

Product datasheet for **RG215472**

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:	TurboGFP
Symbol:	Myosin 1C
Synonyms:	MMI-beta; MMIb; myr2; NMI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215472 representing NM_033375 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAGTGGCTCACCGCCGTGACCGGGTGGGGTGCAGGATTCGTCGCTGCTGGAGAACTTCACCA
GCGAGGCCGCTTCATCGAGAACCTGCGGCGCGGATTCGGGAGAATCTCATCTACACCTACATTGGCCC
CGTCCTGGTCTGTCAATCCCTACCGGACCTGCAGATCTACAGCCGGCAGCATATGGAGCGTTACCGT
GGCGTCAGCTTCTATGAAGTGCCCCCTCACCTGTTTGCCGTGGCGGACACTGTGTACCGAGCACTGCGCA
CGGAGCGTCGGGACCAGGCTGTGATGATCTCTGGGGAGAGCGGGCAGGCAAGACCGAGGCCACCAAGAG
GCTGCTGCAGTTCTATGCAGAGACCTGCCAGCCCCGAGCGCGGAGGTGCCGTGCGGGACCGGCTGCTA
CAGAGCAACCCGGTGCTGGAGGCCCTTGAAATGCCAAGACCCTCCGGAACGATAAATCCAGCAGGTTCCG
GGAAGTACATGGATGTGCAGTTTGACTTCAAGGGTGCCCCGTGGGTGGCCACATCCTCAGTTACCTCCT
GGAAAAGTACAGAGTGGTGCACCAGAAATCATGGGGAGCGGAACTTCCACATCTTCTACCAGCTGTGGAG
GGGGCGAGGAGGAGACTCTTCGAGGCTGGGCTTGAACGGAACCCCCAGAGCTACCTGTACCTGGTGA
AGGGCCAGTGTGCCAAAGTCTCCTCCATCAACGACAAGAGTGACTGGAAGTTCGTCAGGAAGGCTCTGAC
AGTCATTGATTTACCGAGGATGAAGTGGAGGACCTGCTGAGCATCGTGGCCAGCGTCTTCAATTTGGGC
AACATCCACTTTGCTGCCAACGAGGAGCAATGCCAGGTACCACCGAGAACCAGCTCAAGTATCTGA
CCAGGCTCCTCAGCGTGAAGGCTCGACGCTGCGAGAAGCCCTGACACACAGGAAGATCATCGCCAAGGG
GGAGGAGCTCCTGAGCCCGCTGAACCTGGAGCAGGCCGCTACGCACGAGACGCCCTCGCCAAGGCTGTG
TACAGCCGCACTTTACCTGGCTCGTGGGAAGATCAACAGGTCGCTGGCCTCCAAGGAGCTGGAGAGCC
CCAGCTGGCGGAGCACCAGGTTCTCGGCTCCTGGATATTTATGGCTTTGAAGTGTTCAGCATAACAG
CTTTGAGCAGTTCTGCATCAATTACTGCAACGAGAAGCTGCAGCAGCTTTCATCGAGCTCAGCTCAAG
TCGGAGCAGGAGGAGTACGAGGCAGAGGGCATCGCGTGGGAGCCCGTCCAGTATTTCAACAACAAAATCA
TCTGTGATCTGGTGGAGGAGAAGTTTAAGGGCATCATCTCGATTTGGATGAGGAGTGTCTGCGCCCCGG
GGAGGCCACAGACCTGACCTTCTGGAGAAGCTGGAGGATACTGTCAAGCACCATCCACACTTCTGACG



[View online >](#)

CACAAGCTGGCTGACCAGCGGACCAGGAAATCTCTGGGCCGAGGGGAATCCGCCTTCTGCACTATGCGG
 GGGAGGTGACCTACAGCGTGACCGGTTTCTGGACAAAAACAATGACCTTCTTCCGGAACCTTAAGGA
 GACCATGTGTAGCTCAAAGAATCCCATTATGAGCCAGTGCTTTGACCGGAGCGAGCTCAGTGACAAGAAG
 CGGCCAGAGACGGTCCGACCCAGTTCAAGATGAGCCTCTGCAGCTGGTGGAGATCCTGCAGTCTAAGG
 AGCCCCCTACGTCCGCTGCATCAAACCAATGATGCCAACAGCCCGCCGCTTTGACGAGGTGCTGAT
 CCGCCACCAGGTGAAGTACCTGGGGCTGTTGAAAACTGCGCGTGCCGAGAGCCGGCTTTGCCTATCGC
 CGCAAATACGAAGCTTTCCTGCAAAGGTACAAGTCACTGTGCCAGAGACGTGGCCACGTGGCCAGGAC
 GGCCGAGGATGGGGTGGCTGTGCTGGTCCGACACCTGGGCTACAAGCCAGAAGGTACAAGATGGGCAG
 GACCAAGATCTTCATCCGCTTCCCAAGACCCTGTTTGCACAGAGGATGCCCTGGAGGTCCGGCGGACG
 AGCCTGGCCACAAAGATCCAAGCTGCCTGGAGGGCTTCACTGGCGGCAGAAATTCCTCCGGGTGAAGA
 GATCAGCCATCTGCATCCAGTCTGGTGGCGTGGAACTGGGCCGAGGAAGGCAGCCAAGAGGAAGTG
 GGCGGCACAGACCATCCGGCGGCTATCCGAGGCTTATCCTGCGCCACGCCCCGCTGCCCGAGAAC
 GCCTTCTCTGGACCATGTGCGCACCTTTTTTGTAACTGAGCGGCAGCTGCCCGGAATGTCC
 TGGACACCTCGTGGCCACGCCCCACCTGCCCTGCGTGAGGCCTCAGAGCTTCTCGGGAGTTGTGCAT
 AAAGAACATGGTGTGAAATACTGCCGGAGTATCAGCCCTGAGTGAAGCAGCAGCTGCAGCAGAAGGCC
 GTGGCTAGTGAGATCTTCAAGGGCAAGAAGGATAATTACCTCAGAGTGTACCCAGGCTCTTCATCAGCA
 CTCGGCTTGGTACAGATGAGATCAGCCCCGAGTGTGCAGGCCTTGGGCTCTGAGCCATTCAATATGC
 GGTGCCTGTTGTGAAATACGACCGCAAGGGCTACAAGCCTCGCTCCCGGAGCTGCTGCTCACGCCAAC
 GCCGTCGTCATCGTGGAGGACGCCAAAGTCAAGCAGAGGATTGATTACGCCAACCTGACCGGAATCTCTG
 TCAGCAGCCTGAGCGACAGTCTTTTGTGCTTATGTACAGCGTGCAGCAATAAGCAAAAGGGAGATGT
 GGTGCTGCAGAGTGACCAGTATTGAGACGCTGACCAAGACAGCCCTCAGTGCCAACCGCGTGAACAGC
 ATCAACATCAACCAGGGCAGCATACGTTTGCAGGGGGCCCCGGCAGGGATGGCACCATTGACTTACAC
 CCGGCTCGGAGCTGCTCACCAGGCCAAGAACGGGCACCTGGCTGTGGTCCGCCACGGCTGAATTC
 TCGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG215472 representing NM_033375
 Red=Cloning site Green=Tags(s)

MESALTARDRVGVQDFVLLNFTSEAAFIEENLRRRFRENLIYTYIGPVLVSVNPNYRDLQIYSRQHMER
 YR GVSFYEVPPHLFAVADTVYRALRTERRDQAVMISGESGAGKTEATKRLQLFYAETCPAPERGGAVRDRLL
 QSNPVLEAFGNAKTLRNDNSSRFKGYMDVQDFDKGAPVGGHILSYLLEKSRVHQNHGERNFHIFYLLE
 GGEEETLRRLLGLERNPQSYLYLVKGQCAKVSINDKSDWKVVRKALTVIDFTEDEVEDLLSIVASVHLG
 NIHFANEESSNAQVTTENQLKYLTRLLSVEGSTLREALTHRKIIAKGEELLSPLNLEQAAYARDALAKAV
 YSRFTFWLVGKINRSLASKDVESPSWRSTTVLGLLDIYGFVQFQHSFEQFCINYCNEKLQQLFIELTLK
 SEQEEYEAEGLAWEPVQYFNKIIICDLVEEKFKGIISILDEECLRPGEATDLTFLEKLEDTVKHHPHFLT
 HKLADQTRKSLGRGEFRLLHYAGEVTYSVTGFLDKNNDLLFRNLKETMCSKKNPIMSQCFDRSELSDKK
 RPETVATQFKMSLLQLVEILQSKEPAYVRCIKPNDKQGRFDEVLRHQVQKYLGLLENLRVRRAGFAYR
 RKYEAFLQRYKSLCPETWPTWAGRPQDGVAVLVRHLGYKPEEYKMGRTKIFIRFPKTLFATEDALEVRRQ
 SLATKIQAARWGFHWRQKFLRVKRSIICISWWRGTLGRRKAARKRWAAQTIRRLIRGFI LRHAPRCPEN
 AFFLDHVRTSFLNLNRRQLPRNVLDTSWPTPPALREASELLRELCKINMVKYCRSISPEWKQLQQA
 VASEIFKGGKDNYPQSVPRLFISTRGTDEISPRVLQALGSEPIQYAVPVVYDRKGYKPRSRQLLLTPN
 AVVIVEDAKVKQRIDYANLTGISVSSLSDSL FVLHVQRADNKQKGDVVLQSDHVIETLTKTALSANRVNS
 ININQGSITFAGGPGRDGTIDFTPGSELLITKAKNGHLAVVAPRLNSR

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

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](#)

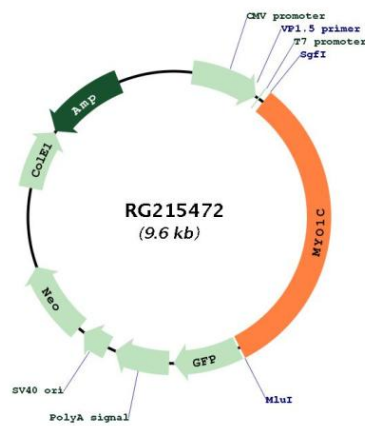
RefSeq Size: 4318 bp

RefSeq ORF: 3087 bp

Locus ID: 4641
UniProt ID: [O00159](#)
Cytogenetics: 17p13.3
Domains: IQ, myosin_head

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 1E has been referred to as myosin 1C in the literature, but it is a distinct locus on chromosome 19. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG215472