

Product datasheet for **RC202797**

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:	Myc-DDK
Symbol:	Myotilin
Synonyms:	LGMD1; LGMD1A; MFM3; TTID; TTOD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC202797 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTTTAACTACGAACGTCCAAAACACTTCATCCAGTCCCAAACCCATGTGGCTCCAGATTGCAGCCTC
 CTGGACCAGAAAACCTCCAGCTTCTCTAGCCAGACCAAACAGTCTTCCATTATCATCCAGCCCGCCAGTG
 TACAGAGCAAAGATTTTCTGCCTCCTCAACACTGAGCTCTCACATCACCATGTCTCTCTGCTTTCCCT
 GCTTCTCCCAGCAGCATGCTGGCTCCAACCCAGGCCAAAGGGTTACAACCACCTATAACCAGTCCCAG
 CCAGCTTCTCAGCTCCATATTACCATCACAGCCTGATTACAATAGCAGTAAAAATCCCTTCCGCTATGGA
 TTCCAACATCAACAGTCTCAGCTGGCCAACCTATAAATGCAAAGCCATCCCAAATGCAAATGCTAAG
 CCCATACCAAGAACTCCTGATCATGAAATAACAAGGATCAAAGAAGCTTTGATTCAAGATTTGGAAAGAA
 AGCTGAAATGCAAGGACACCTTCTTCATAATGGAAATCAACGTCTAACATATGAAGAGAAGATGGCTCG
 CAGATTGTAGGACCACAGAATGCAGCTGCTGTGTTTCAAGCTCAGGATGACAGTGGTGCACAAGACTCG
 CAGCAACACAACCTCAGAACATGCGCGACTGCAAGTTCCTACATCAACAAGTAAGAAGTAGATCAACCTCAA
 GGGGAGATGTGAATGATCAGGATGCAATCCAGGAGAAATTTTACCACCACGTTTCATTCAAGTGCCAGA
 GAACATGTCGATTGATGAAGGAAGATTCTGCAGAAATGGACTTCAAAGTGAGTGGACTGCCAGCTCCTGAT
 GTGTCAATGGTATCTAAATGGAAGAACAGTTCAATCAGATGATTTGCACAAAATGATAGTGTCTGAGAAGG
 GTCTTCATTCACTCATCTTTGAAGTAGTCAGAGCTTCAGATGCAGGGGCTTATGCATGTGTTGCCAAGAA
 TAGAGCAGGAGAAGCCACCTTCACTGTGCAGCTGGATGTCCTTGCAAAAAGAACATAAAAGAGCACCAATG
 TTTATCTACAAAACACAGAGCAAAAAAGTTTTAGAGGGAGATTCAGTGAAGTGAATGCAACTGACCGAATAAG
 CTATACCTCCACCAAAGCTTTTCTGAAAAGAAATAATGAAATGGTACAATTCACACTGACCGAATAAG
 CTATATCAAGATAAACACTGGAAGAGTTACTTTACTGATAAAAGATGTAACAAGAAAGATGCTGGGTGG
 TATACTGTGTCAGCAGTTAATGAAGCTGGAGTACTACATGTAACACAAGATTAGACGTTACGGCACGTC
 CAAACCAAACCTTCCAGCTCCTAAGCAGTTACGGGTTGACCAACATTCAGCAAATATTTAGCACTTAA
 TGGGAAAGGTTTGAATGTAACAAGCTTTTAAACCAGAAGGAGAATTTACAGCGTTTGGCAGCTCAATCT
 GGACTCTATGAAAGTGAAGAATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202797 protein sequence
 Red=Cloning site Green=Tags(s)

MFNYERPDKHFIQSQNPGSRLQPPGPETSSFSSTKQSSIIQPRQTEQRFSSASSTLSSHITMSSSAFP
 ASPQQHAGSNPGRVTTTYNQSPASFLSSILPSQPDYNSKIPSAMDSNYQQSSAGQPINAKPSQTANAK
 PIPRTPDHEIQGSKEALIQDLERKLCCKDTLLHNGNQRLTYEEKMARRLLGPQNAAVFQAQDDSGAQDS
 QQHNSEHARLQVPTSQVRSRSTSRGDVNDQDAIQEKFYPPRFIQVPENMSIDEGFRMDFKVSGLPAPD
 VSWYLNGRTVQSDDLHKMIVSEKGLHSLIFEVVRASDAGAYACVAKNRAGEATFTVQLDLVAKEHKRAPM
 FIYKPKQSKVLEGDSVKLEQISAIPPPPLFWKRNEMVQFNTDRISLYQDNTGRVTLLIKDVNKKDAGW
 YTVSAVNEAGVTTNTRLDVTRPNQTLPAKQLRVRPTFSKYLALNGKGLNVKQAFNPEGEFQRLAAQS
 GLYESEEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6153_a09.zip

Restriction Sites:

Sgfl-MluI

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006790.3](#)

RefSeq Size: 2290 bp

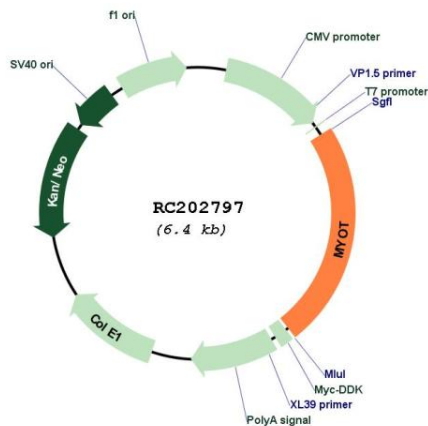
RefSeq ORF: 1497 bp

Locus ID: 9499

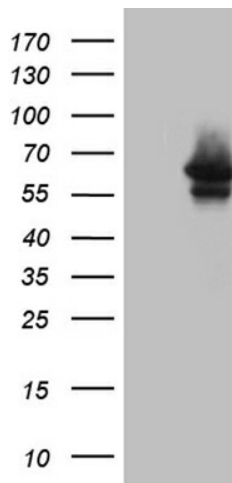
UniProt ID: [Q9UBF9](#)
Cytogenetics: 5q31.2
Domains: ig, IGc2, IG
MW: 55.4 kDa

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]

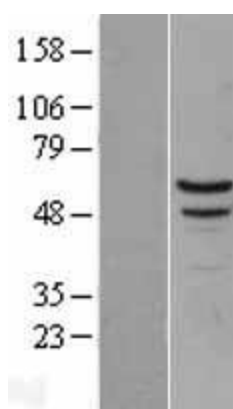
Product images:



Circular map for RC202797



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MYOT (Cat# RC202797, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MYOT (Cat# [TA809575])(1:2000). Positive lysates [LY402026] (100ug) and [LC402026] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402026]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202797 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).