

## Product datasheet for **MG216211**

### Myo19 (NM\_025414) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myo19 (NM_025414) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Myo19
Synonyms:	1110055A02Rik; Myohd1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG216211 representing NM\_025414  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCTCCAGCAGGTGAATGGCCACAGTTTAGGCTCTGATGCCAAGGTAGGGCCTCCCTCAAGGGAGACC  
 TAAGGGAGTTCCTGGGTGGGAGATCCCACTGCACCAGCTGGATGACCTACCAAGTGAATCCCGTGAC  
 ACTGGAACAGTCTGAGGTGCCTGCAGGCCGATACACAGAAGACATATTCTATACCAATGCTGGCTGT  
 ACCTTGGTAGCTCGAACCCCTTAAGCAGTCCCTCACTCTATGCACCAGAACTGATGCAAGAGTACC  
 ATGCTGCACCTCAGCCTCAGAAATTGAAACCCACATCTTACAGTGGGTGAACAACTATAGAAATGT  
 CAAGAGCCTGATTGAGCCGGTCAACCAGTCCATCGTGGTCAAGGAGAGTGGAGCCGGAAGACATGG  
 ACATCCCGATGCCTGATGAAGTCTATGCGGTGGTGGCTGCCTCACCGACTTCTGTGAGAACATAAGA  
 TTGCAGAGAGGATTGAACAGCGGATTCTGAACCTCAACCTGTGATGGAAGCTTTTGGGAACGCATGCAC  
 ACTGAGGAACAGCAACAGCAGCCGCTTCGGGAAGTTCATTCAGCTCCAACCAACAGAGCCAGCAGATG  
 ACAGGAGCTGCAGTCCAGACCTACTCCTAGAGAAAACCCGTGTGGCCTGTCAAGGCTCCAGTGAGAGGA  
 ACTTTACATCTTCTACCAGATTGCAAAGGAGCCACCAAGGATGAAAGGCTCCAATGGCACCTCCCTGA  
 GGGAACTGCCTTCTCCTGGCTACCCAATCCAGAAAGCAGTTTGGAAAGAGGATTGTTTCGAGGTGACCAGA  
 GAGGCCATGCTCCATTTGGGCATCGACACCCCCACCCAGAAACATCTTTAAGGTCCTAGCTGGACTGC  
 TGCACCTTGGCAATGTCCATTTTGTGACTCAGAGGATGAAGCCCTGCCCTGCCAAGTATGGATGATAC  
 CAAGGTCTCTGTGAGGACCTCAGCCTTGTGCTGCAGCTCCCAGAGAAAATGCTGCTGGAGAGTATGCAG  
 ATTCGAACCATCAAGGCAGGCAAGCAGCAGCAGGTGTTCCAGAAGCCCTGCTCCGAGCCGAGTGTGACA  
 CACGCAGAGACTGTCTGGCCAACTGATCTATGCACGGCTGTTTCGACTGGCTGGTCTGTGATCAACAG  
 CAGCATCTGTGCAGACTCCAATCATGGACTGCCTTCATAGGGCTGCTAGATGTGTATGGGTTTGAGTCA  
 TTTCTAATAACAGTTTGGAAACAGCTGTGCATCAACTATGCCAATGAGAAGCTACAGCAGCACTTCGTGG  
 CTCACTACCTCAGGGCCAGCAGGAGGAGTACGAAGTTGAGGGCCTGGAGTGGTCAATTTGTCAACTACCA  
 GGACAACCAGACCTGCTTAGATCTCCTTGAAGGGAGCCCATCAGCATCTGTTCCCTATAAATGAGGAA  
 TGCCGCCCTAACCGCCAAGCAGTGCAGCACAACACAGACGCGCATCGAGAGCAGCTGGCAGGACGGC  
 CCTGCCTGGGCCATAACAAGCTCAGCCGGGAGCCAGCTTCGTGGTTGTGCATTTTCGCGGACCTGTACG  
 GTACCACACAGCCGGCCTGGTGGAAAAGAACAAGGACCCTGTTCCCTGAGCTGACTGAGCTCCTGCAG  
 CAATCCCAAGACCCCTGCTCAGATGCTGTTTCTGCCAACCTGAAGAGAAGCCAGGAGGAGCTGT  
 CTGGCCAGAGCCGGCTCCTGCATTGACTGTGGTGTCCAAGTTCAGGCCCTCACTGGAACAGCTCCTGCA  
 GGTCTACATAATAACAACACCCACTACATTTCGCTGCATCAAGCCCAACAGCCAGAGTACGCCACAGACT  
 TTCTCCAAGAAGAGGTCTGAACCAGTTAGAGGCTGTGGCCTTGTGGAAACCATTACATCAGTGCTG  
 CTGGCTTTCCATCCGGGTCTCTCACCAGAACTCATAGAAAGATATAAACTACTGAGAAGGCTCGGACC  
 TCGCATGTCTCTGGCCTCGGGGCTGGAGCCTGCCAAGGGTCTCTGAGCAGCCTCTGTGTGCCAAG  
 GAGGCCACACTGCAACCTCTACTACAGGACATTCTCCATGCTCTGCCAGCTTTAATTCAGACAGCAGCCA  
 CTCCCAGTGACCCGGCTAAGAACACACAAATCCCACTGTACTGTGGCAGGACAAAGATCTTCATGACTGA  
 CTCCATGCTAGAGCTTCTGGAATGTGGGCTGCCAGATGCTGGAGCAGTGTGCCGTTGCATCCAGTGT  
 GGCTGGAGGCGACACCGCTCCAAAAGCAGGAGAAACAGAGGCGGGCTGCCGTGCTCATCCAGGCTGCTT  
 TTAGGTCTGGTTAACTCGGAAACACATCAGAAGTTACACATAGCTGCCACGGTCATCAAGCACGCATG  
 GCATAAGTGGAGAATCAGAATGGCTGTCTTGCCTCTAAAGAAGTGGATGGTATGGAGGAGAAACCCATG  
 CCTCAGGCTCCTGGTACCCTGCGGTCTCGATGTCCCAGCACACACTAGGTTCTGGGAGCAATAATCC  
 ATCTCTGGCCCTGGGACTGGTGTAGCCAACTCAGCTGATGGCGTACGTGGCTTTCAGAGGAACTGGT  
 AGCCCATGCCTGCCTTCGGCTTCCCTCAGACAGACCCAGCAACAAAGTCCAGACACCACAACAGGATCAG  
 GCTGGTATTACATCTATCAGAGCACTGCCCCAGGGCTCGATAAAGTTTCACTGCAGGAAGTCTCCACTTC  
 AGTATGCTGACATCTGCCCTGACCTTCAGCCTCTGTGTACTGGCTTAAATCAGATTCTGCTAGAAA  
 CCACAGGCCAGTCCAAGTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG216211 representing NM\_025414  
Red=Cloning site Green=Tags(s)

MLQQVNGHSLGSDAEGRASLKGDLREFLGGEIPLHQLDDLTKVNPVTLETVLRCLQARYTEDIFYTNAGC  
 TLVALNPFKHPQLYAPELMQEYHAAPQPQKLPHIIFTVGEQTYRNVKSLIEPVNQSIIVSGESGAGKTW  
 TSRLCMKFYAVVAASPTSCENHKIAERIEQRILNSNPVMEAFGNACTLRNSNSSRFGKFIQLQLNRAQQM  
 TGAAVQTYLLEKTRVACQASSERNFHIFYQICKGATKDERLQWHLPEGTAFSWLPNPESSEEDCFEVTR  
 EAMLHLGIDTPTQNNIFKVLAGLLHLGNVHFVDESEALPCQVMDDTKVSVRTSALLLQLPEKMLESQ  
 IRTIKAGKQQVFQKPCSRACEDTRRDCLAKLIYARLFDWLVSVINSSICADSKSWTAFIGLLDVYGFES  
 FPNNSLEQLCINYANEKLQHFVAHYLRAQQEYEVEGLEWSFVNYQDNQCLDLLEGSPISICSLINEE  
 CRLNRPSSAAQLQTRIESTLAGRPCLGHNKLREPSFVVVHFAGPVRYHTAGLVEKNKDPVPEL TELLQ  
 QSQDPLL TMLFPANPEEKQEELSGQSRAPALTVVSKFKASLEQLLQVLHNTTPHYIRCIPNSQSQPQT  
 FLQEEVLNQLEACGLVETIHI SAAGFPIRVSHQNFIERYKLLRRLGPRMSSGLGLEPAEGSSEQPLCAK  
 EATLQPLLQDILHALPALIQTAATPSDPKNTQIPL YCGRTKIFMTDSMLELLECGRAQMLEQCARCICQ  
 GWRRHRLQKQEKORRAAVLIQAAFRSWL TRKHIRRLHIAATVIKHAHWKWRIRMACLASKELDGMEEKPM  
 PQAPGTLRSSMSPAHTRFLGAI IHLWPLGLVLANSADGVRGFQRKLVHAACLRLPSPDRPSNKVQTPQQDQ  
 AGITSIRALPQGSIKFHCRKSPLQYADICPDPSASCVTGFNFQILLESHRPVQV

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

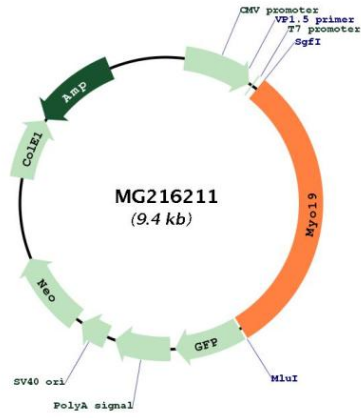


**ACCN:** NM\_025414

**ORF Size:** 2889 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_025414.4</a>
<b>RefSeq Size:</b>	3924 bp
<b>RefSeq ORF:</b>	2892 bp
<b>Locus ID:</b>	66196
<b>UniProt ID:</b>	<a href="#">Q5SV80</a>
<b>Cytogenetics:</b>	11 C
<b>Gene Summary:</b>	Actin-based motor molecule with ATPase activity that localizes to the mitochondrion outer membrane (PubMed:24825904). Motor protein that moves towards the plus-end of actin filaments (PubMed:24825904). Required for mitochondrial inheritance during mitosis (By similarity). May be involved in mitochondrial transport or positioning (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG216211