

## Product datasheet for RC206569

### Myosin (MYL4) (NM\_001002841) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Myosin (MYL4) (NM\_001002841) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Myosin  
**Synonyms:** ALC1; AMLC; GT1; PRO1957  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC206569 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTCCCAAGAAGCCTGAGCCTAAGAAGGAGGCAGCCAAGCCAGCTCCAGCTCCAGCTCCAGCCCCTG  
 CACCAGCCCCTGCCCGAGCTCCTGAGGCTCCCAAGGAACCTGCCTTTGACCCCAAGAGTGTAAAGATAGA  
 CTTCACTGCCGACCAGATTGAAGAGTTCAAAGAGGCCTTTTCATTGTTTGACCGGACCCCGACTGGAGAG  
 ATGAAGATCACCTACGGCCAGTGCAGGGATGACTGCGGGCCCTGGCCAGAACCCTACCAATGCCGAGG  
 TGCTGCGTGTGCTGGCAAGCCCAAGCCTGAAGAGATGAATGTCAAGATGCTGGACTTTGAGACGTTCTT  
 GCCCATCCTGCAGCACATTTCCCGCAACAAGGAGCAGGGCACCTATGAGGACTTCGTGGAGGGCCTGCGT  
 GTCTTTGACAAGGAGAGCAATGGCACGGTCATGGGTGCTGAGCTTCGGCACGTCCTTGCCACCCTGGGAG  
 AGAAGATGACTGAGGCTGAAGTGGAGCAGCTGTTAGCTGGCAAGAGGATGCCAATGGCTGCATCAATTA  
 TGAAGCCTTTGTCAAGCACATCATGTCAGGG

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC206569 protein sequence  
 Red=Cloning site Green=Tags(s)

MAPKKPEPKKEAAKPAPAPAPAPAPAPAPEAPKEPAFDPKSVKIDFTADQIEEFKEAFSLFDRPTTGE  
 MKITYGQCGDVLRALGQNPTNAEVLRLVKGPKPEEMNVKMLDFETFLPILQHISRNKEQGTYEDFVEGLR  
 VFDKESNGTVMGAELRHVLA TLGEKMTEAEVEQLLAGQEDANGCINYEAFVKHIMSG

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



[View online »](#)

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6328\\_d10.zip](https://cdn.origene.com/chromatograms/mk6328_d10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001002841

**ORF Size:** 591 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\\_001002841.1](#), [NP\\_001002841.1](#)

**RefSeq Size:** 934 bp

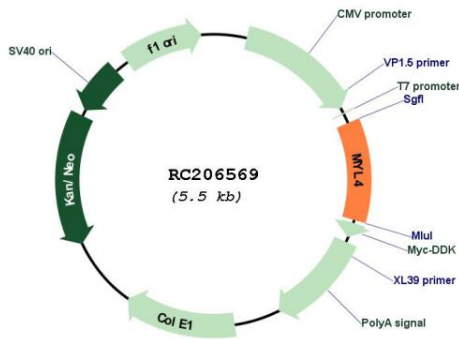
**RefSeq ORF:** 594 bp

**Locus ID:** 4635

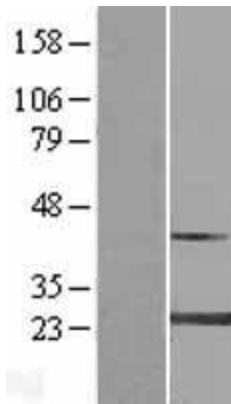
UniProt ID: [P12829](#)  
 Cytogenetics: 17q21.32  
 MW: 21.6 kDa

**Gene Summary:** Myosin is a hexameric ATPase cellular motor protein. It is composed of two myosin heavy chains, two nonphosphorylatable myosin alkali light chains, and two phosphorylatable myosin regulatory light chains. This gene encodes a myosin alkali light chain that is found in embryonic muscle and adult atria. Two alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

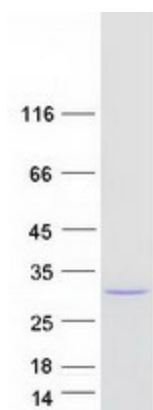
**Product images:**



Circular map for RC206569



Western blot validation of overexpression lysate (Cat# [LY419311]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC213170] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MYL4 protein (Cat# [TP306569]). The protein was produced from HEK293T cells transfected with MYL4 cDNA clone (Cat# RC206569) using MegaTran 2.0 (Cat# [TT210002]).