

Product datasheet for **RC208983**

Myosin 1C (MYO1C) (NM_001080779) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myosin 1C (MYO1C) (NM_001080779) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Myosin 1C
Synonyms:	MMI-beta; MM1b; myr2; NMI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208983 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAGTGCCTCACCGCCCGTGACCGGGTGGGGTGCAGGATTTCTGTCTGCTGGAGAACTTACCA
GCGAGGCCGCTTCATCGAGAACCTGCGCGCGGATTTCTGGGAGAATCTCATCTACACCTACATTGGCC
CGTCTGGTCTGTCAATCCCTACCGGGACCTGCAGATCTACAGCCGGCAGCATATGGAGCGTTACCGT
GGCGTCAGCTTCTATGAAGTGCCCCCTCACCTGTTTGGCGTGGCGGACACTGTGTACCGAGCACTGCGCA
CGGAGCGTCGGGACCGGCTGTGATGATCTCTGGGAGAGCGGGCAGGCAAGACCGAGGCCACCAAGAG
GCTGCTGCAGTTCTATGCAGAGACCTGCCAGCCCCGAGCGCGGAGGTGCCGTGCGGGACCGGCTGCTA
CAGAGCAACCCGGTGCTGGAGGCCCTTTGGAAATGCCAAGACCCTCCGGAACGATAACTCCAGCAGTTCTG
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GGAAAAGTCACGAGTGGTGCACCAAGATCATGGGAGCGGAACTTCCACATCTTCTACCAGCTGCTGGAG
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AGGGCCAGTGTGCCAAAGTCTCCTCCATCAACGACAAGAGTGACTGGAAGGTGTCAGGAAGGCTCTGAC
AGTCATTGATTTACCGAGGATGAAGTGGAGGACCTGCTGAGCATCGTGCCAGCGTCTTCATTTGGGC
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CCAGGCTCCTCAGCGTGGAAGGCTCGACGCTGCGAGAAGCCCTGACACACAGGAAGATCATCGCCAAGGG
GGAGGAGCTCCTGAGCCCGCTGAACCTGGAGCAGGCCGCGTACGCACGAGACGCCCTCGCCAAGGCTGTG
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CCAGCTGGCGGAGCACCACGGTTCTCGGCTCCTGGATATTTATGGCTTTGAAGTGTTCAGCATAACAG
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TCGGAGCAGGAGGAGTACGAGGCAGAGGCGATCGCGTGGGAGCCCGTCCAGTATTTCAACAACAAAATCA
TCTGTGATCTGGTGGAGGAGAAGTTTAAGGGCATCATCTCGATTTTGGATGAGGAGTGTCTGCGCCCCGG
GGAGGCCACAGACCTGACCTTCTGGAGAAGCTGGAGGATACTGTCAAGCACCATCCACACTTCTGACG



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CACAAGCTGGCTGACCAGCGGACCAGGAAATCTCTGGGCCGAGGGGAATTCCGCCTTCTGCACTATGCGG
GGGAGGTGACCTACAGCGTGACCGGTTTCTGGACAAAAACAATGACCTTCTCTCCGGAACCTTAAGGA
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GGCCGCAGGATGGGGTGGCTGTGCTGGTCCGACACCTGGGCTACAAGCCAGAAGATACAAGATGGGCAG
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GCCGTCGTATCGTGGAGGACGCCAAAGTCAAGCAGAGGATTGATTACGCCAACCTGACCGGAATCTCTG
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TCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208983 protein sequence

Red=Cloning site Green=Tags(s)

MESALTARDRVGVQDFVLEENFTSEAFIENLRRRFRENLIYTYIGPVLVSVNPYRDLQIYSRQHMER
GVSYFYEVPPLHFAVADTVYRALRTERRDQAVMISGESGAGKTEATKRLLQFYAETCPAPERGGAVRDRLL
QSNPVLEAFNAKTLRNDNSSRFKYMVDVQDFDKGAPVGGHILSYLLEKSRVVHQNHGERNFHIFYQLLE
GGEEETLRLGLERNPQSYLYLVKGQCAKVSSINDKSDWKVVRKALTVIDFTEDEVEDLLSIVASVLHLG
NIHFAANESNAQVTENQLKYLTRLISVEGSTLREALTHRKIIAKGEELLSPNLLEQAAYARDALAKAV
YSRTFTWLVGKINRSLASKDVESPSWRSTTVLGLLDIYGFVQFQHSFEQFCINYNCKLQQLFIELTLK
SEQEEYEAEGIAWEPVQYFNNKIICDLVEEFKGIISILDEECLRPGEATDLTFLEKLEDTVKHHPHFLT
HKLADQRTKSLGRGEFRLHYAGEVTYSVTGFLDKNNLLFRNLKETMCSKNPIMSQCDFRSELSDDK
RPETVATQFKMSLLQLVEILQSKEPAYVRCIKPNDKQPGRFDEVLRHQVKYLGLENLRVRRAGFAYR
RKYEAFRLQRYKSLCPETWPTWAGRPQDGVAVLVRHLGYKPEEYKMGRTKIFIRFPKTLFATEDALEVRRQ
SLATKIQAARWGFHWRQKFLRVKRSIICISWWRGTLGRRKAARKWAAQTIRRLIRGFILRHAPRCPEN
AFFLDHVRTSFLNLRRQLPRNVLDTSWPTPPALREASELLRELCKNMVWKYCRSISPEWKQLQQA
VASEIFKGKKNYPQSVPRFLFISTRGTDEISPRVLQALGSEPIQYAVPVVKYDRKGKPRSRQLLLTPN
AVVIVEDAKVKQRIDYANLTGISVSSLSDSLFLVHVQRADNKQKGDVVLQSDHVIETLTKTALSANRVNS
ININQGSITFAGGPGRDGTIDFTPGSELLITKAKNGHLAVVAPRLNSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6678_f05.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001080779

ORF Size: 3084 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 Size: 4973 bp

RefSeq ORF: 3192 bp

Locus ID: 4641

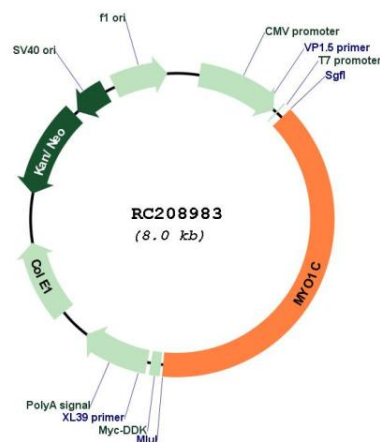
UniProt ID: [O00159](#)

Cytogenetics: 17p13.3

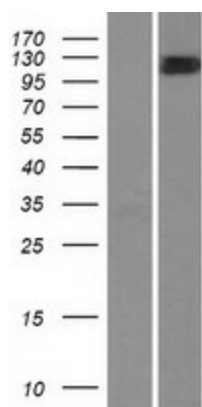
MW: 117.9 kDa

Gene Summary: This gene encodes a member of the unconventional myosin protein family, which are actin-based molecular motors. The protein is found in the cytoplasm, and one isoform with a unique N-terminus is also found in the nucleus. The nuclear isoform associates with RNA polymerase I and II and functions in transcription initiation. The mouse ortholog of this protein also functions in intracellular vesicle transport to the plasma membrane. Multiple transcript variants encoding different isoforms have been found for this gene. The related gene myosin IE has been referred to as myosin IC in the literature, but it is a distinct locus on chromosome 19. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC208983



Western blot validation of overexpression lysate (Cat# [LY421110]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208983 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).