

Product datasheet for **RC203358**

MYO19 (NM_025109) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYO19 (NM_025109) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MYO19
Synonyms:	MYOHD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC203358 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGCTCCAGCAGGTCAATGGCCACAATCCGGGGTCTGATGGCCAAGCCAGGGAGTACCTCAGAGAAGACC
TGCAGGAGTTCCTGGGTGGGAGGTCTGCTGTACAAACTGGATGACCTACCAGGGTGAATCCTGTGAC
ACTAGAGACAGTCTGAGGTGCCTGCAGGCCCGGTACATGGCAGACACATTCTACACCAATGCTGGCTGC
ACCCTGGTAGCCTGAACCCCTCAAGCCTGTTCTCAGCTCTACTCGCCCGAGCTAATGAGAGAGTACC
ATGCTGCGCCTCAGCCCCAGAACTGAAGCCCCATGTGTTCACTGTGGTGAACAGACCTACAGGAATGT
CAAGAGCCTGATTGAACCACTCAACCACTATTGTTGTCAGTGGAGAGAGTGGTCTGGAAGACATGG
ACGTCTCGCTGCCTAATGAAGTCTATGCTGTGGTGGCCACCTCACCTGCATCTGGGAGAGCCACAAGA
TTGCAGAGAGGATAGAACAGAGGATCCTGAACCTCAACCTGTCCATGGAAGCTTTGGGAATGCGTGTAC
ACTGAGGAATAACAACAGCAGTCGCTTTGGGAAGTTCATCCAGCTCCAGCTGAACAGGGCTCAGCAATG
ACTGGAGCCCGAGTCCAGACCTACCTCCTAGAGAAAACCTCGAGTGGCCTGCCAGGCTTCCAGTGAGAGGA
ACTTCCACATCTTCTATCAGATTTGCAAAGGAGCCAGTGAAGGACGAGAGGCTCCAGTGGCACCTTCTGA
GGGAGCTGCCTTCTCCTGGCTGCCAACCCAGAGAGGAGCTTAGAAGAGGATTGTTTTGAGGTGACCAGA
GAGGCCATGCTCCATTTGGGCATTGACACCCCTACCCAGAACAACATCTTTAAGGTCTAGCTGGACTGC
TGCACCTTGGCAATATCCAGTTTGTCTGCCCTCCGAGGATGAAGCCAGCCCTGCCAGCCGATGGATGATGC
CAAGTACTCTGTGAGGACGGCAGCCTCGCTGCTGGGGCTCCAGAGGACGTGCTGCTGGAGATGGTGCAG
ATTAGAACCATCAGGGCAGGCAGACAGCAGGTGTTCCGGAAGCCCTGCGCCCGAGCCGAGTGTGACA
CCCGTAGAGACTGCCTGGCCAACTGATCTATGCGCGGTTGTTGACTGGCTGGTATCAGTGATCAACAG
CAGCATCTGTGCAGACACCGACTCGTGGACCACTTTCATAGGCCTGCTGGATGTGTATGGATTTGAATCA
TTTCTGACAACAGTCTGGAACAGTTGTGCATCAACTACGCCAATGAGAAGCTGCAGCTGGAGGCCCTGTG
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ACGATACAAGTTACTAAGAAGGCTTCATCCTTGACATCCTCTGGCCCCGACAGCCCATATCCTGCCAAA
GGGCTCCCTGAATGGTGTCCACACAGCGAGGAAGCCACGCTTGAACCTCTCATCCAGGACATTCTCCACA
CTCTGCCGGTCTAACTCAGGCAGCAGCCATAACTGGTACTCGGCTGAGGCCATGCCAGCCCCATGCA
CTGTGGCAGGACCAAGGTGTTGACTGACTCTATGCTGGAGCTTCTGGAATGTGGCGTGGCCGGGTG
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GGCGGGCCGTATGCTCATCCAGGCAGCCATTCGTTCTGGTTAACTCGGAAACACATCCAGAGGCTGCA
TGACGCTGCCACAGTCAAGCGTGCATGGCAGAAGTGGAGAATCAGAATGGCCTGCCTTGTGCTAAA
GAGCTGGATGGTGTGGAAGAAAACTTCTCTCAAGCTCCCTGTTCCCTGAGCACCTCGCCGCTGCAGA
CCAGGCTCCTGGAGGCAATAATCCGCCTCTGGCCCTGGGACTGGTCTGGCCAAACCGCTATGGGTGT
AGGCAGCTTTCAGAGGAAATTAGTGGTCTGGGCTTGCCTCCAGCTCCCAGGGGCAGCCCCAGTAGCTAC
ACTGTCCAGACAGCACAAGACCAGGCTGGTGTACGTCCATCCGAGCGCTGCCTCAGGGATCGATAAAGT
TTCCTGCAGAAAGTCTCCTACTGCGGTATGCTGACATCGCCCTGAACCTTACCCTACAGCATTACAGG
CTTTAATCAGATTCTGCTGGAAGACACAGGCTGATCCACGTGACCTCTTCTGCCTTCACTGGGCTGGG

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203358 protein sequence
Red=Cloning site Green=Tags(s)

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MLQQVNGHNPGSDGQAREYLREDLQEFLGGEVLLYKLLDDLTRVNPVTLETVLRCLQARYMADTFYTNAGC
TLVALNPFKVPVQLYSPELMREYHAAPQPQKLKPHVFTVGEQTYRNVKSLIEPVNQSIIVSGESGAGKTW
TSRCLMKFYAVVATSPASWESHKIAERIEQRILNSNPVMEAFGNACTLRNNSSRFGKFIQLQLNRAQQM
TGAAVQTYLLEKTRVACQASSERNFHIFYQICKGASEDERLQWHLPEGAASFSLPNPERSLEEDCFEVTR
EAMLHLGIDTPTQNNIFKVLAGLLHLGNIQFAASEDEAQCQPMDDAKYSVRTAASLLGLPEDVLLMVQ
IRTIRAGRQQQVFRKPCARAECDRRDCLAKLIYARLFDWLVSVINSSICADTDSWTTFIGLLDVGFEF
FPDNSLEQLCINYANEKLQLEACGLVETIHISAAGFPIRVSHRNVERYKLLRRLHPCTSSGPDSPYPAK
GLPEWCPHSEEATLEPLIQDILHTLPVLTQAAAITGDSAEAMPAMHCGRTKVFMTDSMLELLECGRRARV
LEQCARCISQGGWRRHRHREQERQWRAVMLIQAAIRSWLTKHIQRLHAAATVIKRAWQKWRIRMACLAAK
ELDGVEEKHFSQAPCSLSTSPQLTRLLEAIIRLWPLGLVLANTAMGVGSFQRKLVVWACLQLPRGSPSSY
TVQTAQDQAGVTSIRALPQGSIKFHCRKSPLRYADICPEPSPYSITGFNQILLERHRLIHVTSSAFTGLG
    
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6578_a11.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_025109

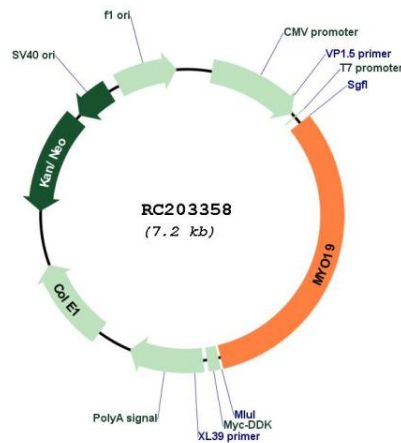
ORF Size: 2310 bp

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](#)

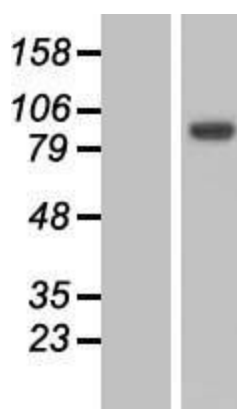
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_025109.3
RefSeq Size:	3818 bp
RefSeq ORF:	2313 bp
Locus ID:	80179
UniProt ID:	Q96H55
Cytogenetics:	17q12
Domains:	IQ, myosin_head
MW:	86.7 kDa
Gene Summary:	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 RC203358



Western blot validation of overexpression lysate (Cat# [LY410890]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203358 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).