

## Product datasheet for **RG202797**

### Myotilin (MYOT) (NM\_006790) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myotilin (MYOT) (NM_006790) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Myotilin
Synonyms:	LGMD1; LGMD1A; MFM3; TTID; TTOD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG202797 representing NM\_006790  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTTAACTACGAACGTCCAAAACACTTCATCCAGTCCCAAACCCATGTGGCTCCAGATTGCAGCCTC  
 CTGGACCAGAAACCTCCAGCTTCTCTAGCCAGACCAAACAGTCTTCCATTATCATCCAGCCCGCCAGTG  
 TACAGAGCAAAGATTTTCTGCCTCCTCAACACTGAGCTCTCACATCACCATGTCTCTCTGCTTTCCCT  
 GCTTCTCCCAGCAGCATGCTGGCTCCAACCCAGGCCAAAGGGTTACAACCACCTATAACCAGTCCCAG  
 CCAGCTTCTCAGCTCCATATTACCATCACAGCCTGATTACAATAGCAGTAAAAATCCCTTCCGCTATGGA  
 TTCCAATATCAACAGTCTCAGCTGGCCAACCTATAAATGCAAAGCCATCCCAAATGCAAATGCTAAG  
 CCCATACCAAGAACTCCTGATCATGAAATACAAGGATCAAAGAAGCTTTGATTCAAGATTTGGAAAGAA  
 AGCTGAAATGCAAGGACACCTTCTTCATAATGGAAATCAACGTCTAACATATGAAGAGAAGATGGCTCG  
 CAGATTGCTAGGACCACAGAATGCAGCTGCTGTGTTTCAAGCTCAGGATGACAGTGGTGCACAAGACTCG  
 CAGCAACACAACCTCAGAACATGCGCGACTGCAAGTTCCTACATCAACAAGTAAGAAGTAGATCAACCTCAA  
 GGGGAGATGTGAATGATCAGGATGCAATCCAGGAGAAATTTTACCACCACGTTTCATTCAAGTGCCAGA  
 GAACATGTCGATTGATGAAGGAAGATTCTGCAGAAATGGACTTCAAAGTGAGTGGACTGCCAGCTCCTGAT  
 GTGTCAATGGTATCTAAATGGAAGAACAGTTCAATCAGATGATTTGCACAAAATGATAGTGTCTGAGAAGG  
 GTCTTCATTCACCTCATCTTTGAAGTAGTCAGAGCTTCAGATGCAGGGGCTTATGCATGTGTTGCCAAGAA  
 TAGAGCAGGAGAAGCCACCTTCACTGTGCAGCTGGATGTCCTTGCAAAAAGAACATAAAAGAGCACCAATG  
 TTTATCTACAAACCACAGAGCAAAAAAGTTTTAGAGGGAGATTCAGTAAACTAGAATGCCAGATCTCGG  
 CTATACCTCCACAAAGCTTTTCTGAAAAGAAATAATGAAATGGTACAATTCAACACTGACCGAATAAG  
 CTTATATCAAGATAAACACTGGAAGAGTTACTTTACTGATAAAAGATGTAACAAGAAAGATGCTGGGTGG  
 TATACTGTGTCAGCAGTTAATGAAGCTGGAGTACTACATGTAACACAAGATTAGACGTTACGGCACGTC  
 CAAACCAAATCTTCCAGCTCCTAAGCAGTTACGGGTTGACCAACATTCAGCAAATATTTAGCACTTAA  
 TGGGAAAGGTTTGAATGTAACAAGCTTTTAAACCAGAAGGAGAATTTACAGCTTTGGCAGCTCAATCT  
 GGACTCTATGAAAGTGAAGAATT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG202797 representing NM\_006790  
 Red=Cloning site Green=Tags(s)

MFNYERPKEHFISQNPQSRQLPPGPETSSFSSTKQSSIIQPRQCTEQRFSSSTLSSHITMSSSAFP  
 ASPQQHAGSNPQQRVTTTTYNQSPASFLSSILPSQPDYNSKIPSAMDSNYQQSSAGQPINAKPSQTANAK  
 PIPRTPDHEIQGSKEALIQDLERLKKCKDTLLHNGNQRLTYEEKMARRLLGPQNAAAVFQAQDDSGAQDS  
 QQHNSEHARLQVPTSQVRSRSTSRGDVNDQDAIQEKFYPPRFIQVPENMSIDEGFRMDFKVSGLPAPD  
 VSWYLNQRTVQSDDLHKMIVSEKGLHSLIFEVVRASDAGAYACVAKNRAGEATFTVQLDVLAKEHKRAPM  
 FIYKPKSKVLEGDVSKLEQISAIPPPPLFWKRNEMVQFNTDRISLYQDNTGRVTLLIKDVNKKDAGW  
 YTVSAVNEAGVTTNTRLDVTARPNQTLPAKQLRVRPTFSKYLALNGKGLNVKQAFNPEGEFQRLAAQS  
 GLYESEEL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_006790

**ORF Size:** 1494 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\\_006790.3](#)

**RefSeq Size:** 2244 bp

**RefSeq ORF:** 1497 bp

**Locus ID:** 9499

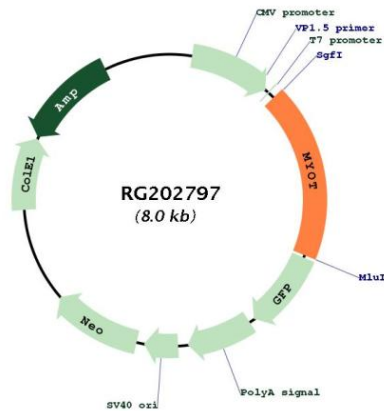
**UniProt ID:** [Q9UBF9](#)

**Cytogenetics:** 5q31.2

**Domains:** ig, IGc2, IG

**Gene Summary:** This gene encodes a cytoskeletal protein which plays a significant role in the stability of thin filaments during muscle contraction. This protein binds F-actin, crosslinks actin filaments, and prevents latrunculin A-induced filament disassembly. Mutations in this gene have been associated with limb-girdle muscular dystrophy and myofibrillar myopathies. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined.[provided by RefSeq, Oct 2008]

**Product images:**



Circular map for RG202797