

Product datasheet for RC224925

OriGene Technologies, Inc.

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Myosin (MYL6) (NM_079423) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Myosin (MYL6) (NM_079423) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: Myosin

Synonyms: ESMLC; LC17; LC17-GI; LC17-NM; LC17A; LC17B; MLC-3; MLC1SM; MLC3SM

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC224925 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTGTGACTTCACCGAAGACCAGACCGCAGAGTTCAAGGAGGCCTTCCAGCTGTTTGACCGAACAGGTG
ATGGCAAGATCCTGTACAGCCAGTGTGGGGATGTGATGAGGGCCCTGGGCCAGAACCCTACCAACGCCGA
GGTGCTCAAGGTCCTGGGGAACCCCAAGAGTGATGAGATGAATGTGAAGGTGCTGGACTTTGAGCACTTT
CTGCCCATGCTGCAGACAGTGGCCAAGAACAAGGACCAGGGCACCTATGAGGATTATGTCGAAGGACTTC
GGGTGTTTGACAAGGAAGGAAGTAGGCACCGTCATGGGTGCTGAAATCCGGCATGTTCTTGTCACACTGGG
TGAGAAGATGACAGAGGAAGAAGTAGAGATGCTGGTGGCAGGGCATGAGGACAATGGTTGTATCAAC
TATGAAGAGCTCGTCCGCATGGTGCTGAATGGC

 ${\color{red} \textbf{ACGCGT}} \textbf{ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT}$

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC224925 protein sequence

Red=Cloning site Green=Tags(s)

MCDFTEDQTAEFKEAFQLFDRTGDGKILYSQCGDVMRALGQNPTNAEVLKVLGNPKSDEMNVKVLDFEHFLPMLQTVAKNKDQGTYEDYVEGLRVFDKEGNGTVMGAEIRHVLVTLGEKMTEEEVEMLVAGHEDSNGCIN

YEELVRMVLNG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

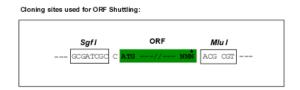
Chromatograms: https://cdn.origene.com/chromatograms/mk6453 f02.zip

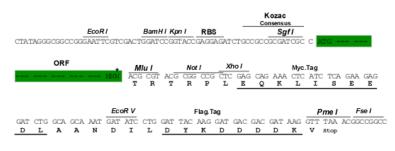




Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_079423

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: <u>NM 079423.4</u>

RefSeq Size: 782 bp
RefSeq ORF: 456 bp
Locus ID: 4637



UniProt ID: P60660

Cytogenetics: 12q13.2

Domains: EFh

Protein Families: Druggable Genome

Protein Pathways: Vascular smooth muscle contraction

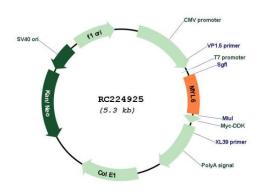
MW: 17 kDa

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

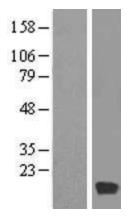
nonphosphorylatable alkali light chains, and two phosphorylatable regulatory light chains. This gene encodes a myosin alkali light chain that is expressed in smooth muscle and non-muscle tissues. Genomic sequences representing several pseudogenes have been described and two transcript variants encoding different isoforms have been identified for this gene.

[provided by RefSeq, Jul 2008]

Product images:

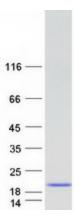


Circular map for RC224925



Western blot validation of overexpression lysate (Cat# [LY409203]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224925 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified MYL6 protein (Cat# [TP324925]). The protein was produced from HEK293T cells transfected with MYL6 cDNA clone (Cat# RC224925) using MegaTran 2.0 (Cat# [TT210002]).