

Product datasheet for **MG224870**

Sym (NM_207663) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Sym (NM_207663) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Sym |
| Synonyms: | 4930412K21Rik; AI852401; Dmn; E130104F11; Syn; Synemin |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >MG224870 representing NM_207663 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTCCTGGCGGCTGCAGACGGGCTCTGAAAAGGCGGAGCTGCAGGAGCTCAACGCCCGGCTTTACG
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AATGAGAGGACTGTCATTCTGGGAAAGAAATTAGAAGCGCAAGCCACTAAAGAACAAGAAAGGGACAGAT
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GAAGAAAGTGCTCTTCTTATCTAGACAATGAAGAGGAGGAGGAGGAGGGCGAAGGGTGGTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224870 representing NM_207663
 Red=Cloning site Green=Tags(s)

MLSWRLQTGSEKAEQLNARLYDYVCRVRELERENLLLEELRSRLSREDRWAEDQALYAEARS LRQQ
 LDELNWTALAEGERDALRRELELQREGVEAGTARSRLDAELGAQRRELEALGARAAL EALLGRLETE
 RRDLDAAHERQVRDLRARAASLTMHFRARATSPAAPPRLRDVHDSYALLVAESWRESVQLYEDEVRELE
 QALRRGQESRLQAEDEARLCAQEADALRNQALELEQLRARLEDELLRMREEYGMQAEERQRVIDSLEDEK
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 SSRANLRPVTPTHGFLRNTDAQMKTLPHRSKVEGTGDTHARRATESVITRESYRGHQGHVAA GAVSSTPS
 NERTVILGKKLEAQATKEQERDRSGVIRIKPEEKMFDSKEKASEERNLRWEELTKLDRDARKRESRHLRD
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 LQSDSTTETIAESIVTTILKQFTQSPGAE EATSFPD TKVTVYDRKEFPD GKGTKTEIVVESKLTDVV DV
 SDEAGLDYLLSKDVKEVGLK GKSTETMIGEMINLGLKGREGRAKVVNVEIVEE PMSYIGGKIDFSTPFQ
 VEEVDDVSPSPKGFVEEEDGEGETHMAFSMRPHQTKQPQGTIPHVEEVTEAGDSEGEQSYFVSTPDEYPG
 GHDREDDGSVYGQIHIEEESTIRYSWQDEIAQGTWRRKMRGDVGG EKPVKVLEVPALSLGGAIGSAHLKE
 EASGELRAEPTVIEKEIKIPHEFHTSIKGVFSSEPRHQLVEVIGQLEETLPERMKEEL SALT RQSQGESG
 SVSVDVKVQSAAGGSVTLMAEVNLSQTV DADQLDLEQLSRDEAGEIERAVESV VRESLAKRSSPVRSP
 DREDGEEVPAGGILFKRWATRELYSPSGERDDAGQVSPSSDQRVTQGPVSATVEVT SPTGFVQSHVLEDV
 SQSVRHVKLGPTEMWRTEQVTFGGPTAQV VEMDLSDTRAIRSWTRDTGSEVEAHGVSHRGGWRIAHSRDE
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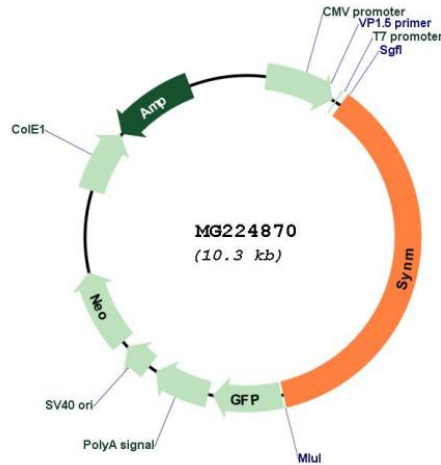
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_207663

ORF Size: 3777 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_207663.3](#), [NP_997546.2](#)

RefSeq Size: 6960 bp

RefSeq ORF: 3780 bp

Locus ID: 233335

UniProt ID: [Q70IV5](#)

Cytogenetics: 7 C

Gene Summary: Type-VI intermediate filament (IF) which plays an important cytoskeletal role within the muscle cell cytoskeleton. It forms heteropolymeric IFs with desmin and/or vimentin, and via its interaction with cytoskeletal proteins alpha-dystrobrevin, dystrophin, talin-1, utrophin and vinculin, is able to link these heteropolymeric IFs to adherens-type junctions, such as to the costameres, neuromuscular junctions, and myotendinous junctions within striated muscle cells (By similarity).[UniProtKB/Swiss-Prot Function]