

Product datasheet for **RC219483**

MYO19 (NM_001033580) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MYO19 (NM_001033580) 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)
ORF Nucleotide Sequence:	>RC219483 representing NM_001033580 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTCCAGCAGGTCAATGGCCACAATCCGGGGTCTGATGGCCAAGCCAGGGAGTACCTCAGAGAAGACC
TGCAGGAGTTCCTGGGTGGGAGGTCTGCTGTACAACTGGATGACCTCACCAGGGTGAATCCTGTGAC
ACTAGAGACAGTCCTGAGGTGCCTGCAGGCCCGGTACATGGCAGACACATTCTACACCAATGCTGGCTGC
ACCCTGGTAGCCTTGAACCCCTCAAGCCTGTTCTCAGCTCTACTCGCCGAGCTAATGAGAGAGTACC
ATGCTGCGCCTCAGCCCCAGAACTGAAGCCCATGTGTTCACTGTGGTGAACAGACCTACAGGAATGT
CAAGAGCCTGATTGAACCACTCAACAGTCTATTGTTGTCACTGGAGAGAGTGGTGTGGAAAGACATGG
ACGTCTCGCTGCCTAATGAAGTTCTATGCTGTGGTGGCCACCTCACCTGCATCTTGGGAGAGCCACAAGA
TTGCAGAGAGGATAGAACAGAGGATCCTGAACTCCAACCTGTCAATGGAAGCTTTTGGGAATGCGTGTAC
ACTGAGGAATAACAACAGCAGTCGCTTTGGGAAGTTCAATCCAGCTCCAGCTGAACAGGGCTCAGCAAATG
ACTGGAGCCGAGTCCAGACCTACCTCCTAGAGAAAACCGAGTGGCCTGCCAGGCTTCCAGTGAGAGGA
ACTTCCACATCTTCTATCAGATTTGCAAAGGAGCCAGTGGGACGAGAGGCTCCAGTGGCACCTTCTCGA
GGGAGCTGCCTTCTCCTGGCTGCCCAACCCAGAGAGGAGCTTGAAGAGGATTGTTTTGAGGTGACCAGA
GAGGCCATGCTCCATTTGGGCATTGACACCCCTACCCAGAACAACATCTTAAGGTGAGAAGAAAAGCCA
CGCCACTTAAGTTTGGCAGAGATGACGGGCAGCCCTTTGCA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219483 representing NM_001033580
 Red=Cloning site Green=Tags(s)

MLQQVNGHNPGSDGQAREYLREDLQEFLGGEVLLYKLDDLTRVNPVTLETVLRCLQARYMADTFYTNAGC
 TLVALNPFKVPVQLYSPELMREYHAAPQPQKLKPHVFTVGEQTYRNVKSLIEPVNQSIIVSGESGAGKTW
 TSRCLMKFYAVVATSPASWESHKIAERIEQRILNSNPVMEAFGNACTLRNNNSSRFGKFIQLQLNRAQQM
 TGAAVQTYLLEKTRVACQASSERNFHIFYQICKGASEDERLQWHLPEGAASFSLPNPERSLEEDCFEVTR
 EAMLHLGIDTPTQNNIFKVRKATPLKFRDDGQPFA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8051_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001033580

ORF Size: 951 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_001033580.2](#), [NP_001028752.1](#)

RefSeq Size: 1730 bp

RefSeq ORF: 954 bp

Locus ID: 80179

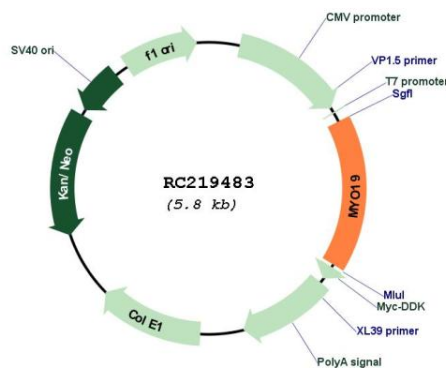
UniProt ID: [Q96H55](#)

Cytogenetics: 17q12

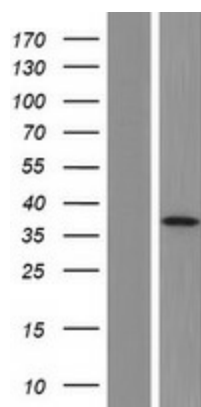
MW: 35.8 kDa

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 RC219483



Western blot validation of overexpression lysate (Cat# [LY422404]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219483 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).