

## Product datasheet for **RG228626**

### **MYO19 (NM\_001163735) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MYO19 (NM_001163735) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYO19
Synonyms:	MYOHD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RG228626 representing NM\_001163735  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTCCAGCAGGTCAATGGCCACAATCCGGGGTCTGATGGCCAAGCCAGGGAGTACCTCAGAGAAGACC  
 TGCAGGAGTTCCTGGGTGGGAGGTCTGCTGTACAAACTGGATGACCTACCAGGGTGAATCCTGTGAC  
 ACTAGAGACAGTCTGAGGTGCCTGCAGGCCCGGTACATGGCAGACACATTCTACACCAATGCTGGCTGC  
 ACCCTGGTAGCCTGAACCCCTCAAGCCTGTTCTCAGCTCTACTCGCCCGAGCTAATGAGAGAGTACC  
 ATGCTGCGCCTCAGCCCCAGAACTGAAGCCCATGTGTTCACTGTGGTGAACAGACCTACAGGAATGT  
 CAAGAGCCTGATTGAACCACTCAACCAGTCTATTGTTGTCAGTGGAGAGAGTGGTCTGGAAGACATGG  
 ACGTCTCGCTGCCTAATGAAGTCTATGCTGTGGTGGCCACCTCACCTGCATCTGGGAGAGCCACAAGA  
 TTGCAGAGAGGATAGAACAGAGGATCCTGAACTCCAACCTGTCCATGGAAGCTTTGGGAATGCGTGTAC  
 ACTGAGGAATAACAACAGCAGTCGCTTTGGGAAGTTCATCCAGCTCCAGCTGAACAGGGCTCAGCAATG  
 ACTGGAGCCGAGTCCAGACCTACTCCTAGAGAAAACCTCGAGTGGCCTGCCAGGCTTCCAGTGAGAGGA  
 ACTTCCACATCTTCTATCAGATTTGCAAAGGAGCCAGTGAAGACGAGAGGCTCCAGTGGCACCTTCTGA  
 GGGAGCTGCCTTCTCCTGGCTGCCAACCCAGAGAGGAGCTTAGAAGAGGATTGTTTTGAGGTGACCAGA  
 GAGGCCATGCTCCATTTGGGCATTGACACCCCTACCCAGAACAACATCTTTAAGGTCTAGCTGGACTGC  
 TGCACCTTGGCAATACCAAGTTTGTGCTCCGAGGATGAAGCCAGCCCTGCCAGCCGATGGATGATGC  
 CAAGTACTCTGTGAGGACGGCAGCCTCGCTGCTGGGGCTCCAGAGGACGTGCTGCTGGAGATGGTGCAG  
 ATTAGAACCATCAGGGCAGGCAGACAGCAGCAGGTGTTCCGGAAGCCCTGCGCCCGAGCCGAGTGTGACA  
 CCGCTAGAGACTGCCTGGCCAACTGATCTATGCGCGTGTGTTGACTGGCTGGTATCAGTGATCAACAG  
 CAGCATCTGTGCAGACACCGACTCGTGGACCACTTTCATAGGCCTGCTGGATGTGTATGGATTTGAATCA  
 TTTCTGACAACAGTCTGGAACAGTTGTGCATCAACTACGCCAATGAGAAGCTGCAGCAGCATTTTGTGG  
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 GGACAACCAGCCCTGTTTGGATCTCATTGAGGGAAGCCCATCAGCATCTGCTCCCTATAAATGAGGAA  
 TGCCGCTCAATCGACCCAGCAGCGCAGCCAGCTCCAGACACGCATTGAGACTGCCCTGGCAGGCAGCC  
 CCTGCCTGGGCCACAATAAGCTCAGCCGGGAGCCAGCTTCATTGTTGTCATTATGCGGGGCTGTGCG  
 GTACCACACAGCAGGCCCTGGTGGAGAAGAACAAGGACCCTATCCACCTGAGCTGACCAGGCTCCTGCAG  
 CAATCCCAGGACCCCTGCTCATGGGGCTTTTCTACTAACCCAAAGAGAAGACCAGGAGGAACCC  
 CTGGCCAGAGCAGGGCCCTGTGTTGACCGTGGTCCAAGTTCAGGCCCTCACTGGAGCAGCTTCTGCA  
 GGTCTACACAGCACCACGCCCACTACATTGCTGCATCAAGCCCAACAGCCAGGGCCAGGCGCAGACC  
 TTTCTCCAAGAGGAGTCTGAGCCAGCTGGAGGCTGTGGCCTCGTGGAGACCATCCATATCAGTGCTG  
 CTGGCTTCCCCATCCGGGTCTCTCACCAGAACTTTGTAGAACGATACAAGTTACTAAGAAGGCTTATCC  
 TTGCACATCCTCTGGCCCCGACAGCCATATCCTGCCAAAGGGCTCCCTGAATGGTGTCCACACAGCGAG  
 GAAGCCACGCTTGAACCTCTCATCCAGGACATTCTCCACTCTGCCGCTCCTAACTCAGGCAGCAGCCA  
 TAACTGGTGACTCGCTGAGGCCATGCCAGCCCCATGCACTGTGGCAGGACCAAGGTGTTCACTGACTGA  
 CTCTATGCTGGAGCTTCTGGAATGTGGGGTGGCCGGTGTGGAGCAGTGTGCCGCTGCATCCAGGGT  
 GGCTGGAGGCGACACCGCACCGAGAGCAGGAGCGGAGTGGCGGCCGTCATGCTCATCCAGGCAGCCA  
 TTCGTTCTGTTAACTCGGAAACACATCCAGAGGCTGCATGCAGCTGCCACAGTCATCAAGCGTGCATG  
 GCAGAAGTGGAGAATCAGAATGGCCTGCCTTGCTGCTAAAGAGCTGGATGGTGTGGAAGAAAACTTCT  
 TCTCAAGCTCCCTGTTCCCTGAGCACCTCGCCGCTGCAGACCAGGCTCCTGGAGGCAATAATCCGCCTCT  
 GGCCCTGGGACTGGTCTGGCCAATACGGCTATGGGTGTAGGCAGCTTTCAGAGGAAATAGTGGTCTG  
 GGCTTGCTCCAGCTCCCAGGGCAGCCCCAGTACTACTGTCCAGACAGCACAAGACCAGGCTGGT  
 GTCAGTCCATCCGAGCGCTGCCTCAGGGATCGATAAAGTTTCACTGCAGAAAGTCTCCACTGCGGTATG  
 CTGACATCTGCCCTGAACCTTACCCTACAGCATTACAGGCTTAAATCAGATTCTGCTGGAAGACACAG  
 GCTGATCCACGTGACCTTCTGCTTCACTGGGCTGGG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG228626 representing NM\_001163735  
 Red=Cloning site Green=Tags(s)

MLQQVNGHNPGSDGQAREYLREDLQEFLGGEVLLYKLDDLTRVNPVTLETVLRCLQARYMADTFYTNAGC  
 TLVALNPFKVPVQLYSPELMREYHAAPQPQKLPKVFTVGEQTYRNVKSLIEPVNQSIIVSGESGAGKTW  
 TSRLCMKFYAVVATSPASWESHKIAERIEQRILNSNPVMEAFGNACTLRNNSSRFGKFIQLQLNRAQQM  
 TGAAVQTYLLEKTRVACQASSERNFHIFYQICKGASERLQWHLPEGAASFSLPNPERSLEEDCFEVTR  
 EAMLHLGIDTPTQNNIFKVLAGLLHLGNIQFAASEDEAQCQPMDDAKYSVRTAASLLGLPEDVLLVMVQ  
 IRTIRAGRQQQVFRKPCARAECDRRDCLAKLIYARLFDWLVSVINSSICADTDSWTTFIGLLDVYGFES  
 FPDNSLEQLCINYANEKLQHFVAHYLRAQQEYAVEGLEWSFINYQDNQPCLDLIEGSPISICSLINEE  
 CRLNRPSSAAQLQTRIALAGSPCLGHNKLREPSFIVVHYAGPVRYHTAGLVEKNKDPIPPELTRLQ  
 QSQDPLLMGLFPTNPKEKTQEPPGQSRAPVLTVVSKFKASLEQLLQVLHSTTPHYIRCIPNSQGGQQT  
 FLQEEVLSQLEACGLVETIHI SAAGFPIRVSHRNFFERYKLLRRLHPCTSSGPDSPYPAKGLPEWCPHSE  
 EATLEPLIQDILHTLPVLTQAAAITGDSAEAMPAPMHCGRTKVFTDMSLELLECGRARVLEQCARCIQG  
 GWRRRHRHREQERQWRAVMLIQAAIRSWL TRKHIQRLHAAATVIKRAWQKWRIRMACLAAKELDGVEEKHF  
 SQAPCSLSTSPQLTRLLEAIIRLWPLGLVLANTAMGVGSFQRKLVVWACLQLPRGSPSSYTVQTAQDQAG  
 VTSIRALPQSGIKFHCRKSPLRYADICPEPSPYSITGFNQILLERHRLIHVTSSAFTGLG

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

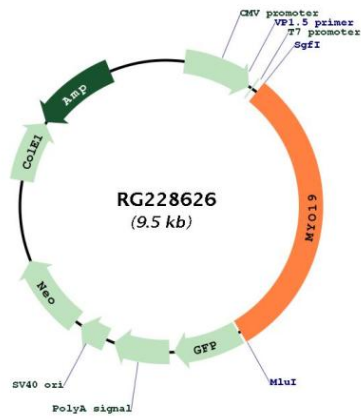


ACCN: NM\_001163735

ORF Size: 2910 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_001163735.1</a> , <a href="#">NP_001157207.1</a>
<b>RefSeq Size:</b>	4418 bp
<b>RefSeq ORF:</b>	2913 bp
<b>Locus ID:</b>	80179
<b>UniProt ID:</b>	<a href="#">Q96H55</a>
<b>Cytogenetics:</b>	17q12
<b>Gene Summary:</b>	Actin-based motor molecule with ATPase activity that localizes to the mitochondrion outer membrane (PubMed:19932026, PubMed:23568824, PubMed:25447992). Motor protein that moves towards the plus-end of actin filaments (By similarity). Required for mitochondrial inheritance during mitosis (PubMed:25447992). May be involved in mitochondrial transport or positioning (PubMed:23568824).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG228626