

## Product datasheet for **RG235354**

### MYH10 (NM\_001256095) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYH10 (NM_001256095) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYH10
Synonyms:	NMMHC-IIB; NMMHCB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235354 representing NM_001256095 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCAGAGAAGCTGGACTCGAGGATCCAGAGAGGTATCTCTTTGTGGACAGGGCTGTCATCTACAACC  
CTGCCACTCAAGCTGATTGGACAGCTAAAAAGCTAGTGTGGATTCCATCAGAACGCCATGGTTTTGAGGC  
AGCTAGTATCAAAGAAGAACGGGAGATGAAGTTATGGTGGAGTTGGCAGAGAATGGAAGAAAGCAATG  
GTCAACAAAGATGATATTCAGAAGATGAACCCACCTAAGTTTTCCAAGGTGGAGGATATGCCAGAATTGA  
CATGCTTGAATGAAGCTCCGTTTTACATAATCTGAAGGATCGCTACTATTCAGGACTAATCTATACTTA  
TTCTGGACTCTTCTGTGTAGTTATAAACCTTACAAGAATCTTCCAATTTACTCTGAGAATATTATTGAA  
ATGTACAGAGGGAAGAAGCGTCATGAGATGCCTCCACACATCTATGCTATATCTGAATCTGCTTACAGAT  
GCATGCTTCAAGATCGTGAGGACCAGTCAATTTCTTGCACGGGTGAGTCAGGTGCTGGGAAGACAGAAAA  
TACAAAGAAAGTTATTCAGTACCTTGCCCATGTTGCTTCTTACATAAAGGAAGAAAGGACCATAATATT  
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AAGCTGCAGCAGCTGTTCAACCACACCATGTTTATCCTAGAACAAGAGGAATACCAGCGCGAAGGCATCG  
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 GGGAACTGGATGATGCCACCGAGGCCAACGAGGCGCTGAGCCGCGAGGTGAGCACCCTGAAGAACCAGCT  
 GAGGCGGGGTGGCCCATCAGCTTCTCTCCAGCCGATCTGGCCGCGCCAGCTGCACCTTGAAGGAGCT  
 TCCCTGGAGCTCTCCGACGATGACACAGAAAGTAAAGACCAGTGTGTCAACGAGACGCAGCCACCCAGT  
 CAGAG

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG235354 representing NM\_001256095

Red=Cloning site Green=Tags(s)

MAQRTGLEDPERYLFVDRAVIYNPATQADWTAKKLWVWIPSERHGFEAASIKEERGDEVMVELAENGGKAM  
 VNKDDIQKMNPPKFSKVEDMAELTCLNEASVLHNLKDRYSSGLIYTYSGLFCVVINPYKNLPIYSENIIE  
 MYRGGKRHEMPPHIYAISESAYRCMLQDREDQSILCTGESGAGKTENTKKVIQYLAHVASSHKGRKDHN  
 PESPKPKVHKQGELERQLLQANPILESFNGAKTVKNDNSSRFGKIRINFVDVTGYIVGANIETYLLLEKSRA  
 VRQAKDERTFHIFYQLLSGAGEHLKSDLLLEGFNNYRFLSNGYIPIPGQQDKDNFQETMEAMHMGFSHE  
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 EKVTAEAIKKMEEELLEDQNSKFIKEKLMEDRIAECSSQLAEKKAKNLAKIRNKQEVMSDLEE  
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 VVRELQAQIAELQEDFESEKASRNKAQKQKRDLSSELEALKTELEDLDTTAAQQELRTKREQVAVELKK  
 ALLEETKNHEAQIQDMRQRHATALEELSEQLEQAKRFKANLEKNKQGLETDNKELACEVKVLQVKAESE  
 HKRKKLDAQVQELHAKVSEGDRLRVELAEKASKLQNELDNVSTLLEAEKKGKIFAKDAASLESQDQT  
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 EAKKKLLKDAEALSQRLEEKALAYDKLEKTKNRLQQELDDLTVLDLHQRQVANSLEKKQKQKFDQLLAEK  
 SISARYAEERDRAEAEAREKETKALSLARALEEALAEKEEFERQNKQLRADMEDLMSSKDDVGVKNVHE  
 KSKRALEQQVEEMRTQLEEELEDELQATEDAKLRLEVNMQAMKAQFERDLQTRDEQNEEKRLLIKQVREL  
 EALEDERKQRALAVASKKMEIDLKDLQAQIEAANKARDEVIKLRLQAQMKDYQRELEEARASRDEI  
 FAQSKESEKLLKSLAEILQLQEELASSERARRHAEQERDELADEITNSASGKSALLDEKRRLEARIAQL  
 EEELEEQSNMELLNDRFRKTTLQVDTLNAELAAERSAAQKSDNARQQLERQNKELKAKLQELGAVKSK  
 FKATISALEAKIGQLEEQLEQEAKEERAANKLVRRETKLKEIFMQVEDERRHADQYKEQMEKANARMKQ  
 LKRQLEEAEEEEATRANASRRKLQRELDDATEANEGLSREVSTLKNRLRRGGPISFSSRSRGRRLHLEGA  
 SLELSDDDTESKTSVDNETQPPQSE

SGPTRRRLE - GFP Tag - V

**Restriction Sites:**

Sgfl-RsrII



<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001256095.1</u> , <u>NP_001243024.1</u>
<b>RefSeq Size:</b>	7712 bp
<b>RefSeq ORF:</b>	5958 bp
<b>Locus ID:</b>	4628
<b>UniProt ID:</b>	<u>P35580</u>
<b>Cytogenetics:</b>	17p13.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Regulation of actin cytoskeleton, Tight junction, Viral myocarditis
<b>Gene Summary:</b>	This gene encodes a member of the myosin superfamily. The protein represents a conventional non-muscle myosin; it should not be confused with the unconventional myosin-10 (MYO10). Myosins are actin-dependent motor proteins with diverse functions including regulation of cytokinesis, cell motility, and cell polarity. Mutations in this gene have been associated with May-Hegglin anomaly and developmental defects in brain and heart. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]