OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC200708

Myosin (MYL6) (NM_021019) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Myosin (MYL6) (NM_021019) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Myosin
Synonyms:	ESMLC; LC17; LC17-GI; LC17-NM; LC17A; LC17B; MLC-3; MLC1SM; MLC3NM; MLC3SM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200708 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGTGACTTCACCGAAGACCAGACCGCAGAGTTCAAGGAGGCCTTCCAGCTGTTTGACCGAACAGGTG
ATGGCAAGATCCTGTACAGCCAGTGTGGGGATGTGATGAGGGCCCTGGGCCAGAACCCTACCAACGCCGA
GGTGCTCAAGGTCCTGGGGAACCCCAAGAGTGATGAGATGAATGTGAAGGTGCTGGACTTTGAGCACTTT
CTGCCCATGCTGCAGACAGTGGCCAAGAACAAGGACCAGGGCACCTATGAGGATTATGTCGAAGGACTTC
GGGTGTTTGACAAGGAAGGAAATGGCACCGTCATGGGTGCTGAAATCCGGCATGTTCTTGTCACACTGGG
TGAGAAGATGACAGAGGAAGAAGTAGAGATGCTGGTGGCAGGGCATGAGGACAGCAATGGTTGTATCAAC
TATGAAGCGTTTGTGAGGCATATCCTGTCGGGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200708 protein sequence
Red=Cloning site Green=Tags(s)

MCDFTEDQTAEFKEAFQLFDRTGDGKILYSQCGDVMRALGQNPTNAEVLKVLGNPKSDEMNVKVLDFEHF
LPMLQTVAKNKDQGTYEDYVEGLRVFDKEGNGTVMGAEIRHVLVTLGEKMTEEEVEMLVAGHEDSNGCIN
YEAFVRHILSG

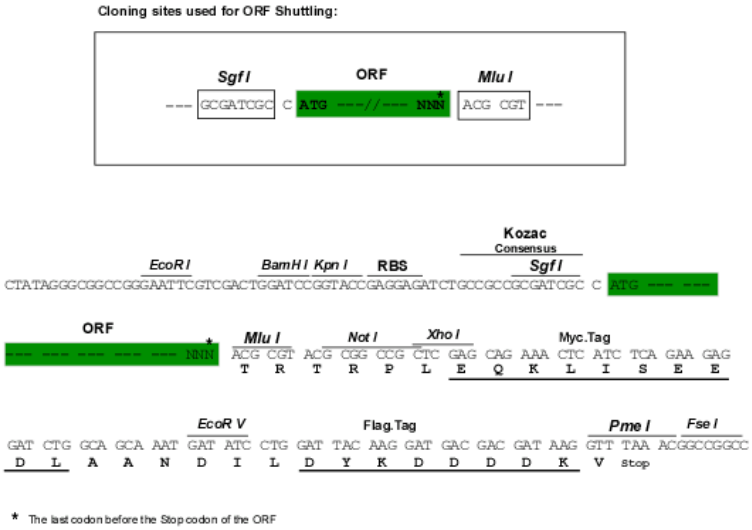
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6418_g05.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021019

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: NM_021019.5

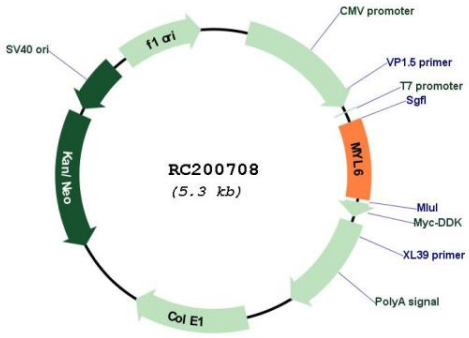
RefSeq Size: 827 bp

RefSeq ORF: 456 bp

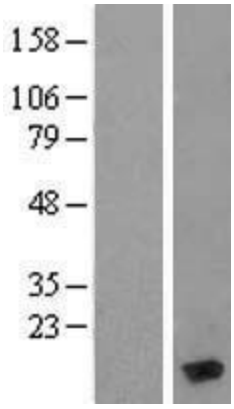
Locus ID: 4637

UniProt ID:	P60660
Cytogenetics:	12q13.2
Domains:	EFh
Protein Families:	Druggable Genome
Protein Pathways:	Vascular smooth muscle contraction
MW:	16.9 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]

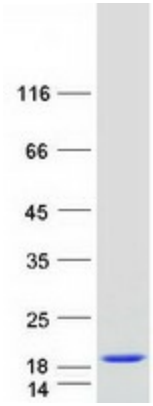
Product images:



Circular map for RC200708



Western blot validation of overexpression lysate (Cat# [LY412144]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200708 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MYL6 protein (Cat# [TP300708]). The protein was produced from HEK293T cells transfected with MYL6 cDNA clone (Cat# RC200708) using MegaTran 2.0 (Cat# [TT210002]).