

Product datasheet for **RC202750**

myosin light chain 1 (MYL1) (NM_079422) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: myosin light chain 1 (MYL1) (NM_079422) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: myosin light chain 1
Synonyms: MLC1F; MLC3F; MYOFTA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202750 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCTTCAGTGCTGACCAGATTGCTGAATTC AAGGAGGCATTTCTCTGTTTGACAGAACAGGTGATT
CCAAGATCACCTTAAGCCAGGTCGGTGATGTCCTTCGAGCTCTGGGCACAAATCCACCAATGCAGAGGT
CAGGAAAGTTCTGGGAAACCCAGCAATGAAGAGCTGAATGCCAAGAAAATTGAGTTTGAACAATTTCTG
CCTATGATGCAAGCCATTTCCAACAACAAGGACCAGGCCACCTATGAAGACTTTGTTGAGGGTCTGCGTG
TCTTTGACAAGGAAGCAATGGCACAGTCATGGGTGCTGAACTCCGCCATGTTCTAGCCACCTGGGTGA
AAAGATGAAAGAGGAAGAAGTGAAGCCCTGATGGCAGGTCAAGAAGACTCCAATGGCTGCATCAACTAC
GAAGCTTTTGCAAGCACATCATGTCTATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202750 protein sequence
Red=Cloning site Green=Tags(s)
MSFSADQIAEFKEAFLLFDRTGDSKITLSQVGDVLRALGTNPTNAEVRKVLGNPSNEELNAKKIEFEQFL
PMMQAIISNNKDQATYEDFVEGLRVFDKEGNVTMGAELRHVLATLGEKMKEEVEALMAGQEDSNGCINY
EAFVKHIMSI

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

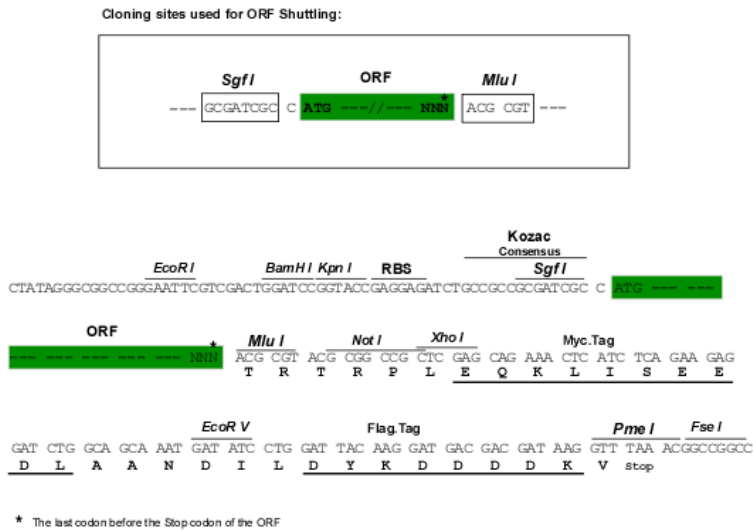
Chromatograms: https://cdn.origene.com/chromatograms/mk6414_g05.zip



[View online >](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_079422

ORF Size: 453 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_079422.3](#)

RefSeq Size: 862 bp

RefSeq ORF: 453 bp

Locus ID: 4632

UniProt ID: [P05976](#)

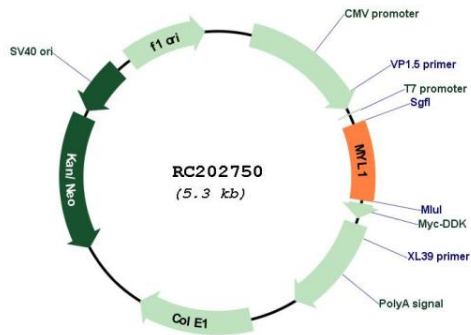
Cytogenetics: 2q34

Domains: EFh

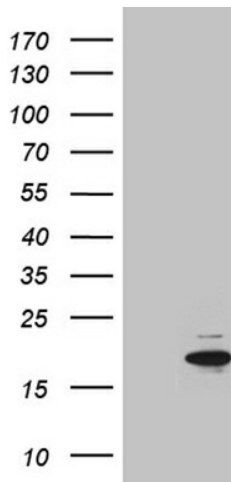
MW: 16.7 kDa

Gene Summary: Myosin is a hexameric ATPase cellular motor protein. It is composed of two heavy chains, two nonphosphorylatable alkali light chains, and two phosphorylatable regulatory light chains. This gene encodes a myosin alkali light chain expressed in fast skeletal muscle. Two transcript variants have been identified for this gene. [provided by RefSeq, Jul 2008]

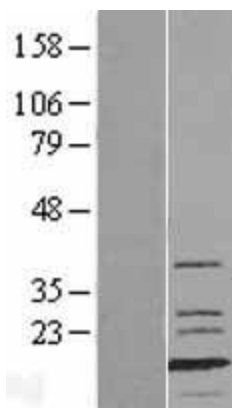
Product images:



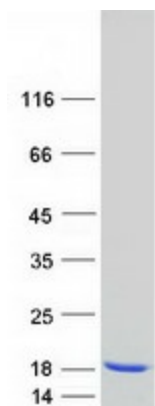
Circular map for RC202750



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MYL1 (Cat# RC202750, 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-MYL1 (Cat# [TA810681])(1:2000). Positive lysates [LY409202] (100ug) and [LC409202] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY409202]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202750 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MYL1 protein (Cat# [TP302750]). The protein was produced from HEK293T cells transfected with MYL1 cDNA clone (Cat# RC202750) using MegaTran 2.0 (Cat# [TT210002]).