

Product datasheet for **MR207567**

Mmp12 (NM_008605) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mmp12 (NM_008605) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mmp12
Synonyms:	AV378681; MME; Mmel; MMP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207567 representing NM_008605
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCTGCACTCTGCTGAAAGGAGTCTGCACAATGAAATTTCTCATGATGATTGTGTTCTTACAGGTAT
 CTGCCTGTGGGGCTGCTCCCATGAATGACAGTGAATTTGCTGAATGGTACTTGTCAAGATTTTATGATTA
 TGGAAAGGACAGAATTCCAATGACAAAAACAAAACCAATAGAAACTTCTAGAAGAAAACTCCAGGAA
 ATGCAGCAGTTCTTTGGGCTAGAAGCAACTGGGCAACTGGACAACCACTCTGGCAATAATGCACATCC
 CTCGATGTGGAGTGCCCGATGTACAGCATCTTAGAGCAGTGCCCCAGAGGTCAAGATGGATGAAGCGGTA
 CCTCACTTACAGGATCTATAATTACACTCCGGACATGAAGCGTGAGGATGTAGACTACATATTTACAGAA
 GCTTTCCAAGTCTGGAGTGTGACTCCTTAAGATTCAGAAAGCTTCATAAAGATGAGGCTGACATTA
 TGATACTTTTGCATTTGGAGCTCACGGAGACTCAACTATTTTGTGGCAAAGGTGGTACTAGCCCA
 TGCTTTTTATCCTGGACCTGGTATTCAAGGAGATGCACATTTTGTGAGGCAGAAACGTGGACTAAAAGT
 TTTCAAGGCACAAACCTCTTCTTGTGCTGTTTCAATGAATTTGGCCATTCTTGGGGCTGCAGCATTCCA
 ATAATCCAAAGTCAATAATGGACCCACCTACAGATACCTTAACCCCAACACATTTGCGCTCTCTGCTGA
 TGACATACGTAACATTAGTCCCTCTATGGAGCCCAAGTAAAACCCCATCTTGACAAAACCTAGCAGT
 CCACCAACAATTTCTGTACCAAAAGCTTGAGTTTTGATGCTGTCAACAGTGGGAGAGAAAACTTTTT
 TCTTTAAAGACTGGTTCTTCTGGTGAAGCTTCTGGGAGTCCAGCCACCAACATTTATTTCTATTTCTTC
 CATATGGCCAAGCATCCCATCTGGTATTCAAGCTGCTTATGAAATTGAAAGCAGAAATCACTTTTCTT
 TTTAAAGATGAGAAGTACTGGTTAATAACAACCTAGTACCAGAGCCACACTATCCAGGAGCATATATT
 CCCTGGGCTTCTCTGCATCTGTGAAGAAGTTGATGCAGCTGTCTTTGACCCACTCGCCAAAAGTTTA
 TTTCTTTGTGGATAAACAATACTGGAGGTATGATGTGAGGCAGGAGCTCATGGACCTGCTTACCCCAAG
 CTGATTTCCACACTTCCAGGAATCAAGCCTAAAATTGATGCAGTCTCTATTTCAAAAAGACACTACT
 ACATCTTCCAAGGAGCTATCAATTGGAATATGACCCCTGTTCCGTCGTGCACCAAAACATTGAAAAG
 TACAAGCTGGTTTGGTTGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207567 representing NM_008605
 Red=Cloning site Green=Tags(s)

MSCTLLKGVCTMKFLMMIVFLQVSACGAAPMNDSEFAEWYLSRFYDYGKDRIPMTKTKTNRNRFLEEKLQE
 MQQFFGLEATGQLDNSTLAIMHIPRCGVPDVQHLRAVPQRSRWMKRYLTYRIYNYTPDMKREDVDYIFQK
 AFQVWSDVTPPLRFRKLHKDEADIMILFAFGAHGDFNYFDGKGGTLAHAFYPGPGIQGDAHFDDEAETWTKS
 FQGTNLFVAVHELGHSLGLQHSNNPKSIMDPTYRYLNPNTFRLSADDIRNIQSLYGAPVKTPSLTKPSS
 PPSTFCHQSLSFDAVTTVGEKIFFFKDWFVFWKLPSPATNIISSSIWPSIPSGIQAAEIESRNQLFL
 FKDEKYWLINNLVPEPHYPRSIYSLGFSASVKKVDAAVFDPLRQKVYFFVDKQYWRYDVRQELMDPAYPK
 LISTHFPGIKPKIDAVLYFKRHYYIFQAYQLEYDPLFRRVTKLTKSTSWFGC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_008605

ORF Size: 1419 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

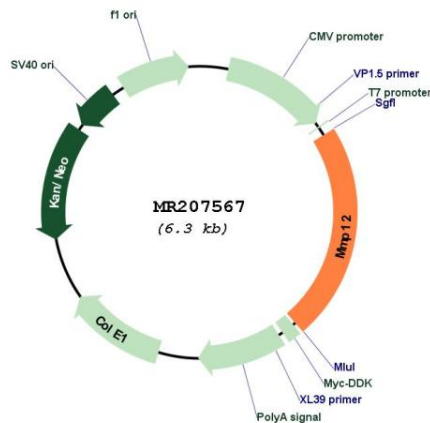
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_008605.2](#), [NM_008605.3](#), [NP_032631.3](#)
RefSeq Size: 3607 bp
RefSeq ORF: 1422 bp
Locus ID: 17381
UniProt ID: [P34960](#)
Cytogenetics: 9 2.46 cM
MW: 55.4 kDa

Gene Summary: This gene encodes a member of the matrix metalloproteinase family of extracellular matrix-degrading enzymes that are involved in tissue remodeling, wound repair, progression of atherosclerosis and tumor invasion. The encoded preproprotein undergoes proteolytic processing to generate a mature, zinc-dependent endopeptidase enzyme. Mice lacking the encoded protein have a diminished capacity to degrade extracellular matrix components, do not develop emphysema in response to long-term exposure to cigarette smoke, and exhibit impaired clearance and increased mortality upon bacterial infection. This gene is located in a cluster of other matrix metalloproteinase genes on chromosome 9. Alternate splicing generates multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Feb 2016]

Product images:



Circular map for MR207567