

Product datasheet for **RG236299**

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: TurboGFP
Symbol: MRCL3
Synonyms: HEL-S-24; MLC-2B; MLCB; MRCL3; MRLC3; MYL2B
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG236299 representing NM_001303049.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGACTTAACCACCACCATGTCGAGCAAAAGAACAAGACCAAGACCAAGAAGCGCCCTCAGCGTGCA
ACATCCAATGTGTTTGCTATGTTTGACCAGTCACAGATTCAGGAGTTCAAAGAGGCCTTCAACATGATT
GATCAGAACAGAGATGGTTTCATCGACAAGGAAGATTTGCATGATATGCTTGCTTCATTGGGGAAGAAT
CCAACATGATGAGTATCTAGATGCCATGATGAATGAGGCTCCAGGCCCATCAATTCACCATGTTCCCTC
ACCATGTTTGGTGAAGTTAAATGGCACAGATCCTGAAGATGTCATCAGAAATGCCTTTGCTTGCTTT
GATGAAGAAGCAACTGGCACCACACAGGAAGATTACTTGAGAGAGCTGCTGACAACCATGGGGGATCGG
TTTACAGATGAGGAAGTGGATGAGCTGTACAGAGAAGCACCTATTGATAAAAAGGGGAATTTCAATTAC
ATCGAGTTCACACGCATCCTGAAACATGGAGCCAAAGACAAAGATGAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236299
Blue=ORF Red=Cloning site Green=Tag(s)

```
MDLTTTMSKRKTKTKRKRQRATSNVAFMFDQSQIQEFKEAFNMIDQNRDGFIDKEDLHMLASLGKN
PTDEYLDAMMNEAPGPINFMTFLTMFGEKLNQDPEDVIRNAFACFDEEATGTIQEDYLRELLTTMGDR
FTDEEVDELYREAPIDKKGNFNIEFTRILKHGAKDKDD
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSRDGGYSSVVDSSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: Sgfl-MluI



[View online >](#)

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).

RefSeq: [NM_001303049.1](#), [NP_001289978.1](#)

RefSeq Size: 981 bp

RefSeq ORF: 534 bp

Locus ID: 10627

UniProt ID: [O14950](#)

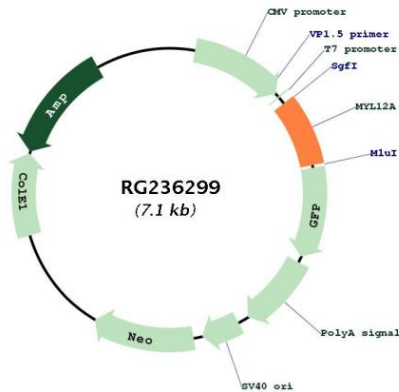
Cytogenetics: 18p11.31

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 RG236299