

Product datasheet for RC236299

MRCL3 (MYL12A) (NM_001303049) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRCL3 (MYL12A) (NM_001303049) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MRCL3
Synonyms: HEL-S-24; MLC-2B; MLCB; MRCL3; MRLC3; MYL2B
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC236299 representing NM_001303049
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGACTTAACCACCACCATGTCGAGCAAAAGAACAAGACCAAGACCAAGAAGCGCCCTCAGCGTGCAA
 CATCCAATGTGTTTGCTATGTTTGACCAAGTACAGATTGAGGAGTTCAAAGAGGCCTTCAACATGATTGA
 TCAGAACAGAGATGGTTTCATCGACAAGGAAGATTGTCATGATATGCTTGCTTCATTGGGAAGAATCCA
 ACTGATGAGTATCTAGATGCCATGATGAATGAGGCTCCAGGCCCATCAATTCACCATGTTCTCACCA
 TGTGTTGGTGAGAAGTTAAATGGCACAGATCCTGAAGATGTCATCAGAAATGCCTTTGCTTGCTTTGATGA
 AGAAGCAACTGGCACCACAGGAAGATTACTTGAGAGAGCTGCTGACAACCATGGGGGATCGGTTTACA
 GATGAGGAAGTGATGAGCTGTACAGAGAAGCACCTATTGATAAAAAGGGGAATTTCAATTACATCGAGT
 TCACACGCATCCTGAAACATGGAGCCAAAGACAAAGATGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236299 representing NM_001303049
 Red=Cloning site Green=Tags(s)

MDLTTTSSKRTKTKTKRPQRATSNVFAFDQSQIQEFKEAFNMIDQNRDGFIDKEDLHDLASLGKNP
 TDEYLDAMMNEAPGPINFMTFLTMFGEKLNQDPEDVIRNAFACFDEEATGTIQEDYLRELLTTMGDRFT
 DEEVDELRYEAPIDKKGNFNYIEFTRILKHGAKDKDD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI


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Cloning Scheme:


ACCN: NM_001303049

ORF Size: 531 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_001303049.1](#), [NP_001289978.1](#)

RefSeq Size: 981 bp

RefSeq ORF: 534 bp

Locus ID: 10627

UniProt ID: [O14950](#)

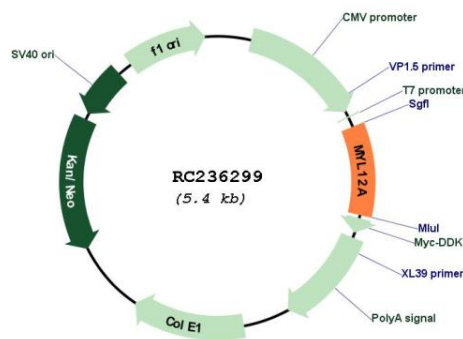
Cytogenetics: 18p11.31

Protein Pathways: Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton, Tight junction

MW: 20.9 kDa

Gene Summary: This gene encodes a nonsarcomeric myosin regulatory light chain. This protein is activated by phosphorylation and regulates smooth muscle and non-muscle cell contraction. This protein may also be involved in DNA damage repair by sequestering the transcriptional regulator apoptosis-antagonizing transcription factor (AATF)/Che-1 which functions as a repressor of p53-driven apoptosis. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 8.[provided by RefSeq, Dec 2014]

Product images:



Circular map for RC236299