

## Product datasheet for **RG202076**

### 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:** TurboGFP  
**Symbol:** MLC1SA  
**Synonyms:** MLC1SA  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG202076 representing NM\_002475  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCTCCCAAGAAGGATGTTCCCGTGAAGAAACCAGCAGGGCCCTCCATCTCCAAACCTGCTGCTAAGC  
 CAGCAGCAGCAGGGGCTCCTCCAGCCAAGACCAAAGCTGAGCCAGCTGTCCCCAGGCCCTCAGAAAAC  
 CCAGGAGCCTCCAGTCGATCTCTCAAAGTGGTATCGAGTTTAAACAAGGACCAGCTGGAGGAGTTCAAG  
 GAGGCCTTCGAGCTGTTTGACCGAGTGGGGATGGCAAGATCCTGTACAGCCAGTGTGGGACGTGATGA  
 GGGCCCTGGGCCAGAACCCACCAACGCCGAGGTGCTCAAGGTCCTGGGAAACCCAAGAGTGATGAGCT  
 GAAGTCGCGGCGTGTGGACTTTGAGACTTTCCTGCCATGCTCCAGGCAGTGGCCAAGAACCAGGCCAA  
 GGCACATATGAGGACTACTTGGAGGGTTTCGTGTGTTTGACAAGGAGGGGAACGGCAAAGTCATGGGAG  
 CAGAGCTCAGACATGTTCTCACCACCCTTGAGAGAAGATGACTGAGGAGGAGGTGGAGACCGTTCTGGC  
 AGGACACGAGGACAGCAACGGCTGCATCAACTACGAGGCCTTCTTGAACACATCCTAAGCGTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG202076 representing NM\_002475  
 Red=Cloning site Green=Tags(s)

MPPKDVVVKKPAAGPSISKPAAKPAAAGAPPAKTKAEPVVPQAPQKTQEPVVDLSKVVIEFNKDQLEEFK  
 EAFELFDRVGDGKILYSQCGDVMRALGQNPTNAEVLKVLGNPKSDELKSRVDFETFLPMLQAVAKNRGQ  
 GTYEDYLEGFRVFDKEGNGKVMGAELRHVLTTLGKMTTEEEVETVLAGHEDSNGCINYEAFLLKHLISV

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



[View online »](#)

**Cloning Scheme:**

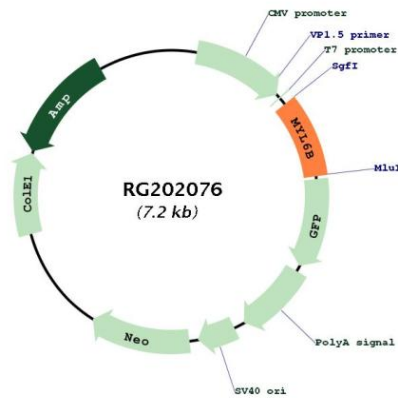

- ACCN:** NM\_002475
- ORF Size:** 624 bp
- OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each 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.
- RefSeq:** [NM\\_002475.2](#), [NP\\_002466.1](#)
- RefSeq Size:** 778 bp
- RefSeq ORF:** 627 bp
- Locus ID:** 140465
- UniProt ID:** [P14649](#)
- Cytogenetics:** 12q13.2

**Domains:** EFh

**Protein Pathways:** Vascular smooth muscle contraction

**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 RG202076