

## Product datasheet for **RG211638**

### MYH14 (NM\_024729) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MYH14 (NM_024729) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYH14
Synonyms:	DFNA4; DFNA4A; FP17425; MHC16; MYH17; myosin; NMHC-II-C; NMHC II-C; PNMHH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG211638 representing NM_024729 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGCCGTGACCATGTCGGTGCCCGGGCGGAAGGCGCCCCCAGGCCGGGCCAGTGCCCGAGGCGG  
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GGTGGAGTGGACGGCCCGCGTCTCGTGTGGTGCCTTCGGAGCTTACGGGTTTCGAGGCGGCGGCTG  
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ACCAGATCCAGCGCATGAACCCGCCAAGTTCAGCAAGGCGGAGGACATGGCCGAGCTGACTGCCTCAA  
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 CGGAGCTGAGGGTCCCACCAGCCACCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG211638 representing NM\_024729

Red=Cloning site Green=Tags(s)

MAAVTMSVPRKAPRPGVPVPEAAQPFLLTPRGPSSAGGPGSGTSPQVEWTARRLVWVPSLHGFEEAAL  
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 FCVVINPYKQLPIYTEAIVEMYRKKRHEVPPHYAVTEGAYRSM LQDREDQSILCTGESGAGKTENTKK  
 VIQYLAVHASSPKRKEPGVPELEERQLLQANPILEAFGNAKTVKNDNSSRF GKFI RINFDVAGYIVGAN  
 IETYLLEKSRAIRQAKDECSFHIFYQLLGGAGEQLKADLLEPCSHYRFLTNGPSSSPGQERELFQETLE  
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 DQLLAEKKA AVLRAVEERERAEAEGREREARALS LTRALEEEQEAREELERQNRALRAELEALLSSKDDV  
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 LAKQLRDAEVERDEERKQRTLAVAARKKLEGELEELKAQMASAGQGKEEAVKQLRKMQAQMKELWREVEE  
 TRTSREEIFSQNRESEKRLKGLAEVLR LQEELAASDRARRQAQQDRDEMADEVANGNL SKAAI LEEKRQ  
 LEGRLGQLEEELEEEQSNSELLNDRYRKL LQVESL TTEL SAERSF SAKAESGRQQLERQIQELRGRLGE  
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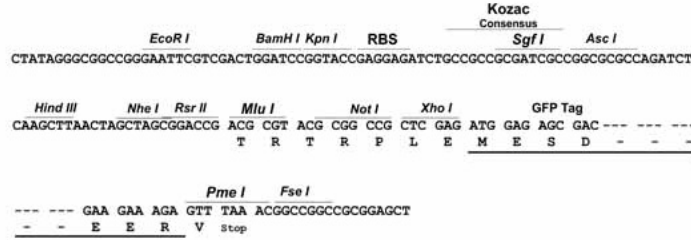
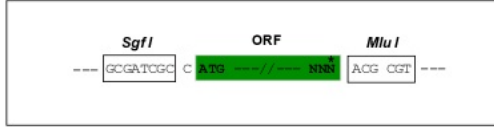
TRTRPLE - GFP Tag - V

**Restriction Sites:**

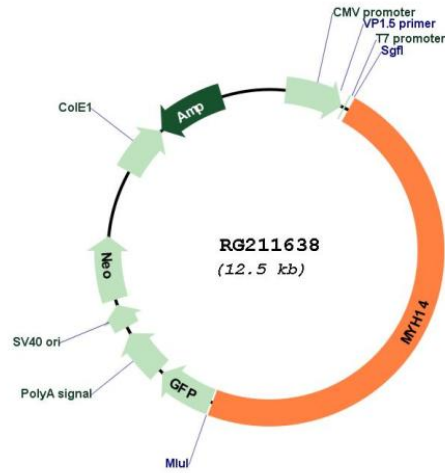
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_024729  
 ORF Size: 5985 bp

<b>OTI Disclaimer:</b>	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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>	<a href="#">NM_024729.3</a> , <a href="#">NP_079005.3</a>
<b>RefSeq Size:</b>	6807 bp
<b>RefSeq ORF:</b>	5988 bp
<b>Locus ID:</b>	79784
<b>UniProt ID:</b>	<a href="#">Q7Z406</a>
<b>Cytogenetics:</b>	19q13.33
<b>Domains:</b>	Myosin_tail, M
<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-14 (MYO14). Myosins are actin-dependent motor proteins with diverse functions including regulation of cytokinesis, cell motility, and cell polarity. Mutations in this gene result in one form of autosomal dominant hearing impairment. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]