

Product datasheet for **RG236252**

MRCL3 (MYL12A) (NM_001303048) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRCL3 (MYL12A) (NM_001303048) 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: >RG236252 representing NM_001303048.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCGAGCAAAAGAACAAGACCAAGACCAAGAAGCGCCCTCAGCGTGCAACATCCAATGTGTTTGT
ATGTTTGACCAAGTACAGATTACAGGAGTTCAAAGAGGCCCTCAACATGATTGATCAGAACAGAGATGGT
TTCATCGACAAGGAAGATTTGCATGATATGCTTGCTTCATTGGGAAGAATCCAACATGATGAGTATCTA
GATGCCATGATGAATGAGGCTCCAGGCCCATCAATTTACCATGTTCTCACCATGTTTGGTGAGAAG
TTAAATGGCACAGATCCTGAAGATGTCATCAGAAATGCCTTTGCTTGCTTTGATGAAGAAGCAACTGGC
ACCATACAGGAAGATTACTTGAGAGAGCTGCTGACAACCATGGGGATCGGTTTACAGATGAGGAAGTG
GATGAGCTGTACAGAGAAGCACCTATTGATAAAAAGGGGAATTTCAATTACATCGAGTTCACACGCATC
CTGAAACATGGAGCCAAAGACAAAGATGAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236252
Blue=ORF Red=Cloning site Green=Tag(s)

```
MSSKRTKTKTKRPQRATSNVAFMFDQSQIQEFKEAFNMIDQNRDGFIDKEDLHMLASLGNPTDEYL
DAMMNEAPGPIINFMTFLTMFGEKLNQDTPEDVIRNAFACFDEEATGTIQEDYLRELLTTMGDRFTDEEV
DELYREAPIDKKGNFNIEFTRILKHGAKDKDD
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLVHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSSHMFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: SgfI-MluI



Cloning Scheme:


ACCN: NM_001303048

ORF Size: 513 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_001303048.1](#), [NP_001289977.1](#)

RefSeq Size: 974 bp

RefSeq ORF: 516 bp

Locus ID: 10627

UniProt ID: [P19105](#)

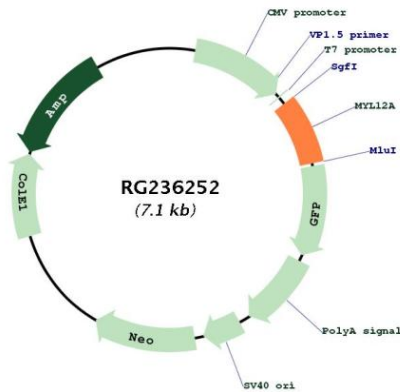
Cytogenetics: 18p11.31

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

MW: 20.2 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 RG236252