

## Product datasheet for **SC334145**

### MRCL3 (MYL12A) (NM\_001303047) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MRCL3 (MYL12A) (NM_001303047) Human Untagged Clone
Tag:	Tag Free
Symbol:	MYL12A
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)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001303047, the custom clone sequence may differ by one or more nucleotides

```
ATGTCGAGCAAAAAGAACAAGACCAAGACCAAGAAGCGCCCTCAGCGTGCAACATCCAATGTGTTTGCTA
TGTTTGACCAGTCACAGATTCAGGAGTTCAAAGAGGCCTTCAACATGATTGATCAGAACAGAGATGGTTT
CATCGACAAGGAAGATTTGCATGATATGCTTGCTTCATTGGGGAAGAATCCAACCTGATGAGTATCTAGAT
GCCATGATGAATGAGGCTCCAGGCCCATCAATTTACCATTGCTCCTCACCATGTTTGGTGAGAAGTTAA
ATGGCACAGATCCTGAAGATGTCATCAGAAATGCCTTTGCTTGCTTTGATGAAGAAGCAACTGGCACCAT
ACAGGAAGATTACTTGAGAGAGCTGCTGACAACCATGGGGATCGGTTTACAGATGAGGAAGTGGATGAG
CTGTACAGAGAAGCACCTATTGATAAAAAGGGGAATTTCAATTACATCGAGTTCACACGCATCCTGAAAC
ATGGAGCCAAAGACAAAGATGAC TGA
```

Restriction Sites:	SgfI-MluI
ACCN:	NM_001303047
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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).



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**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\\_001303047.1](#), [NP\\_001289976.1](#)

**RefSeq Size:** 1331 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

**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]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2 and 3 encode the same isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.