

## Product datasheet for **RC237870**

### 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:                     | Myc-DDK  |
| Symbol:                  | MYOT   |
| Synonyms:                | LGMD1; LGMD1A; MFM3; TTID; TTOD  |
| Vector:                  | pCMV6-Entry (PS100001)   |
| E. coli Selection:       | Kanamycin (25 ug/mL)   |
| Cell Selection:          | Neomycin   |
| ORF Nucleotide Sequence: | >RC237870 representing NM_001300911<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATCCAACATCAACAGTCTCAGCTGGCCAACCTATAAATGCAAAGCCATCCAACTGCAATG  
CTAAGCCCATACCAAGAAGCTCCTGATCATGAAATACAAGGATCAAAGAAGCTTTGATTCAGATTTGGA  
AAGAAAGCTGAAATGCAAGGACACCTTCTTCATAATGGAAATCAACGTCTAACATATGAAGAGAAGATG  
GCTCGCAGATTGCTAGGACCACAGAATGCAGCTGCTGTGTTTCAAGCTCAGGATGACAGTGGTGCACAAG  
ACTCGCAGCAACACAACCTCAGAACATGCGCGACTGCAAGTTCCTACATCACAAGTAAGAAGTAGATCAAC  
CTCAAGGGGAGATGTGAATGATCAGGATGCAATCCAGGAGAAATTTTACCACCAGTTCATTCAAGTG  
CCAGAGAACATGTCGATTGATGAAGGAAGATTCTGCAGAAATGGACTTCAAAGTGAGTGGACTGCCAGCTC  
CTGATGTGTCATGGTATCTAAATGGAAGAAGAGTTCAATCAGATGATTTGCACAAAATGATAGTGTCTGA  
GAAGGGTCTTCATTCACCTCATCTTTGAAGTAGTCAGAGCTTCAGATGCAGGGCTTATGCATGTGTTGCC  
AAGAATAGAGCAGGAGAAGCCACCTTCACTGTGCAGCTGGATGTCCTTGCAAAAGAACAATAAAGAGCAC  
CAATGTTTATCTACAAACCACAGAGCAAAAAGTTTTAGAGGGAGATTCAAGTAACTAGAAATGCCAGAT  
CTCGGCTATACCTCCACCAAGCTTTTCTGAAAAGAAATAATGAAATGGTACAATTCAACACTGACCGGA  
ATAAGCTTATATCAAGATAACACTGGAAGAGTTACTTTACTGATAAAAAGATGTAACAAGAAGATGCTG  
GGTGGTATACTGTGTCAGCAGTTAATGAAGCTGGAGTGACTACATGTAACACAAGATTAGACGTTACGGC  
ACGTCCAAACCAACTCTCCAGCTCCTAAGCAGTTACGGGTTGACCAACATTCAGCAAAATATTTAGCA  
CTTAATGGGAAAGGTTTGAATGTAACAAGCTTTTAACCCAGAAGGAGAATTTACAGCTTTGGCAGCTC  
AATCTGGACTCTATGAAAGTGAAGAATT

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC237870 representing NM\_001300911  
 Red=Cloning site Green=Tags(s)

MDSNYQQSSAGQPINAKPSQTANAKPIPRTPDHEIQGSKEALIQDLERLKKCKDTLLHNGNQRLTYEEKM  
 ARRLGPNAAAVFQAQDDSGAQDSQQHNSEHARLQVPTSQVRSRSTSRGDVNDQDAIQEKFYPPRFIQV  
 PENMSIDGRFCRMDFKVSGLPAPDVSWYLNGRVTQSDDLHKMIVSEKGLHSLIFEVVRASDAGAYACVA  
 KNRAGEATFTVQLDVLAKEHKRAPMFIYKPSKKVLEGDSVKLECGI SAIPPPKLFWKRRNEMVQFNTDR  
 ISLYQDNTGRVTLLIKDVNKKDAGWYTVSAVNEAGVTTNTRLDVTPARNQTLPAKQLRVRPTFSKYLA  
 LNGKGLNVKQAFNPEGEFQRLAAQSGLYESEEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

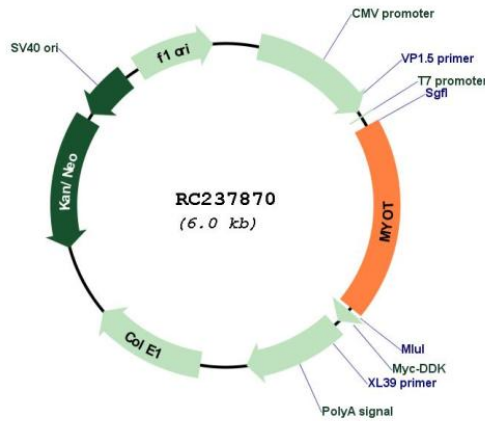
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001300911

|                               |   |
|-------------------------------|---|
| <b>ORF Size:</b>              | 1149 bp   |
| <b>OTI Disclaimer:</b>        | 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_001300911.2</a>  |
| <b>RefSeq Size:</b>           | 1939 bp   |
| <b>RefSeq ORF:</b>            | 1152 bp   |
| <b>Locus ID:</b>              | 9499  |
| <b>UniProt ID:</b>            | <a href="#">Q9UBF9</a>  |
| <b>Cytogenetics:</b>          | 5q31.2  |
| <b>MW:</b>                    | 43.4 kDa  |
| <b>Gene Summary:</b>          | 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] |