

Product datasheet for **RG218098**

myosin heavy chain 3 (MYH3) (NM_002470) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | myosin heavy chain 3 (MYH3) (NM_002470) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | myosin heavy chain 3 |
| Synonyms: | CPSFS1A; CPSFS1B; CPSKF1A; CPSKF1B; DA2A; DA2B; DA2B3; DA8; HEMHC; MYHC-EMB; MYHSE1; SMHCE |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >RG218098 representing NM_002470 Red=Cloning site Blue=ORF Green=Tags(s) |

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GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG218098 representing NM_002470
Red=Cloning site Green=Tags(s)

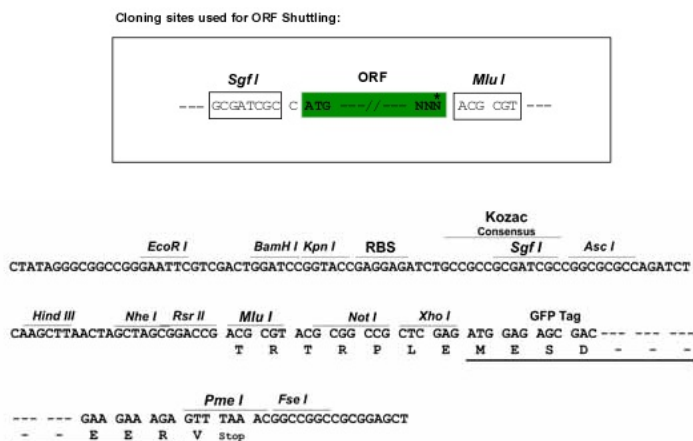
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TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_002470

ORF Size: 5820 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_002470.1](#), [NP_002461.1](#)

RefSeq Size: 6032 bp

RefSeq ORF: 5823 bp

Locus ID: 4621

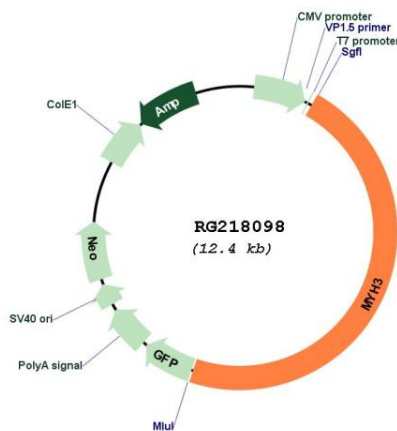
UniProt ID: [P11055](#)

Cytogenetics: 17p13.1

Protein Pathways: Tight junction, Viral myocarditis

Gene Summary: Myosin is a major contractile protein which converts chemical energy into mechanical energy through the hydrolysis of ATP. Myosin is a hexameric protein composed of a pair of myosin heavy chains (MYH) and two pairs of nonidentical light chains. This gene is a member of the MYH family and encodes a protein with an IQ domain and a myosin head-like domain. Mutations in this gene have been associated with two congenital contracture (arthrogryposis) syndromes, Freeman-Sheldon syndrome and Sheldon-Hall syndrome. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG218098