

## Product datasheet for **RG237870**

### Myotilin (MYOT) (NM\_001300911) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Myotilin (MYOT) (NM_001300911) 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)
ORF Nucleotide Sequence:	>RG237870 representing NM_001300911. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC
ATGGATTCCAACATCAACAGTCCTCAGCTGGCCAACCTATAAATGCAAAGCCATCCCAAATGCAAAT
GCTAAGCCCATACCAAGAAGCTCTGATCATGAAATACAAGGATCAAAAGAAGCTTTGATTCAAGATTTG
GAAAGAAAGCTGAAATGCAAGGACACCCTTCTTCATAATGAAATCAACGTCTAACATATGAAGAGAAG
ATGGCTCGCAGATTGCTAGGACCACAGAATGCAGCTGCTGTGTTCAAGCTCAGGATGACAGTGGTGCA
CAAGACTCGCAGCAACAACACTCAGAACATGCCGACTGCAAGTTCCTACATCACAAGTAAGAAGTAGA
TCAACCTCAAGGGGAGATGTGAATGATCAGGATGCAATCCAGGAGAAATTTTACCACCAGTTCATT
CAAGTGCCAGAGAACATGTCGATTGATGAAGGAAGATTCTGCAGAATGGACTTCAAAGTGAGTGGACTG
CCAGCTCCTGATGTGTCATGGTATCTAAATGGAAGAACAGTTCATCAGATGATTTGCACAAAATGATA
GTGTCTGAGAAGGGTCTTCATCACTCATCTTTGAAGTAGTCAGAGCTTCAGATGCAGGGCTTATGCA
TGTGTTGCCAAGAATAGAGCAGGAGAAGCCACCTTCACTGTGCAGCTGGATGTCTTGCAAAAAGAACAT
AAAAGAGCACCAATGTTTATCTACAAACCACAGAGCAAAAAGTTTTAGAGGGAGATTCAAGTAACTA
GAATGCCAGATCTCGGCTATACCTCCACCAAAGCTTTTCTGAAAAGAAATAATGAAATGGTACAATTC
AACACTGACCGAATAAGCTTATATCAAGATAAAGCTGGAAGAGTACTTTACTGATAAAAAGATGTAAC
AAGAAAGATGCTGGTGGTATACGTGTGCAGCAGTTAATGAAGCTGGAGTGACTACATGTACACAAGA
TTAGACGTTACGGCAGCTCCAAACCAAACTCTTCCAGCTCCTAAGCAGTTACGGGTTACGACCAACATTC
AGCAAAATATTTAGCACTTAATGGGAAAGTTTTGAATGTAACAAGCTTTTAACCCAGAAGGAGAATTT
CAGCGTTTGGCAGCTCAATCTGGACTCTATGAAAGTGAAGAAGCTT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237870  
 Blue=ORF Red=Cloning site Green=Tag(s)

MDSNYQQSSAGQPINAKPSQTANAKPIRTPDHEIQGSKEALIQDLERLKCCKDTLLHNGNQRLTYEEK  
 MARRLLGPQNAAVFQAQDDSGAQDSQQHNSEHARLQVPTSQVRSRSTSRGDVNDQDAIQEKFYPPRFI  
 QVPENMSIDEGFRCRMDFKVSGLPAPDVSWYLNGRTVQSDDLHKMIVSEKGLHSLIFEVVRASDAGAYA  
 CVAKNRAGEATFTVQLDLAKEHKRAPMFIYKPKQSKKVLGSDSVKLECCQISAIPPPKLFWKRNEMVQF  
 NTDRIISLYQDNTGRVTLLIKDVNKKDAGWYTVSAVNEAGVTTCNTRLDVDTARPNQTLPAKQLRVRPTF  
 SKYLALNGKGLNVKQAFNPEGEFQRLAAQSGLYESEEL  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001300911

**ORF Size:** 1149 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).

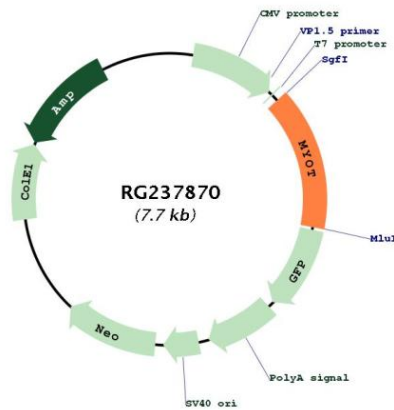
**RefSeq:** [NM\\_001300911.2](#)

**RefSeq Size:** 1939 bp

RefSeq ORF: 1152 bp  
 Locus ID: 9499  
 UniProt ID: [Q9UBF9](#)  
 Cytogenetics: 5q31.2  
 MW: 43.4 kDa

**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 RG237870