

Product datasheet for **RG207294**

MRCL3 (MYL12A) (NM_006471) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRCL3 (MYL12A) (NM_006471) 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: >RG207294 representing NM_006471
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCGAGCAAAGAACAAGACCAAGACCAAGAAGCGCCCTCAGCGTGCAACATCCAATGTGTTTGCTA
TGTTTGACCAGTCGCAGATTCAGGAGTTCAAAGAGGCCTCAACATGATTGATCAGAACAGAGATGGTTT
CATCGACAAGGAAGATTTGCATGATATGCTTGCTTCATTGGGGAAGAATCCAACCTGATGAGTATCTAGAT
GCCATGATGAATGAGGCTCCAGGCCCATCAATTTACCATGTTCTCACCATGTTTGGTGAGAAGTTAA
ATGGCACAGATCCTGAAGATGTCATCAGAAATGCCTTTGCTTTGATGAAGAAGCAACTGGCACCAT
ACAGGAAGATTACTTGAGAGAGCTGCTGACAACCATGGGGGATCGGTTTACAGATGAGGAAGTGGATGAG
CTGTACAGAGAAGCACCTATTGATAAAAAGGGGAATTTCAATTACATCGATTCACACGCATCCTGAAAC
ATGGAGCCAAAGACAAAGATGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG207294 representing NM_006471
Red=Cloning site Green=Tags(s)

MSSKRTKTKKKRPQRATSNVFMFDQSQIQEFKEAFNMIDQNRDGFIDKEDLHDMLASLGKNPTDEYLD
AMMNEAPGPINFMTFLTMFGEKLNKTDPEVIRNAFACFDEEATGTIQEDYLRELLTTMGDRFTDEEVDE
LYREAPIDKKGNFNIEFTRILKHGAKDKDD

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_006471

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).

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_006471.2](#), [NP_006462.1](#)

RefSeq Size: 1243 bp

RefSeq ORF: 516 bp

Locus ID: 10627

UniProt ID: [P19105](#)

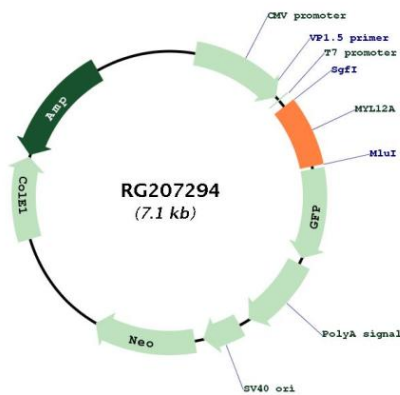
Cytogenetics: 18p11.31

Domains: EFh

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

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 RG207294