

## Product datasheet for **RG220101**

### Myosin (MYH4) (NM\_017533) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myosin (MYH4) (NM_017533) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Myosin
Synonyms:	MYH2B; MyHC-2B; MyHC-IIb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220101 representing NM_017533 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGTCTGACTCTGAGATGGCCATTTTTGGGGAGGCTGCTCCTTTCTCCGAAAGTCTGAAAAGGAGC  
GAATTGAAGCTCAGAACAAGCCTTTTGATGCCAAGACATCAGTCTTTGTGGTGGACCCTAAGGAGTCCTA  
CGTGAAAGCAATAGTGCAGAGCAGGGAAGGGGGAAGGTGACAGCCAAGACCGAAGCTGGAGCTACTGTA  
ACTGTGAAAGAAGACCAAGTCTTCTCCATGAACCTCCCAAATATGACAAGATCGAGGACATGGCCATGA  
TGACTCACCTGCATGAGCCTGCTGTGCTGTATAACCTCAAAGAGCGTTACGCAGCCTGGATGATCTACAC  
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 TGAAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG220101 representing NM\_017533  
 Red=Cloning site Green=Tags(s)

MSSDSEMAIFGEAAPFLRKSEKERIEAQNKPFDAKTSVVFVDPKESYVKAIVQSREGGKVTAKTEAGATV  
 TVKEDQVFSMPPKYDKIEDMAMMTHLHEPAVL YNLKERYAAWMIYYSGLFCVTVNPYKWL PVYNPEVV  
 TAYRGGKRQEAAPHIFSIDNAYQFML TDRENQSILITGESGAGKTVNTRVIQYFATI AVTGEKKKEEP  
 ASGKMQGTLEDQIISANPLLEAFGNAKTVRNDNSRFGKIRIHFHATGKLASADIETYLLEKSRVTFQL  
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 QQVYNVAVGALAKAIYEKMF LWMVTRINQLDTKQPRQYFIGVLDIAGFEIFDFNSLEQLCINFTNEKLQQ  
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 SEIKTKEEEQRLINELSAQKARLHTESGEFSRQLDEKDAMVSQLSRGKQAF TQIEELKRQLEETKAK  
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 LQDAEEHVEAVNSK CASLEKTKQRLQNEVEDLMIDVERSNAACIALDKQRNFDKVLAEWKQKYEETQAE  
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 KSELQTSLEEAESLEHEEGKILRIQLELNQVKSEIDRKIAEKDEELDQLKR NHLRVVESMQSTLDAEIR  
 SRNDALRIKKMEGDLNEMEIQLNHANRQAAEALRNL RNTQGILKDTQLHLDDAIRGQDDLKEQLAMVER  
 RANLMQAEVEELRASLERTERGRKMAEQELLDASERVQLLHTQNTSLINTKKKLETDISQIQGEMEDIVQ  
 EARNAEEKAKKAITDAAMMAEELKKEQD TSAHLERMKNMEQTVKDLQLRLGAEQLALGGKKQIQKLE  
 ARVRELESEVESEQKHNVEAVKGLRKHERRVKELTYQTEEDRKNILRLQDLVDKLTQKVKAYKRQAEAE  
 EQSNVNLAKFRKLQHELEEAERADIAESQVNKLRVKSREVHTKVISEE

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_017533

**ORF Size:** 5817 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](mailto: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:** [NM\\_017533.1](#), [NP\\_060003.1](#)

**RefSeq Size:** 6016 bp

**RefSeq ORF:** 5820 bp

**Locus ID:** 4622

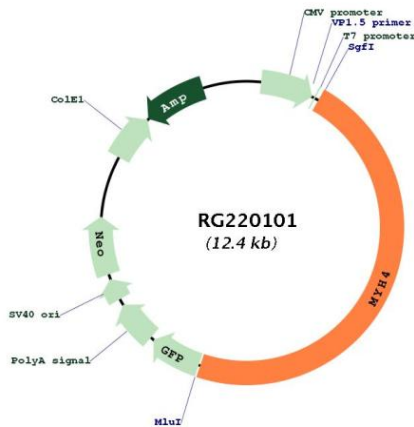
**UniProt ID:** [Q9Y623](#)

**Cytogenetics:** 17p13.1

**Protein Pathways:** Tight junction, Viral myocarditis

**Gene Summary:** Muscle contraction.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RG220101