

Product datasheet for **RG203122**

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: TurboGFP
Symbol: Myosin light chain 3
Synonyms: CMH8; MLC-IV/sb; MLC15B; MLC1V; VLC1; VLCI
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG203122 representing NM_000258
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCCCAAAAGCCAGAGCCCAAGAAGGATGATGCCAAGGCAGCCCCAAGGCAGCTCCAGCTCCCG
 CACCTCCCCTGAGCCTGAGCGCCCTAAGGAGGTCGAGTTTGTGCTTCCAAGATCAAGATTGAGTTCAC
 ACCTGAGCAGATTGAAGAGTTCAAGGAAGCCTTCATGCTGTTCCGACCGCACACCAAGTGTGAGATGAAG
 ATCACCTACGGGCAGTGTGGGATGTCTCGGGCGCTGGCCAGAACCCACACAGGCAGAAGTGTCTCC
 GTGCTCCTGGGGAAGCCAAGACAGGAAGAGCTCAATACCAAGATGATGGACTTTGAACTTCTGCCTAT
 GCTCCAGCACATTTCCAAGAACAAGGACACAGGCACCTATGAGGACTTCGTGGAGGGGCTGCGGGTCTTC
 GACAAGGAGGGCAATGGCACTGTGATGGGTGCTGAGCTTCGCCACGTGCTGGCCACGCTGGGTGAGAGGC
 TGACAGAAGACGAAGTGGAGAAGTTGATGGCTGGCAAGAGGACTCCAATGGCTGCATCAACTATGAAGC
 ATTTGTGAAGCACATCATGTCCAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

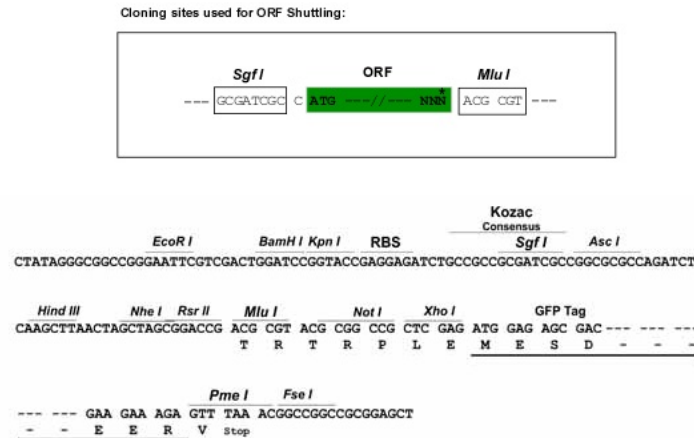
Protein Sequence: >RG203122 representing NM_000258
 Red=Cloning site Green=Tags(s)

MAPKKPEPKKDDAKAAPKAAPAPAPPPEPERPKEVEFDASKIKIEFTPEQIEEFKEAFMLFDRTPKCEMK
 IYQGCGDVLRALGQNPTQAEVLRVLGKPRQEELNKMMDFETFLPMLQHISKNKDTGTYYEDFVEGLRVF
 DKEGNGTVMGAELRHVLA TLGERL TEDEVEKLMAGQEDSNGCINYEAFVKHIMSS

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:


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).

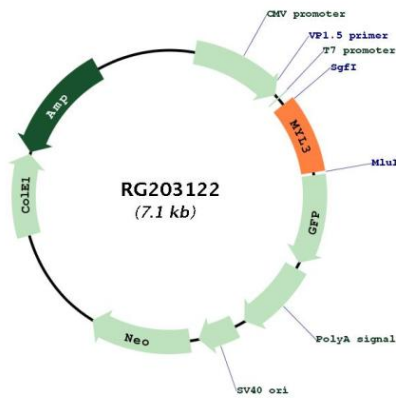
Reconstitution Method:

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: [NM_000258.3](#)

RefSeq Size:	872 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)
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 RG203122