

Product datasheet for **SC123911**

MMP13 (NM_002427) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MMP13 (NM_002427) Human Untagged Clone
Tag:	Tag Free
Symbol:	MMP13
Synonyms:	CLG3; MANDP1; MDST; MMP-13
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC123911 sequence for NM_002427 edited (data generated by NextGen Sequencing)

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ATGCATCCAGGGGTCCTGGCTGCCTTCCTCTTCTTGAGCTGGACTCATTGTCGGGCCCTG
CCCCTCCAGTGGTGGTGAAGATGATTTGTCTGAGGAAGACCTCCAGTTTGACAGAG
CGCTACCTGAGATCATACTACCATCCTACAAATCTCGCGGAATCCTGAAGGAGAATGCA
GCAAGCTCCATGACTGAGAGGCTCCGAGAAATGCAGTCTTTCTTCGGCTTAGAGGTGAT
GGCAAACCTTGACGATAACACCTTAGATGTCATGAAAAAGCCAAGATGCGGGGTTCTGAT
GTGGTGAATACAATGTTTTCCCTCGAACTCTTAAATGGTCCAAAATGAATTTAACTAC
AGAATTGTGAATTACACCCTGATATGACTCATTCTGAAGTCGAAAAGGCATTCAAAAAA
GCCTTCAAAGTTTGGTCCGATGTAACCTCTCTGAATTTTACCAGACTTCACGATGGCATT
GCTGACATCATGATCTCTTTTGAATTAAGGAGCATGGCGACTTCTACCCATTTGATGGG
CCCTCTGGCTGCTGGCTCATGCTTTTCTCTGGGCCAAATTATGGAGGAGATGCCCAT
TTTGATGATGATGAAACCTGGACAAGTAGTTCCAAAGGCTACAACCTGTTTCTTGTGCT
GCGCATGAGTTCGGCCACTCCTTAGGTCTTGACCACTCCAAGGACCTGGAGCACTCATG
TTTCTATCTACACCTACACCGGCAAAAGCCACTTTATGCTTCTGATGACGATGTACAA
GGGATCCAGTCTCTATGGTCCAGGAGATGAAGACCCCAACCCTAAACATCCAAAAACG
CCAGACAAATGTGACCCTTCCTTATCCCTTGATGCCATTACCAGTCTCCGAGGAGAAACA
ATGATCTTTAAAGACAGATTCTTCTGGCGCTGCATCCTCAGCAGGTTGATGCGGAGCTG
TTTTTAAAGAAATCATTTTGGCCAGAATTCCCAACCGTATTGATGCTGCATATGAGCAC
CCTTCTCATGACCTCATCTTTCATCTTTCAGAGGTAGAAAATTTGGGCTCTTAATGGTTAT
GACATTCTGGAAGTTATCCCAAAAAATATCTGAACTGGGTCTTCCAAAAGAAGTTAAG
AAGATAAGTGCAGCTGTTCACTTTGAGGATACAGGCAAGACTCTCCTGTTCTCAGGAAAC
CAGGTCTGGAGATATGATGATACTAACCATATTATGGATAAAGACTATCCGAGACTAATA
GAAGAAGACTTCCAGGAATTGGTGATAAAGTAGATGCTGTCTATGAGAAAAATGGTTAT
ATCTATTTTTTCAACGGACCCATACAGTTTGAATACAGCATCTGGAGTAACCGTATTGTT
CGCGTCATGCCAGCAAATTCATTTTGGTGTAA

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Clone variation with respect to NM_002427.3

5' Read Nucleotide Sequence: >OriGene 5' read for NM_002427 unedited

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NAACGTACAAATTTTGNATAACGACTCACTATAGGGCGGCCGCGATTCCGGCAGGAGATT
CAAGAGCATCCAGGGGTCCTGGCTGCCTTCCTCTTCTTGAGCTGGACTCATTGTCGGGCC
CTGCCCTCCAGTGGTGGTGAAGATGATTTGTCTGAGGAAGACCTCCAGTTTGCA
GAGCGCTACCTGAGATCATACTACCATCCTACAAATCTCGCGGAATCCTGAAGGAGAAT
GCAGCAAGCTCCATGACTGAGAGGCTCCGAGAAATGCAGTCTTTCTTCGGCTTAGAGGTG
ACTGGCAAACCTTGACGATAACACCTTAGATGTCATGAAAAAGCCAAGATGCGGGGTTCT
GATGTTGGTGAATACAATGTTTTCCCTCGAACTCTTAAATGGTCCAAAATGAATTTAACC
TACAGAATTGTGAATTACACCCCTGATATGACTCATTCTGAAGTCGAAAAGGCATTCAAA
AAAGCCTTCAAAGTTTGGTCCGATGTAACCTCTCTGAATTTTACCAGACTTCACGATGGC
ATTGCTGACATCATGATCTCTTTTGAATTAAGGAGCATGGCGACTTCTACCCATTTGAT
GGGCCCTCTGGCTGCTGGCTCATGCTTTTCTCTGGGCCAAATTATGGAGGAGATGCC
CATTTTGTGATGATGAAACCTGGACAAGTAGTTCCAAAGGCTACAACCTGTTTCTTGTG
GCTGCGCATGAGTTCGGCCACTCCTTTAGTCTTGACCACTCCAAGGACCTGGAGCACTC
ATGTTTTCTATCTACACCTACACCGGCAAAAGCCACTTTTGGCTTCTGATGACGATGTC
CAAGGGAATCCGTCCTAATGGTCCGGGAGATGAAGACCCCAACCCTAAACATC

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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002427 unedited TCCAGGCCAGGAGAGGCACTGGGGAGGGTCACAGGGATGCCACCCGGGATCTGTTTCAGG AAACAGCTATGACCGCGGCCGAATCTAGAGTCGAGTTTTTTTTTTGTTTTTTTTTTTTTT TTCTGTTGAAAATATATTTTTATTATAAACAACATAAACACTTCCCTAATACACTTTGCAA ATATGCATTTTCATTTTCTTTGCCTGAGTTTTTATCAACAGTGTCTCTGAGCACAATAGTT CTTCCCTTGATGGCCGATCATATATTCAATAAGTGCCAAGCACCCCTCCCCAAGTATCAAT AGGCACTGTGGGAAGTGCTGGGGATTTTTTAAATGCAGAGAAAAAAGGCATCCTTCC ATATCTCAAGGGATCACAACTAGTAGACTGCTTTAAAAAATTTGGATGTCTCTTTT TTAATATACATACTTCCACTTTATAAGATATATTTTATTTTCATGTATACAAGTCTTTAG AAAATAGCCTATATATCCAAGACAACTGGACAATTAATAATTAGCTAGGTAATAATAGG GTTAAATGCAACTTTTAGTCTTAAATAATCAAATAATTTATGAAAAAGGGATGCCATGG CCTTAGACTATTTTGATAACAATTTAACTTTGTAATGTGTGACTTCTGAAGAACCTGAA ATATTTTAAATAAAAAGACATCATCCTTCTTTATCCTTTATAATATGCAAAGGAATATTTG TCTTATATGAGAGCAGACTTTGAGTCATTGCCA
Restriction Sites:	NotI-NotI
ACCN:	NM_002427
Insert Size:	3000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_002427.2 , NP_002418.1
RefSeq Size:	2722 bp
RefSeq ORF:	1416 bp
Locus ID:	4322
UniProt ID:	P45452
Cytogenetics:	11q22.2
Protein Families:	Druggable Genome, Protease

Gene Summary:

This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this 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. The encoded preproprotein is proteolytically processed to generate the mature protease. This protease cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. Mutations in this gene are associated with metaphyseal anadysplasia. This gene is part of a cluster of MMP genes on chromosome 11. [provided by RefSeq, Jan 2016]