCAGACGCCATGGGACCCCAAGGCGACTGCTCTACTGCCAGGTTCCCTGCTGGAC
 AAGGTCTGA

Chromatograms: https://cdn.origene.com/chromatograms/ja3458_h11.zip

Restriction Sites: NotI-NotI

ACCN: NM_004995

Insert Size: 3500 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004995.2](#), [NP_004986.1](#)

RefSeq Size: 3558 bp

RefSeq ORF: 1749 bp

Locus ID: 4323

UniProt ID: [P50281](#)

Cytogenetics: 14q11.2

Domains: hemopexin, Peptidase_M10, ZnMc

Protein Families: Druggable Genome, Protease, Transmembrane

Protein Pathways: GnRH signaling pathway

Gene Summary:

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]