

Product datasheet for **RC215472**

Myosin 1C (MYO1C) (NM_033375) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myosin 1C (MYO1C) (NM_033375) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Myosin 1C
Synonyms:	MMI-beta; MMIb; myr2; NMI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215472 representing NM_033375 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAGTGGCTCACCGCCGTGACCGGGTGGGGTGCAGGATTCGTCGCTGCTGGAGAACTTCACCA
GCGAGGCCGCTTCATCGAGAACCTGCGGCGGCGATTCGGGAGAATCTCATCTACACCTACATTGGCCC
CGTCTGGTCTGTCAATCCCTACCGGACCTGCAGATCTACAGCCGGCAGCATATGGAGCGTTACCGT
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GCTGCTGCAGTTCTATGCAGAGACCTGCCAGCCCCGAGCGCGGAGGTGCCGTGCGGGACCGGCTGCTA
CAGAGCAACCCGGTGCTGGAGGCCCTTGAAATGCCAAGACCCTCCGGAACGATAAATCCAGCAGGTTCCG
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CCAGCTGGCGGAGCACCACGTTCTCGGCTCCTGGATATTTATGGCTTTGAAGTGTTCAGCATAACAG
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GGAGGCCACAGACCTGACCTTCTGGAGAAGCTGGAGGATACTGTCAAGCACCATCCACACTTCTGACG



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CACAAGCTGGCTGACCAGCGGACCAGGAAATCTCTGGGCCGAGGGGAATCCGCCTTCTGCACTATGCGG
 GGGAGGTGACCTACAGCGTGACCGGTTTCTGGACAAAAACAATGACCTTCTTCCGGAACCTTAAGGA
 GACCATGTGTAGCTCAAAGAATCCCATTATGAGCCAGTGCTTTGACCGGAGCGAGCTCAGTGACAAGAAG
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 TCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215472 representing NM_033375

Red=Cloning site Green=Tags(s)

MESALTARDRVGVQDFVLEENFTSEAAFIENLRRRFRENLIYTYIGPVLVSVNRYRDLQIYSRQHMER
 YR GVSFYEVPPHLFAVADTVYRALRTERRDQAVMISGESGAGKTEATKRLQFYAETCPAPERGGAVRDRLL
 QSNPVLEAFGNAKTLRNDNSSRFKYMVDVQDFDKGAPVGGHILSYLLEKSRVVHQNHGERNFHIFYQLLE
 GGEEETLRRLLGLERNPQSYLYLVKGQCAKVVSSINDKSDWKVVRKALTVIDFTEDEVEDLLSIVASVHLG
 NIHFANAANESNAQVTTENQLKYLTRLLEVEGSTLREALTHRKI IAKGEELL SPLNLEQAAYARDALAKAV
 YSRFTFWLVGKINRSLASKDVESPSWRSTTVLGLLDIYGFVQFHNSFEQFCINYCNEKLQQLFIELTLK
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 HKLADQRTRKSLGRGEFRLLHYAGEVTVSVTGFLDKNNDLLFRNLKETMCSKNPIMSQCDFRSELSDKK
 RPETVATQFKMSLLQLVEILQSKEPAYVRCIKPNDKQPGRFDEVLRHQVQKYLGLLENLRVRRAGFAYR
 RKYEAFLQRYKSLCPETWPTWAGRPQDGVAVLVRHLGYKPEEYKMGRTKIFIRFPKTLFATEDALEVRRQ
 SLATKIQAARWGFHWRQKFLRVKRSIICISWWRGTLGRRKAARKRWAAQTIRRLIRGFI LRHAPRCPEN
 AFFLDHVRTSFLNLNRRQLPRNVLDTSWPTPPPALREASELLRELCKINMVMWYCRSISPEWKQLQKKA
 VASEIFKGGKDNYPQSVPRFLISTRGTDEISPRVLQALGSEPIQYAVPVVYKDRKGYKPRSRQLLLTPN
 AVVIVEDAKVKQRIDYANLTGISVSSLSDSLFVLHVQRADNKQKGDVVLQSDHVIETLTKTALSANRVNS
 ININQGSITFAGGPRDGTIDFTPGSELLITKAKNGHLAVVAPRLNSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6204_f09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_033375

ORF Size: 3084 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_033375.3](#), [NP_203693.2](#)

RefSeq Size: 4318 bp

RefSeq ORF: 3087 bp

Locus ID: 4641

UniProt ID: [O00159](#)

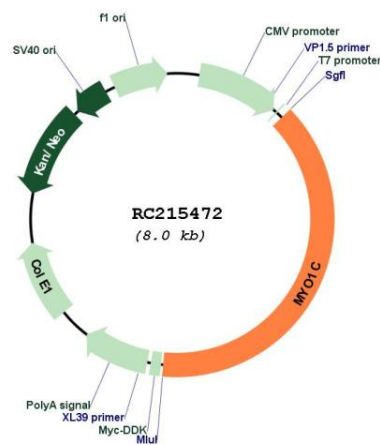
Cytogenetics: 17p13.3

Domains: IQ, myosin_head

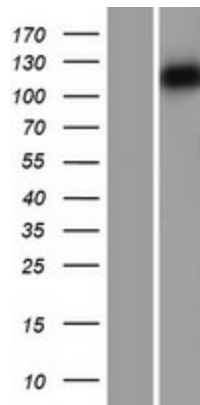
MW: 117.7 kDa

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 RC215472



Western blot validation of overexpression lysate (Cat# [LY403246]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215472 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).