

## Product datasheet for **RC202076**

### MLC1SA (MYL6B) (NM\_002475) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MLC1SA (MYL6B) (NM\_002475) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MLC1SA  
**Synonyms:** MLC1SA  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC202076 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCTCCCAAGAAGGATGTTCCCGTGAAGAAACCAGCAGGGCCCTCCATCTCCAAACCTGCTGCTAAGC  
 CAGCAGCAGCAGGGGCTCCTCCAGCCAAGACAAAGCTGAGCCAGCTGTCCCCAGGCCCTCAGAAAAC  
 CCAGGAGCCTCCAGTCGATCTCTCAAAGTGGTGATCGAGTTTAAACAAGGACCAGCTGGAGGAGTTCAAG  
 GAGGCCTTCGAGCTGTTTGACCGAGTGGGGATGGCAAGATCCTGTACAGCCAGTGTGGGACGTGATGA  
 GGGCCCTGGGCCAGAACCCACCAACGCCGAGGTGCTCAAGGTCCTGGGAAACCCAAGAGTGATGAGCT  
 GAAGTCGCGGCGTGTGGACTTTGAGACTTTCCTGCCATGCTCCAGGCAGTGGCCAAGAACCAGGCCAA  
 GGCACATATGAGGACTACTTGGAGGGTTTCGTGTGTTTGACAAGGAGGGGAACGGCAAAGTCATGGGAG  
 CAGAGCTCAGACATGTTCTCACCACCTTGAGAGAAGATGACTGAGGAGGAGGTGGAGACCGTTCTGGC  
 AGGACACGAGGACAGCAACGGCTGCATCAACTACGAGGCCTTCTTGAACACATCCTAAGCGTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202076 protein sequence  
 Red=Cloning site Green=Tags(s)

MPPKDVVVKPPAGPSSISKPAAKPAAAGAPPAKTKAEPVQPAPQKTQEPVVDLSKVVIEFNKDQLEEFK  
 EAFELFDRVGDGKILYSQCGDVMRALGQNPTNAEVLKVLGNPKSDELKSRVDFETFLPMLQAVAKNRGQ  
 GTYEDYLEGFRVFDKEGNGKVMGAELRHVLTTLGKMTTEEEVETVLAGHEDSNGCINYEAFLLKHILSV

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6304\\_e11.zip](https://cdn.origene.com/chromatograms/mk6304_e11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002475

**ORF Size:** 624 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.

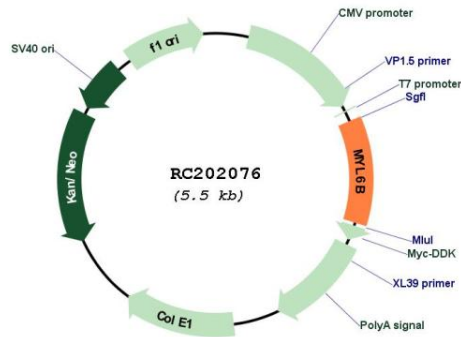
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_002475.5](#)

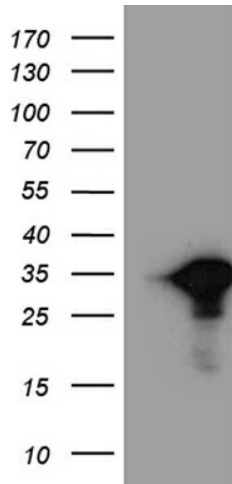
**RefSeq Size:** 1008 bp

RefSeq ORF:	627 bp
Locus ID:	140465
UniProt ID:	<a href="#">P14649</a>
Cytogenetics:	12q13.2
Domains:	EFh
Protein Pathways:	Vascular smooth muscle contraction
MW:	22.8 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 both slow-twitch skeletal muscle and in nonmuscle tissue. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2010]

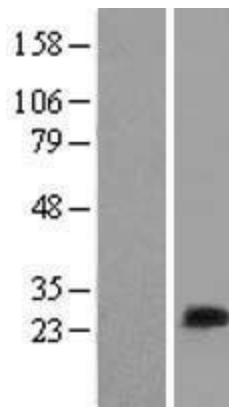
### Product images:



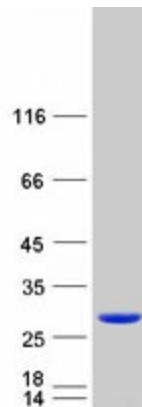
Circular map for RC202076



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MYL6B (Cat# RC202076, 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-MYL6B (Cat# [TA811146])(1:2000). Positive lysates [LY419310] (100ug) and [LC419310] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419310]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202076 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MYL6B protein (Cat# [TP302076]). The protein was produced from HEK293T cells transfected with MYL6B cDNA clone (Cat# RC202076) using MegaTran 2.0 (Cat# [TT210002]).