

## Product datasheet for **RG207069**

### MYO1F (NM\_012335) Human Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: MYO1F (NM\_012335) Human Tagged ORF Clone  
 Tag: TurboGFP  
 Symbol: MYO1F  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-AC-GFP (PS100010)  
 E. coli Selection: Ampicillin (100 ug/mL)  
 ORF Nucleotide Sequence: >RG207069 representing NM\_012335  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCAGCAAGGAGCGCTTCCACTGGCAGAGCCACAACGTGAAGCAGAGCGGCGTGGATGACATGGTGC  
 TTCTTCCCAGATCACCGAAGACGCCATTGCCGCCAACCTCCGGAAGCGCTTCATGGACGACTACATCTT  
 CACCTACATCGGCTCTGTGCTCATCTCTGTAACCCCTTCAAGCAGATGCCCTACTTCACCGACCGTGAG  
 ATCGACCTATCAGGGCGCGCCAGTATGAGAATCCCCGCACATCTACGCCCTCACGGACAACATGT  
 ACCGGAACATGCTTATCGACTGTGAGAACCAGTGTGCATCATTAGTGGAGAGAGTGGAGCTGGGAAGAC  
 AGTGGCAGCCAAATATATCATGGGCTACATCTCCAAGGTGTCTGGCGGAGGCGAGAAGGTCCAGCAGCTC  
 AAAGATATCATCTGCAGTCCAACCCGCTGCTCGAGGCCTTCGGCAACGCCAAGACTGTGCGCAACAACA  
 ATTCCAGCCGCTTTGGCAAGTACTTTGAGATCCAGTTCAGCCGAGGTGGGAGCCAGATGGGGGCAAGAT  
 CTCCAACCTTTGCTGGAGAAGTCCCGCGTGGTTCATGCAAAATGAAAATGAGAGGAACTTCCACATCTAC  
 TACCAGCTGTGGAAGGGGCTCCAGGAGCAAAGGCAGAACCTGGGCCTCATGACACCGGACTACTATT  
 ACTACCTCAACCAATCGGACACCTACCAGGTGGACGGCACGGACGACAGAAGCGACTTTGGTGAGACTCT  
 GAGTGCTATGCAGGTTATTGGGATCCCGCCAGCATCCAGCAGCTGGTCTCTGCAGCTCGTGGCGGGGATC  
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 CCTTCCCCTACCTGCTGGGCATTGACAGCGGGGCGACTGCAGGAGAAGCTGACCAGCCGAAGATGGA  
 CAGCCGCTGGGGCGGGCAGCGAGTCCATCAATGTGACCTCAACGTGGAGCAGGCAGCCTACACCCGT  
 GATGCCCTGGCCAAGGGGCTCTATGCCCGCTCTTCGACTTCTCGTGGAGGCCATCAACCGTGCTATGC  
 AGAAACCCAGGAAGGTACAGCATCGGTGTGCTGGACATTTACGGCTTCGAGATCTTCCAGAAAAATGG  
 CTTTCGAGCAGTTTTGCATCAACTTCGTCAATGAGAAGCTGCAGCAAACTTTATCGAACTTACCCTGAAG  
 GCCGAGCAGGAGGAGTATGTGCAGGAAGGCATCCGCTGGACTCCAATCCAGTACTTCAACAACAAGGTGC  
 TCTGTGACCTCATCGAAAACAAGCTGAGCCCCCAGGCATCATGAGCGTCTTGGAGCGCTGTGCGCCAC  
 CATGCACGCCACGGGCGGGGAGCAGACCAGACTGCTGCAGAAGCTGCAGGCGGCTGTGGGGACCCAC  
 GAGCATTTCAACAGCTGGAGCGCGGCTTCGTCTCCACCAGTACGCTGGCAAGGTCTCCTACGAGTCA  
 GCGGCTTCTGCGAGGAACCGAGACGTTCTTCTCCGACCTCATAGAGCTGATGCAGACCAGTGAGCA



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GGCCTTCCTCCGGATGCTCTTCCCCGAGAAGCTGGATGGAGACAAGAAGGGGCGCCCCAGCACCCGCGG  
 TCCAAGATCAAGAAACAAGCCAACGACCTGGTGGCCACACTGATGAGGTGCACACCCCACTACATCCGCT  
 GCATCAAACCAACGAGACCAAGAGGCCCGGAGACTGGGAGGAGAACAGAGTCAAGCACCAGGTGGAATA  
 CCTGGGCTGAAGGAGAACATCAGGGTGCAGAGCCGGCTTCGCTACCGCCCGCAGTTCCGCAAAATC  
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 GAGAGAAAGTGAAGAAGGACCTGAGAAGGGCCAGGTGTGTGAAGTCTTGAAGAAGAAAGTGACATCCA  
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 AACCTCGGAGTTCGTCACCAAGCCCTACCCGGCGGCCCTGCGCCCCCAGAGGCATGGATCGCAATGG  
 GGTGCCCCCTCTGCCAGAGGGGCCCCCTGCCCTGGAGATCATGTCTGGAGGGGGACCCACAGGCTC  
 CCCCAGGGCCCTCCGTCCACATCCCTGGGAGCCAGCAGACGCCCGGGCACGTCCGCCCTCAGAGCACA  
 ACACAGAATTCCTCAACGTGCCTGACCAGGGCATGGCCGGCATGCAGAGGAAGCGCAGCGTGGGGCAACG  
 GCCAGTGCCTGGTGTGGCCGACCCAAGCCCCAGCCTCGGACACATGGTCCCAGGTGCCGGGCCCTATAC  
 CAGTACGTGGGCAAGATGTGGACGAGCTGAGCTTCAACGTGAACGAGGTATTGAGATCCTCATGGAAG  
 ATCCCTCGGGCTGGTGAAGGGCCGGCTTACGGCCAGGAGGGCTTTTCCAGGAAACTACGTGGAGAA  
 GATC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG207069 representing NM\_012335  
 Red=Cloning site Green=Tags(s)

MGSKERFHWQSHNVKQSGVDDMVLPLQITEDAIAANLRKRFMDDYIFTYIGSVLISVNPFKQMPYFTDRE  
 IDLYQGAQYENPPHIYALTDNMYRNMLIDCENQCVIISGESGAGKTVAAKYIMGYISKVSGGGEKVQHV  
 KDIIILQSNPLLEAFNAKTVRNNSSRFKGYFEIQFSRGGEPDGGKISNFLLEKSRVVMQNERNFHIY  
 YQLLEGASQEQRQLGLMTPDYYYLNSDYQVDGTDGDRSDFGETLSAMQVIGIPPSIQQLVLQLVAGI  
 LHLGNISFCEDGNYARVESVDLLAFPAYLLGIDSGRLQEKLTSRKMSRWGGRSEINVTLNVEQAAAYTR  
 DALAKGLYARLFDLVEAINRAMQKQEEYSIGVLDIYGFEIFQKNGFEQFCINFVNEKLQQIFIELTLK  
 AEQEEYVQEGIRWTPIQYFNNKVVCDLIENKLSPPGIMSVDLDDVCAHATGGGADQTLQLQAQVGTG  
 EHFNSWSAGFVIHHYAGKVSVDVSGFCERNRDLVFDLIELMQTSEQAFLRMLFPEKLDGDKKGRPSTAG  
 SKIKKQANDLVATLMRCTPHYIRCIKPNETKRPRDWEENRVKHQVEYLGLENIRVRRAGFAYRRQFAK  
 LQRYAILTPETWPRWRGDERQGVQHLLRAVNMEPDQYQMGSTKVFVNPESLFLLLEVRERKFDGFARTI  
 QKAWRRHVAVRKYEEMREEASNILLNKKERRRNSINRNFVGDYLGLEERPELRLQFLGKREVRVDFADSVTK  
 YDRRFKPIKRDILTPKCVYVIGREKVKKGPEKGVCEVLKKKVDIQALRGVSLSTRQDDFFILQEDAAD  
 SFLESVFKTEFVSLCKRFEEATRRPLPLTFSDTLQFRVKEGEGGGGTRSVTFSRFGDLAVLKVGGRT  
 LTVSVGDGLPKSSKPTRKGMAGKPRRSSQAPTRAAPAPPRGMDRNGVPPSARGGPLLEIMSGGGTHRP  
 PRGPPSTSLGASRRPRARPPSEHNTEFLNVDPDQGMAGMQRKRSVGRPVPVGVGRPKPQPRTHGPRCRALY  
 QYVQDVEDLSFNVNEVIEILMEDPSGWWKGRHLHGQEGFLFPGNYVEKI

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_012335

ORF Size: 3294 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\\_012335.4](#)

**RefSeq Size:** 3860 bp

**RefSeq ORF:** 3297 bp

**Locus ID:** 4542

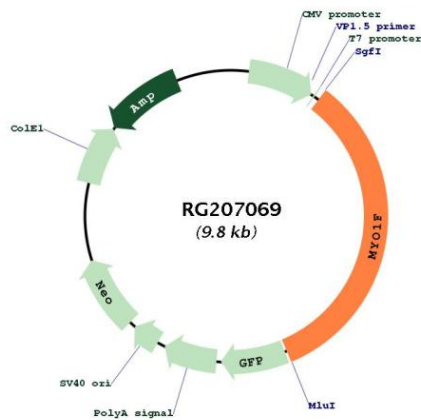
**UniProt ID:** [O00160](#)

**Cytogenetics:** 19p13.2

**Domains:** IQ, SH3, myosin\_head

**Gene Summary:** Myosins are molecular motors that use the energy from ATP hydrolysis to generate force on actin filaments. The protein encoded by this gene is an unconventional myosin that may be involved in the intracellular movement of membrane-enclosed compartments. There is evidence to suggest that mutations in this gene can result in hearing loss. [provided by RefSeq, Jan 2017]

### Product images:



Circular map for RG207069