

## Product datasheet for **RR217634**

### Myom2 (NM\_001169141) Rat Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Myom2 (NM\_001169141) Rat Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Myom2  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 Cell Selection: Neomycin  
 ORF Nucleotide Sequence: >RR217634 representing NM\_001169141  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCCTGGTTGTAGTGCCTTTCTACCAGAAAAGACACAAGCACTTTGACCAGTCAATCGAAACATCC  
 AAACCAGGTACCTCCTGGACCGATATGCATCGAAAAAGCAAGCGTCCAGTCAATCATATCCAGAGGTC  
 TCTTACGGAGAGGTCCTCTTGAAGAGAGCTTCCAGTCAGAGCTCCGCTGAGGGCATGACCTGTAGGCTC  
 TGTGCAAAGCGGATGAGCGCATCAGAAGAGGAGGAAGTTGAAAAAGAAAACAGGTACCGTCTCTAGCGG  
 CTTCTTACGGAGAAGCCAAAAGGACGCTTTCCCTCAGTGAGCTGGCCAGCTGGAGGAGAACGTACAATT  
 GGCACGGACACAGGCTCGGAACAAGCTGGACAAGTACTTCTGGAGCAGACGGTGGCAGACAATCTGGCT  
 TTGGAGAGAAGCTCATTGAAGACCGGCTGAGCAGGGCCCTGAGATCCTGGTGAGGTTAAGTCCCACA  
 CCATCTGGGAGCGGATGTCTGTGAGGCTCTGTTTCACTGTACAAGGATCCCACTCCTGTGGTCAATG  
 GTACAAAGACGGCAGTCTGATCTGCCAGGCAGGGGAGCCAGGCAAGTACCGGATTGAGAGCAGGTACGGA  
 GTGCACACTCTGGAGATCAACAGGGCCGACTTTGAGGACACAGCGACCTATTCAGCAGTAGCAACGAATC  
 CCCATGGACAAGTGTCTACCAATGCTGCGGTGGTGGTGAAGGTACCGAGGAGATGAGGAGCCCTACCA  
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 CACCAGATCTGAAGAGGGTACAGCCTCGAGCCGAGTGGTACCGGGATGATGTGCTGCTGAAAAGTCCAA  
 GTGGACCAAGATGTTCTTCGGAGAAGGCCAGGCCCTCACTGTCTTCAGCCACCTGAACAAGGATGATGAG  
 GGGCTTTACCTTGAGGATCGTGTCCCGGGTGGAGTCACTGACCACAGCGCTTTCATGTTTGTGAGAG  
 ATGCTGACCCGCTGGTCAAGGGGCTCTGGGGCACCCATGGACCTGCAGTGCCATGATGCCAACCGAGA  
 CTATGTTATCGTACTTGGAAACCACCAACCACTACTGAGAGCCCCGTCATTGGCTACTTCAATTGAC  
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 GCCTTCCAGGATCTCCGATGCTGTGGCTGCCCTTGACCCTGTGGACCTCAGAAGTTGCAAGCGATTCAAT  
 TTGGAAGGAGAGAAAAGAAATCGTCATCTACCAGGATGACCTTGAAGGTGATGTTCCAGATTCCAGGACCTC  
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 TGGCAAGGAGCCCTTAATGTACTTCAATTGAGAAGTCGGCAGTTGGGAGTGGCAGCTGGCAGAGGGTCAAT



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GCCCAGACAGCAGTGAGATCTCCTCGGTATGCTGTCTTTGACTTGGCGGAAGGGAAGTCCTATGTGTTCC  
GGGTTTTGTGAGCCAATAAGCATGGCCTGAGTGACCCATCAGAGATAACACCACCTATTCAGGCTCAGGA  
CATGATTGTGGTTCCTCTGCACCTGGCCGGGTGCTTGCTCCAGGAATACAAAGACATCTGTCGTGGTC  
CAGTGGGACAGACCAAAGCATGAAGAAGACCTGCTGGGCTACTATGTGGACTGCTGTGTGGCGGGAACAA  
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TCTGTATCTGTAAGTGACACGGATGGTGTGCTTCCAGCTTCGTTTTGGATGAGGAAGAAGTGGAGCGTT  
TGATGGCGTTGAGCAATGAGATAAAGAATCCACAATTCCTCTGAAATCAGAATTAGCATATGAGATTTT  
CGATAAGGGCCAGGTCGATTCTGGCTCCAGGCAGAGCACCTCTCACCTGATGCCAATTCGGTTTCAAT  
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AGATGGTCATGGATCGGTTTACTATTGAAAACGAAGGGACCTACACTGTGCAGATTCAAGATGAAAAGC  
CAAGAATCAGTCTTCGCTGGTGCTCATTGGAGATGCATTCAGGGCTGTCTAGAAAGAGGCTGAATTTCAA  
AGGAAGGAATTTCTACGGAACAAGGCCCTCATTTTGTGAGATTTGCACTGGGATGTTACTGAAGAGT  
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TGTCTTTACGAAACCGAGACACCACCGCCGGACCTGGAGAAGGGGATCTGTGAGCTGCTTATACCCAAG  
TTGTCTAAGAAGGACCATGGCGAGTACAAAGCAACCTTGAAGATGACAGAGGTCAAGATGTATCTGTCT  
TGGAAGTAGCTGGCAAAGTGTACGAGGACATGATCTTGGCAATGAGCCGAGTGTGTGGAGCCTCTGCCTC  
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GGTCTGGTTTAAAGACGACAAGGACATTGAGCTAAGCGAGCACTTCTCGGTGAAGGTGGAGCAGTCCAAG  
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AATACGGAGGAGAGAAGATCGATGTACCGTACGCGTGTACAAACACGGGGAGAAGATCCCCGACATCTC  
AGCTCCCAGCAGGCCAAACCAAGCTTATCCCAGCTTCCACCTCAGCTGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR217634 representing NM\_001169141  
 Red=Cloning site Green=Tags(s)

MSLVVVPFYQKRHKHFDQSYRNIQTRYLLDRYASKKQASSQSSSQSLTERSSSKRASSQSSAEGMTCRL  
 CAKRMSASEEEEEVENENRYRSLAASYGEAKRQRFLELAQLEENVQLARTQARNKLDKYFLEQTVADNLA  
 LERSSFEDRLSRAPEILVRLRSHTIWERMSVRLCFVQGFPTPVVQWYKDGSLICQAGEPGKYRIESRYG  
 VHTLEINRADFEDTATYSAVATNPHGQVSTNAAVVRRYRGDEEPPYHSVGLPIGLPLSSVIPYTHFDVQF  
 LEKFGVTFRREGETVTLKCTLLVTPDLKRVQPRAEWYRDDVLLKESKWTMFFGEGQASLSFSLNKKDDE  
 GLYTLRIVSRGGVSDHSAFMFVRDADPLVTGAPGAPMDLQCHDANRDYVIIVTWKPNPTTTESPVIGYFID  
 KCEVGTNNWVQCNDAPVKICKYPVTGLFEGRSYVFRVAVNAGISRPSRISDVAALDPVLLRRLQAIH  
 LEGEKEIIVIYQDDLEGDVQIPGPPTNVQASEVSRNYVVLWDPPSPRGKEPLMYFIEKSAVSGSWGQRVN  
 AQTAVRSPRYAVFDLAEGKSYVFRVLSANKHGLSDPSEITPPIQAQDMIIVVPSAPGRVLSRNTKTSVTV  
 QWDRPKHEEDLLGYVDCCVAGTNMWEPCHNPKIGYNRFVHGLTTGEQYIFRVKAVNAVGTSENSQESE  
 VIKVQAALTVSPHPYGITLLNCDGHSMTLGWKVPKFSGGSIAIGYLLDKREVHKKNWHEINSSPVKERIL  
 TVEGLTEGSLYEFKIAATNLGIGQPSDPSEHFKEAWTAPPEGPAYDLTFCEVRDTSVLVWKAPVYSG  
 SSPVSGYFVDFKEEDSGEWKTTSEAATPNRYLKVCDLHQKTYVFRVAVNASGPGKPSDTSVPVLEAR  
 PGTKEISAGVDEEGNIYLGFDQCQEMTDASQFTWCKAYEEIADEERFEVHTEGDHSLKYFKNPKIDIGTY  
 SVSVSDTDGVSSSFVLDDEEELRLMALSNIEKNPTIPLKSELAYEIFDKGQVRFWLQAEHLSPDANFRFI  
 INDREVS DSETHRIKCDRSTGMIEMVMDRFTIENEGTYTVQIQDGKAKNQSSVLIGDAFRAVLEEAFFQ  
 RKEFLRKQGFHFAEYLRHWDVTEECEVRLICKVANTKRETVFKWLKDDVL YETETPPPDLKGI CELLIPK  
 LSKKDHEGYKATLKDDRQDQVSVLEVAGKVYEDMILAMSRVCGASASPLKVLCTPEGIRLQCFMKYFTEE  
 MKVSWYHKEAKISSSEHMRIGGSEEMAWLQICEPTEKDKGKYTFEIFDGKDNHQRSLDL SGQAFDEAYAE  
 FQQLKAAAF AEKNRGKVI GGLPDVVTIMEGKTLNLTCTVFGNPDPEVWVFKNDKDIELSEHF SVKVEQSK  
 YVSLTIKGVTAEDSGKYSINVKNKYGGEKIDVTVSVYKHGEKIPDISAPQQA KPKLIPASTSAD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

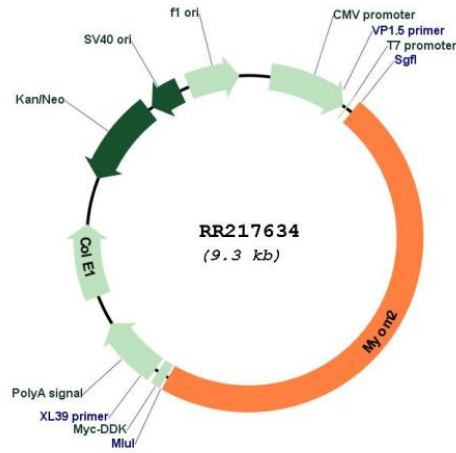
SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001169141

**ORF Size:** 4392 bp

**OTI Disclaimer:** 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\\_001169141.1](#), [NP\\_001162612.1](#)

**RefSeq Size:** 4513 bp

**RefSeq ORF:** 4395 bp

**Locus ID:** 306616

**Cytogenetics:** 16q12.5

**MW:** 164.7 kDa

**Gene Summary:** a major M-line structural protein [RGD, Feb 2006]