

Product datasheet for RC211412

MYL9 (NM_006097) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MYL9 (NM_006097) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MYL9
Synonyms: LC20; MLC-2C; MLC2; MMIHS4; MRLC1; MYRL2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC211412 representing NM_006097
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCCAGCAAGCGGGCCAAAGCCAAGACCACCAAGAAGCGGCCACAGCGGGCCACATCCAATGTCTTCG
CAATGTTTGACCAGTCCCAGATCCAGGAGTTTAAGGAGGCTTCAACATGATTGACCAGAACCGTGATGG
CTTCATTGACAAGGAGGACCTGCACGACATGCTGGCCTCGCTGGGAAGAACCCACAGACGAATACCTG
GAGGGCATGATGAGCGAGGCCCGGGGCCATCAACTTACCATGTTCTCACCATGTTTGGGAGAAGC
TGAACGGCACGGACCCCGAGGATGTGATTCGCAACGCCTTGCCTGCTTCGACGAGGAAGCCTCAGGTTT
CATCCATGAGGACCACCTCCGGGAGCTGCTCACCACCATGGGTGACCGCTTCACAGATGAGGAAGTGGAC
GAGATGTACCGGGAGGCACCCATTGATAAGAAAGGCAACTTCAACTACGTGGAGTTCACCCGCATCTCA
AACATGGCGCCAAGGATAAAGACGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC211412 representing NM_006097
Red=Cloning site Green=Tags(s)

MSSKRAKAKTTKRPQRATSNVAMFDQSQIQEFKEAFNMIDQNRDGFIDKEDLHDMLASLGKNPTDEYL
EGMMSEAPGPINFMTFLTMFGEKLNQDPEDVIRNAFACFDEEASGFIHEDHLRELLTTMGDRFTDEEVD
EMYREAPIDKKGFNFYVEFTRILKHGAKDKDD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

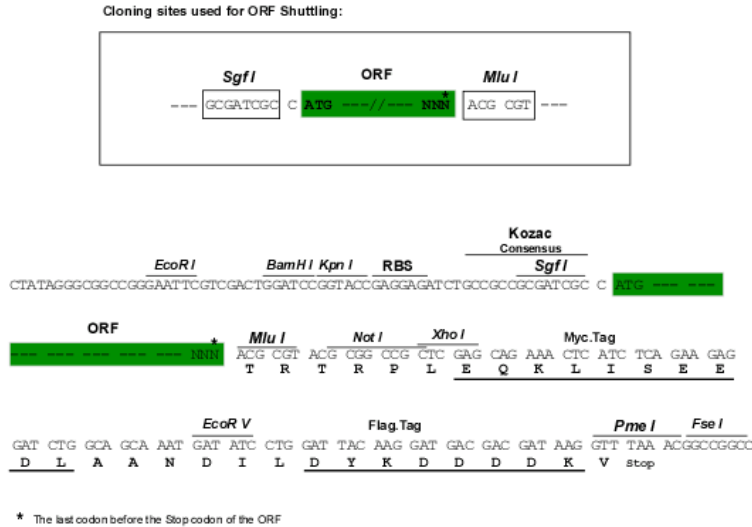
Chromatograms: https://cdn.origene.com/chromatograms/mk6482_a04.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006097

ORF Size: 516 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

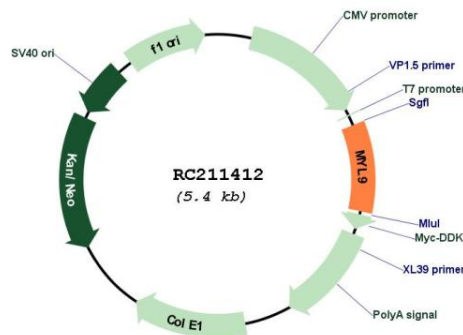
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.

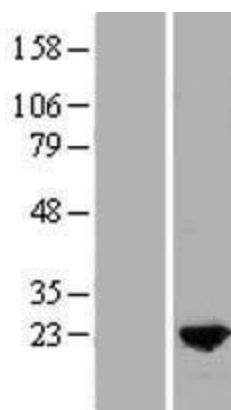
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

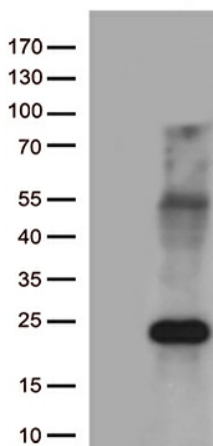
RefSeq:	<u>NM_006097.5</u>
RefSeq Size:	1212 bp
RefSeq ORF:	519 bp
Locus ID:	10398
UniProt ID:	<u>P24844</u>
Cytogenetics:	20q11.23
Domains:	EFh
Protein Pathways:	Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Tight junction, Vascular smooth muscle contraction
MW:	19.6 kDa
Gene Summary:	Myosin, a structural component of muscle, consists of two heavy chains and four light chains. The protein encoded by this gene is a myosin light chain that may regulate muscle contraction by modulating the ATPase activity of myosin heads. The encoded protein binds calcium and is activated by myosin light chain kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RC211412



Western blot validation of overexpression lysate (Cat# [LY416863]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211412 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MYL9 (Cat# RC211412, 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-MYL9 (Cat# [TA813394])(1:500).