

Product datasheet for **RR212159**

Myo5a (NM_022178) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myo5a (NM_022178) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Myo5a
Synonyms:	D; Dop; Myh12
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR212159 representing NM_022178 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCGCGTCCGAGCTCTACCAAGTTTGGCAGGGTTGGATCCCTGATCCTGAGGAAGTGGAAT
CGGCAGAGTTGCTCAAGGATTAAAGCCTGGAGATAAAGTGCTCCTGCTTACCTTGAGGAAGGGAAGGA
TTTGAATACCGTCTAGATCCAAAGACCAGCGAGCTCCCTCACCTACGGAACCCTGACATACTTGTGGGA
GAAAATGACCTCACAGCCCTCAGCTACCTTACGAGCCTGCTGTGCTGCACAATCTCCGCGTCCGCTTCA
TCGACTCCAAACTCATTATACGTATTGTGGGATAGTCCTGGTAGCTATAAATCCCTATGAGCAGCTGCC
TATCTATGGAGAAGATATCATTAAATGCATACAGTGGCCAGAACATGGGTGACATGGACCCTCACATCTTT
GCAGTAGCTGAAGAGGCCATAAACAATGGCAAGGGACGAACGAAATCAGTCCATCATTGTAAGTGGAG
AGTCAGGTGCAGGGAAGACAGTCTCGGCTAAGTATGCCATGAGGTAAGTTCGCAACTGTAAGTGGCTCTGC
CAGTGAGGCCAATGTTGAGGAAAAGTCTTGGCCTCAACCCATCATGGAGTCAATTGGAATGCATAA
ACAACCAGGAATGATAATAGCAGCCGTTTGGGAAATATATTGAAATTGGTTTTGACAAGAGATACGAA
TCATCGGTGCCAATATGAGAATTACCTTTTAGAGAAATCCAGAGTGGTGTCCAGGCAGAAAGAGAGAG
AAACTACCATATCTTCTATCAGCTCTGTGCTTCGGCAAAGCTACCTGAGTTTAAGATGCTGCGGTTAGGA
AATGCAGATAGTTTCCATTACACGAAGCAAGGAGGCAGCCCTATGATAGAAGGAGTGGACGATGCCAAGG
AGATGGCACACACCAGGCAGGCCCTGCACTCTGCTGGGAATTAGTGAATCTTACCAATGGGAATTTTTCG
GATACTTGTGCTGCACTTCTCACTTAGGCAATGTTGGGTTTGCCTCGAGATTGAGCAGCTGCACAATA
CCTCCCAAGCAGCAGCCTCTTATCATTCTGTGATCTTATGGGTGTGGATTATGAAGAGATGTGCACT
GGCTCTGCCACCAGGCTAGCTACCGCCACAGAGACGTACATCAAGCCATCTCCAAGCTGCAGGCCAC
AAATGCCGAGAGCCTTAGCAAAGCATATCTATGCAAAGCTCTTAACTGGATTGTCGGCCATGTCAAT
CAGGCTCTCCATTGAGTGTCAAGCAGCACTCTTTCATCGCGTGTGGACATTTATGGATTTGAAACAT
TTGAGATAAATAGTTTTGAACAGTTCTGCATAAATTATGCAAATGAAAAGCTACAGCAACAATTCACAT
GCATGTCTTCAAAGTGAACAGGAGGAGTACATGAAGGAACAAATTCATGGACACTCATAGATTCTAT
GATAATCAGCCTTGATCAATCTTATAGAATCTAACTGGGTATTCTAGATTTGCTGGATGAGGAATGTA



AGATGCCTAAAGGTACCGATGACACATGGGCCAAAACTATACAACACACATTTGAACAAATGTGCTCT
CTTTGAGAAGCCCCGCATGTCAAACAAAGCTTTTCATCATCAAACATTTTCTGACAAAAGTGGAGTACCAG
TGTGAAGTTTTTCTTGAAGAATAAAGACACTGTTTTGAAGAACAATTAAGTCCTTAAGTCAAGCA
AGTTTAAGATGCTACCAGAACTATTTCAAGATGACGAGAAGGCCATCAGTCCCACCTCTGCCACTTCCTC
AGGACGCACACCTCTCACACGGGTACCTGTAAGCCCAAGGGTCGACCTGGCCAGACTGCCAAAGAG
CACAAGAAGACAGTGGGACTTCAGTTTCGAAACTCCCTTACCTGCTTATGGAAACCTTAACGCCACTA
CTCCTCACTATGTCGCTGATTAAAGCCCAATGATTTCAAGTTTCCATTACATTTGATGAGAAGAGAGC
AGTACAGCAGCTAAGAGCATGTGGTGCCTGGAGACCATCCGGATCAGCGCAGCAGGGTTTTCCCTCAAGG
TGGACTTATCAAGAGTTTTTCAGCCGGTACCGGTCTAATGAAGCAAAAGGATGTGCTGGGAGATAGAA
AGCAAACATGCCAGAATGTATTAGAGAACTGATACTGGACAAGGATAAATACCAGTTTGGTAAGACAAA
GATCTTTTTCTGCTGGTCAAGTGGCCTATCTAGAAAAATTGAGGGCTGACAACTGAGGGCGCCTGC
ATCCGGATCCAGAAGACGATTCTGTTGGTGGCTGCTGAGGAAGAGATACCTGTGTATGCAGAGGGCAGCCA
TCACAGTGCAGCGATACGTGCGTGGCTATCAGGCTCGATGCTATGCTAAGTTTCTGCGCAGAACCAAGGC
AGCAACCACCATTAGAAGTACTGGCGCATGTATGTGGTCCGAGGAAGTACAAGATTAGACGAGCTGCC
ACCATTGTTCTTCACTTATTTGAGAGGCTACTTGGCAAGAAATAGGTATCGCAAGATACTCCGTGAGC
ACAAAGCAGTCATCATTAGAAACGTGTCCGTGGCTGGCTGGCTCGTACACATTAAAGAGGACCATGAA
AGCCATCATCTACCTCAATGCTGCTTCCGGCCGATGATGGCCAAGCGTGAAGTGAAGAACTCAAAT
GAGGCTCGCTCTGTGGAACGCTACAAGAAGCTCCATATTGGCATGGAAAACAAGATTATGCAGTGAAC
GCAAAGTGGATGAGCAGAATAAAGACTACAAATGCCTCATGGAGAACTGACCAATCTAGAAGGAGTATA
CAACTCTGAGACTGAAAACTACGAAATGATGTAGAAGCTTTCAGTAAAGCAGGAGGAAGTAAAGTT
GCCACTGGGAGAGTGTAGTCTGCAGGAAGAAATGCAAACTCCGAAAAGACCTGGAGCAAACCGAT
CGGAGAAAAAGTCCATTGAAGAACGAGCAGATAAATACAAACAAGAACTGAGCAGCTGGTGTCAAAT
GAAGGAAAAAACAACCTGCTGAAGCAGGAAAAAGGAGACCTCAATCACCTCATGGTGGACCTGAATAG
GAGATGACAGAAACTATGGAGAGGAAGTTAGTAGAAGAAACAACAACCTGGAGCTGCAGCTGAATGATG
AGAGGCTGAGGTATCAAAACCTCCTGAATGAGTTCAGTCTGCTGGAGGAGCCTATGACGACCTCAAGGA
AGAGATGACCCTGATGCTGAATGTGCCTAAGCCAGGACACAAGAGAACAGACTCTACCCACAGCAGCAAT
GAGTCTGAATACACCTTCAGCTCAGAAATTTGCAGAACTGAAGACATTGCACCAAGGACAGAGGAGCCAA
CTGAGAAGAAGGTGCCTTTGGATATGTCATTGTTCTTAAAGCTCCAGAAGCGTGTACAGAGCTGGGACA
GGAGAAGCAGTTGATGCAGGATGAGCTGGACCGAAAGGAGGAGCAGGTGTTGCGCAGCAAGGCAAAGGGA
GGAGAAAGACCACAGATTAGAGGTGCTGAACTGGGATATGAGTCCCTCAAGCGTCAGGAACTGGAGTCA
AAAACAAAAGCTGAAGAATGAGCTGAATGAGCTACGCAAGCCCTGAGTGAAGAAGTGCCTCCGAAGT
GAATGCGCCAGGCGCCCGCTTACCGCTCCTCATGGAGCAGCTGACGCGCGTGAAGCAGGAGCTCGAT
GTCCGCAAGGAGGAAGTCTCATTTAAGGTCTCAGCTGGTGAAGCAGAAAGAAGCCATCAACCCAAGG
ATGACAAGAATACAATGACAGATTCCACAATACTTTTGAAGATGTACAGAAAATGAAAGACAAAGGTGA
AATAGCACAAGCATATATTGGTTTGAAGAAACGAACAGGCTCTTAGAATCCCAGCTACAGTGCAGAAAG
AGGAGCCATGAAAATGAGGCTGAGGCCCTCCGTGGGGAGATCCAGAGCCTAAAGGAAGAAAAACAACGGC
AACAGCAGCTGCTGGCCAGAACCTGCAGCTGCCCCCTGAGGCCCGCATTGAGGCCAGCTGCAGCATGA
GATCACCCGGCTGACCAATGAAAACCTGGATCTGATGGAACAACCTGAAAAGCAGGATAAAACCGTCCGG
AAACTGAAGAAACAACATAAAGTCTTTGCCAAAAAATCGTGAACCTAGAAGTGGGGCAGATGGAGAACA
TATCCCCAGGACAGATCATCGATGAGCCTATCCGGCCGGTCAACATTTCCCGGAAAGGAAAGGATTTCCA
AGGGATGCTGGAGTACAAGCGGGAGGACGAACAGAAGCTTGTAAAGAACCTGATTCTAGAATAAAGCCA
CGTGGTGTGGCTGCAATCTGATTTTCAAGGTTACCGGCATATATCTTGTATGTGTGTGCGACATGCCG
ACTACCTGGACGATGATCAGAAAGTAAAGTCAATTGCTGACATCAACAATTAACAGCATCAAAAAAGTCT
GAAGAAAAGAGGTGACGATTTTGAAGTGTCTCTTCTGGCTCTTAACACATGTCGATTTTTGCACTGT
TTGAAGCAATATAGTGGAGAAGAGGGCTTCATGAAACACAACACGTCTCGCCAGAATGAACACTGCCTCA
CCAATTTTACCTTGTGAGTATCGGCAAGTACTGAGTACTGGCCATTAGATCTATCAGCAGCTTGT
GAGGGTGTAGAGAACATTTCTAGCCAATGATAGTCTCAGGCATGCTAGAGCATGAAACAATTCAGGGA
GTATCTGGGTGAAGCCACAGGACTCAGAAAGCGAACCTCCAGTATCGCCGATGAGGGCACCTACACAC
TGGACTCCATCCTGCGGAGCTCAACTCCTTCCATTCCGTGATGTGTGAGCATGGCATGGACCCAGAGCT
AATCAAGCAGGTGGTCAAGCAGATGTTCTACATCGTGGGCACCTCACCTGAACAACCTCCTGCTGCGC
AAGGACATGTGCTCCTGGAGCAAAGGCATGCAGATCAGGTACAATGTCAGTCAATTGGAAGAATGGCTAC
GTGACAAGAATCTAATGAACAGTGGGGCAAAAGAGACTCTGGAACCTCTTATCCAGGCTGCTCAGCTTTT

GCAAGTAAAAAGAAAAGTACGATGACGCGGAAGCCATCTGCTCCATGTGCAACGCTCTGACCACAGCC
 CAGATTGTCAAAGTGTGAATCTGTACACACCCGTTAATGAGTTTGAGGAAAGGGTCTCTGTTTCATTTA
 TCCGCACTATACAGGTGCGGTTACGAGACAGGAAAGACTCTCCACAGCTGCTCATGGATGCAAAACACAT
 CTTTCTGTCACTTTCCCTTTAACCCATCCTCCCTGGCCCTAGAAACCATCCAGATTCCAGCCAGCCTG
 GCCTGGGCTTCATTGCAAGGGTC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR212159 representing NM_022178
 Red=Cloning site Green=Tags(s)

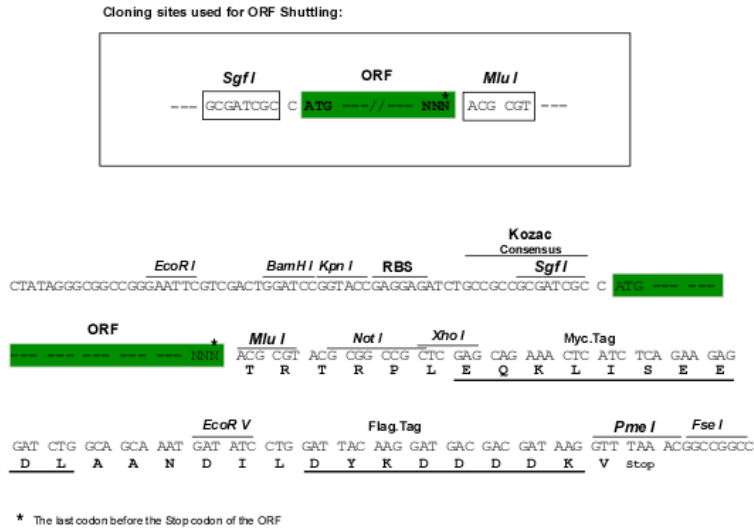
MAASELYTKFARVWIPDPEEVWKSSELLKDYKPGDKVLLHLEEGKDLEYRLDPKTSPLRNPDIIVG
 ENDLTALSYLHEPAVLHNLRVRFIDSKLIYTYCGIVLVAINPYEQLPIYGEDIINAYSGQNMGMDFPHIF
 AVAEEAYQMARDERNQSIIVSGESGAGKTVSAKYAMRYFATVSGSASEANVEEKVLASNPIMESIGNAK
 TTRNDSSRFKGYIEIGFDKRYRIIGANMRTYLLLEKSRVVFQAEERNYHIFYQLCASAKLPEFKMLRLG
 NADSFHYTKQGGSPMIEGVDDAKEMAHRQACTLLGISESYQMGIFRILAGILHLGNVGFASRSDSCTI
 PPKHEPLIIFCDLMGVDEEMCHWLCHRKLATATETYIKPISKLQATNARDALAKHIYAKLFWIVGHVN
 QALHSVAKQHSFIGVLDIYGFETFEINSFEQFCINYANEKLQQQFNMHVFKLEQEEMKEQIPWTLIDFY
 DNQPCINLIESKLGILDLLDEECKMPKGTDDTWAQKLYNTHLNKCALFEKPRMSNKAIIKHFADKVEYQ
 CEGFLEKNKDTVFEEQIKVLKSSKFKMLPELFQDDEKAI SPTSATSSGRTPLTRVPVKTKGRPGQTAKE
 HKKTVGLQFRNSLHLLMETLNATPHYVRCIKPNDFKFPFTFDEKRAVQQLRACGVLETIRISAAGFSPSR
 WTYQEFFSRYRVLKQKQDVLGDRKQTCQNVLEKILDKDKYQFGKTKIFFRAGQVAYLEKLRADKLRAAC
 IRIQKTRGWLLRKRYLCMQRAAITVQRYVRYGQARCYAKFLRRTKAATTIQKYWRMYVVRKRYKIRRAA
 TIVLQSYLRGYLARNRYKILREHKAVIIQKRVGWLARTHVKRTMKAIIYLQCCFRRMMAKRELKLLKI
 EARSVERYKKLHIGMENKIMQLQRKVDEQNKDYLMEKLTNLEGVYNSETEKLNRNDVERLQLSEEEAKV
 ATGRVLSLQEEIAKLRKDLQTRSEKKSIEERADKYKQTEQLVSNLKEENTLLKQEKETLNHLMVEQAK
 EMTETMERKLVEETKQLELDLNDERLRYQNLNEFSRLEERYDDLKEEMTLMNVPKPGHKRTDSTHSSN
 ESEYTFSSFEAETEDIAPRTEEPTEKKVPLDMSLFLKLQKRVTELGOEKQLMQDELDRKEEQVLRSAKAG
 GERPQIRGAELGYESLKRQELESENKLLKNELNLRKALSEKSAPEVNAPGAPAYRVLMEQLTAVSEELD
 VRKEEVLILRSQVLSQKEAIQPKDDKNTMTDSTILLEVDVQKMKDKGEIAQAYIGLKETNRLLLESQVLSQK
 RSHENEAEALRGEIQSLKEENNRQQQLLAQNLQLPPEARIEASLQHEITRLTNENLDLMEQLEKQDKTVR
 KLKQKLVFAKKIGELEVGMENISPGQIIDEPIRPVNIIPRKGKDFQGMLEYKREDEQKLVKNLILELKP
 RGVAVNLISGLPAYILFMCVRHADYLDLDDQKVRSLTSTINSIKKVLKRGDDFETVSFWLSNTCRFLHC
 LKQYSGEEGFMKHNTSRQNEHCLTNFDLAEYRQVLSDLAIQIYQQLVRVLENILQPMIVSGMLEHETIQG
 VSGVKPTGLRKRTSSIADEGTYLDSILRQLNSFHSVMCQHGMDPELIKQVVKQMFYIVGAITLNNLLLR
 KDMCSWSKGMQIRYNVSQLEEWLRDKNLMNSGAKETLEPLIQAAQLLQVKKKTDDEAEICSMCNALTTA
 QIVKVLNLYTPVNEFEERSVSFIRTIQVRLRDRKQSPQLLMDAKHIFPVTFPFNPSSLALETIQIPASL
 GLGFIARV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

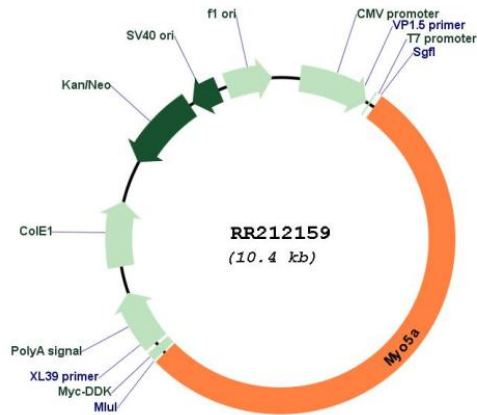
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_022178

ORF Size: 5484 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:	<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_022178.1 , NP_071514.1
RefSeq Size:	5620 bp
RefSeq ORF:	5487 bp
Locus ID:	25017
UniProt ID:	Q9QYF3
Cytogenetics:	8q24
MW:	211.8 kDa
Gene Summary:	may play a role in secretory granule transport [RGD, Feb 2006]