

Product datasheet for RC213170

Myosin (MYL4) (NM_002476) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Myosin (MYL4) (NM_002476) 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>RC213170 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ATGGCTCCCAAGAAGCCTGAGCCTAAGAAGGAGGCAGCCAAGCCAGCTCCAGCTCCAGCTCCAGCCCCTG
CACCAGCCCCTGCCCCAGCTCCTGAGGCTCCCAAGGAACCTGCCTTTGACCCCAAGAGTGTAAAGATAGA
CTTCACTGCCGACCAGATTGAAGAGTTCAAAGAGGCCTTTTCATTGTTTGACCGGACCCCGACTGGAGAG
ATGAAGATCACCTACGGCCAGTGCGGGGATGTACTGCGGGCCCTGGGCCAGAACCCTACCAATGCCGAGG
TGCTGCGTGTGCTGGGCAAGCCCAAGCCTGAAGAGAGTGAATGTCAAGATGCTGGACTTTTGACCGCTGCTTTTGCCCACCATCCTGCAGCACATTTCCCGCAACAAGGAGCAGGGCACCTATGAGGACTTCGTGGAGGGCCTGCGT
GTCTTTGACAAGGAGAGCAATGGCACCGGTCATGGGTGCTGAGCTTCGGCACCCTTGCCACCCTGGGAG
AGAAGATGACTGAGGCTGAAATTGGAGCACGTTTTAGCTGGGCAAGAGGATGCCAATGGCTGCATCAATTA

TGAAGCCTTTGTCAAGCACATCATGTCAGGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213170 protein sequence

Red=Cloning site Green=Tags(s)

MAPKKPEPKKEAAKPAPAPAPAPAPAPAPAPAPEAPKEPAFDPKSVKIDFTADQIEEFKEAFSLFDRTPTGE MKITYGQCGDVLRALGQNPTNAEVLRVLGKPKPEEMNVKMLDFETFLPILQHISRNKEQGTYEDFVEGLR

 ${\tt VFDKESNGTVMGAELRHVLATLGEKMTEAEVEQLLAGQEDANGCINYEAFVKHIMSG}$

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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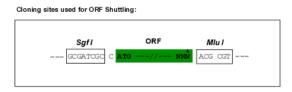


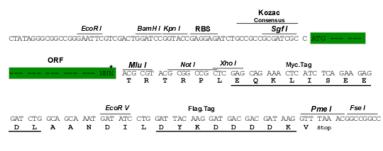
Chromatograms: https://cdn.origene.com/chromatograms/mk6328 d10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM 002476

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: <u>NM 002476.2</u>, <u>NP 002467.1</u>

RefSeq Size: 855 bp
RefSeq ORF: 594 bp
Locus ID: 4635



 UniProt ID:
 P12829

 Cytogenetics:
 17q21.32

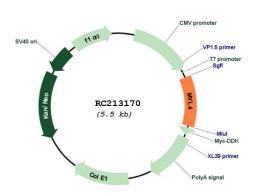
 MW:
 21.6 kDa

Gene Summary: Myosin is a hexameric ATPase cellular motor protein. It is composed of two myosin heavy

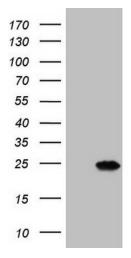
chains, two nonphosphorylatable myosin alkali light chains, and two phosphorylatable myosin regulatory light chains. This gene encodes a myosin alkali light chain that is found in embryonic muscle and adult atria. Two alternatively spliced transcript variants encoding the

same protein have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:

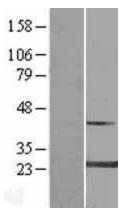


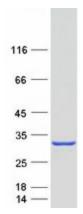
Circular map for RC213170



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MYL4 (Cat# RC213170, 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-MYL4(Cat# [TA807579]). Positive lysates [LY419311] (100ug) and [LC419311] (20ug) can be purchased separately from OriGene.







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# [TP313170]). The protein was produced from HEK293T cells transfected with MYL4 cDNA clone (Cat# RC213170) using MegaTran 2.0 (Cat# [TT210002]).