

# **Product datasheet for RC203122**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Myosin light chain 3 (MYL3) (NM\_000258) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Myosin light chain 3 (MYL3) (NM\_000258) Human Tagged ORF Clone

Tag: Myc-DDK

**Symbol:** Myosin light chain 3

Synonyms: CMH8; MLC-IV/sb; MLC1SB; MLC1V; VLC1; VLC1

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC203122 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATTTGTGAAGCACATCATGTCCAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203122 protein sequence

Red=Cloning site Green=Tags(s)

MAPKKPEPKKDDAKAAPKAAPAPAPPPEPERPKEVEFDASKIKIEFTPEQIEEFKEAFMLFDRTPKCEMKITYGQCGDVLRALGQNPTQAEVLRVLGKPRQEELNTKMMDFETFLPMLQHISKNKDTGTYEDFVEGLRVF

DKEGNGTVMGAELRHVLATLGERLTEDEVEKLMAGQEDSNGCINYEAFVKHIMSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



ORIGENE

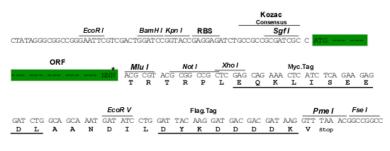
https://cdn.origene.com/chromatograms/mk6055 a07.zip **Chromatograms:** 

**Restriction Sites:** 

Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM 000258

**ORF Size:** 585 bp

**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:** <u>NM 000258.3</u>

 RefSeq Size:
 942 bp

 RefSeq ORF:
 588 bp

 Locus ID:
 4634

 UniProt ID:
 P08590

 Cytogenetics:
 3p21.31

**Protein Families:** Druggable Genome

**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

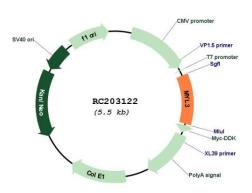
**MW:** 21.9 kDa

**Gene Summary:** MYL3 encodes myosin light chain 3, an alkali light chain also referred to in the literature as

both the ventricular isoform and the slow skeletal muscle isoform. Mutations in MYL3 have been identified as a cause of mid-left ventricular chamber type hypertrophic cardiomyopathy.

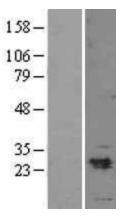
[provided by RefSeq, Jul 2008]

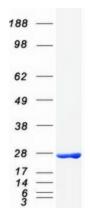
# **Product images:**



Circular map for RC203122







Western blot validation of overexpression lysate (Cat# [LY400098]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203122 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified MYL3 protein (Cat# [TP303122]). The protein was produced from HEK293T cells transfected with MYL3 cDNA clone (Cat# RC203122) using MegaTran 2.0 (Cat# [TT210002]).