

Product datasheet for **RG227183**

Myotilin (MYOT) (NM_001135940) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myotilin (MYOT) (NM_001135940) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MYOT
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:

>RG227183 representing NM_001135940
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTTTAACTACGAACGTCCAAAACACTTCATCCAGTCCCAAACCCATGTGGCTCCAGATTGCAGCCTC
 CTGGACCAGAAACCTCCAGCTTCTCTAGCCAGACCAAACAGTCTTCCATTATCATCCAGCCCGCCAGTG
 TACAGAGCAAAGATTTTCTGCCTCCTCAACACTGAGCTCTCACATCACCATGTCTCCTCTGCTTTCCCT
 GCTTCTCCCAGCAGCATGCTGGCTCCAACCCAGGCCAAAGGGTTACAACCACCTATAACCAGTCCCAG
 CCAGCTTCTCAGCTCCATATTACCATCACAGCCTGATTACAATAGCAGTAAAAATCCCTTCCGCTATGGA
 TTCCAATATCAACAGTCTCAGCTGGCCAACCTATAAATGCAAAGCCATCCCAAAGTCAAATGCTAAG
 CCCATACCAAGAAGTCTGATCATGAAATACAAGGATCAAAGAAGCTTTGATTCAGATTTGGAAAGAA
 AGCTGAAATGCAAGGACACCTTCTTCATAATGGAAATCAACGTCTAACATATGAAGAGAAGATGGCTCG
 CAGATTGCTAGGACCACAGAATGCAGCTGCTGTGTTTCAAGCTCAGGATGACAGTGGTGCACAAGACTCG
 CAGCAACAACACTCAGAACATGCGCGACTGCAAGTTCCTACATCAACAAGTAAGAAGTAGATCAACCTCAA
 GGGGAGATGTGAATGATCAGGATGCAATCCAGGAGAAATTTTACCACCACGTTTCATTCAAGTGCCAGA
 GAACATGTCGATTGATGAAGGAAGATTCTGCAGAAATGGACTTCAAAGTGAGTGGACTGCCAGCTCCTGAT
 GTGTCAATGGTATCTAAATGGAAGAACAGTTCAATCAGATGATTTGCACAAAATGATAGTGTCTGAGAAGG
 GTCTTCATTCACCTCATCTTTGAAGTAGTCAGAGCTTCAGATGCAGGGGCTTATGCATGTGTTGCCAAGAA
 TAGAGCAGGAGAAGCCACCTTCACTGTGCAGCTGGATGTCCTTGCAAAAAGAACATAAAAGAGCACCAATG
 TTTATCTACAAACCACAGAGCAAAAAGTTTTAGAGGGAGATTCAGTGAAGTGAATGCAAACTGACCGAATAAG
 CTATACCTCCACAAAGCTTTTCTGAAAAGAAATAATGAAATGGTACAATTCACACTGACCGAATAAG
 CTTATATCAAGATAAACACTGGAAGAGTTACTTTACTGATAAAAGATGTAACAAGAAAGATGCTGGGTGG
 TATACTGTGTCAGCAGTTAATGAAGCTGGAGTACTACATGTAACACAAGATTAGACGTTACGGCACGTC
 CAAACCAAAGCTTCCAGCTCCTAAGCAGTTACGGGTTGACCAACATTCAGCAAATATTTAGCACTTAA
 TGGGAAAGGTTTGAATGTAACAAGCTTTTAAACCAGAAGGAGAATTTACGCGTTTGGCAGCTCAATCT
 GGACTCTATGAAAGTGAAGAAGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

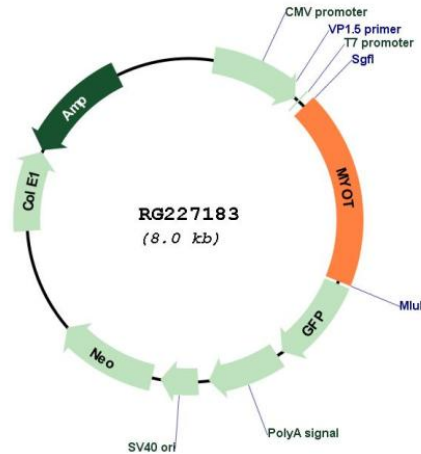
>RG227183 representing NM_001135940
 Red=Cloning site Green=Tags(s)

MFNYERPKEHFISQNPQSRQLPPGPETSSFSSTKQSSIIQPRQCTEQRFSSSTLSSHITMSSSAFP
 ASPQQHAGSNPQQRVTTTTYNQSPASFLSSILPSQPDYNSKIPSAMDSNYQQSSAGQPINAKPSQTANAK
 PIPRTPDHEIQGSKEALIQDLERLKKCKDTLLHNGNQRLTYEEKMARRLLGPQNAAAVFQAQDDSGAQDS
 QQHNSHARLQVPTSQVRSRSTSRGDVNDQDAIQEKFYPPRFIQVPENMSIDEGFRMDFKVSGLPAPD
 VSWYLNQRTVQSDDLHKMIVSEKGLHSLIFEVVRASDAGAYACVAKNRAGEATFTVQLDVLAKEHKRAPM
 FIYKPKSKVLEGDVSKLEQISAIPPPPLFWKRNEMVQFNTDRISLYQDNTGRVTLLIKDVNKKDAGW
 YTVSAVNEAGVTTNTRLDVTARPNTLPAPKQLRVRPTFSKYLALNGKGLNVKQAFNPEGEFQRLAAQS
 GLYESEEL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Plasmid Map:


ACCN:	NM_001135940
ORF Size:	1497 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_001135940.1](#), [NP_001129412.1](#)

RefSeq Size: 1808 bp

RefSeq ORF: 945 bp

Locus ID: 9499

UniProt ID: [Q9UBF9](#)

Cytogenetics: 5q31.2

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]