

Product datasheet for MR224051

Sym (NM_201639) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sym (NM_201639) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Sym
Synonyms: 4930412K21Rik; AI852401; Dmn; E130104F11; Syn; Synemin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR224051 representing NM_201639
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGTCCTGGCGGCTGCAGACGGGCTCTGAAAAGCGGAGCTGCAGGAGCTCAACGCCCGGCTTTACG
 ACTACGTGTGCCGGTGCAGAGCTGGAGCGGAGAACCTGCTACTGGAGGAGGAGTTGCGCAGCCGGCT
 GAGCCGGGAGGACCGCTGGGCTGAGGATCAGGCACTCTACGCCGAGGAGGCGCGCAGCCTACGACAGCAG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >MR224051 representing NM_201639
 Red=Cloning site Green=Tags(s)

MLSWRLQTGSEKAEQLNARLYDYVCRVRELERENLLLEELRSRLSREDRWAEDQALYAEARSRLRQQ
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 RRDLDAHERQVRDLRARAASLTMHFRARATSPAAPPRLRDVHDSYALLVAESWRESVQLYEDEVRELE
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 EALTLAMADRLRDYQELLQVKTGLSLEVATYRALLEGESNPEILIWTEIENVPQEPNRTSYRYTNSVLQ
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 VPTWQETGDETEKPGPVVLSVGADISGSRMPGSEERSHTEKEIRFQGPVSGTAQVGGNFATEESVGSQTFV
 RSLQLGPKKEGFREEIQFIAPIDKVGWGEEDSEHTKVSLEERATSIQRIDIVPQRYLASKQMAPQTLFRD
 SEDMVMVEGSAGTIQATHNFTSDREILQNKENTFQRVISGSPDSDGTGAEVTANVSFRHIQIGPTE
 EEPSEYFVTRGPVSKTFVLDGSVASPGLVGGADGGSTPCRIALGPKETSFTFQMDLSDTRAIRSWTRDTG
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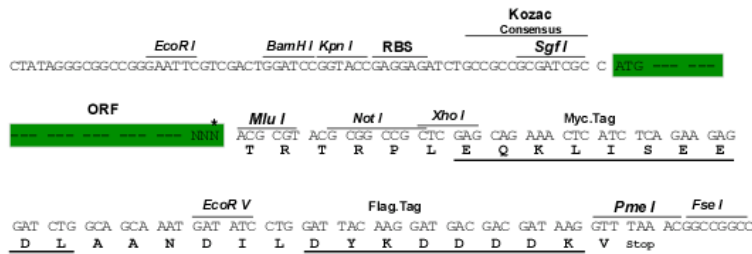
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

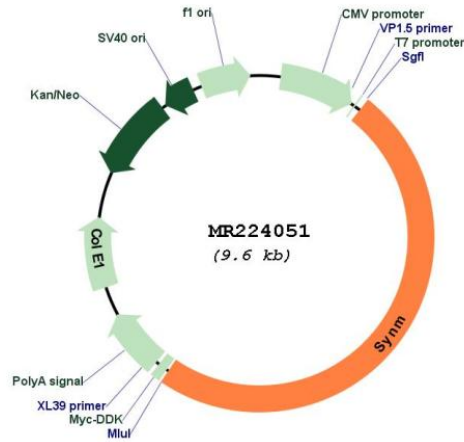
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_201639

ORF Size: 4683 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_201639.2](#), [NP_964001.2](#)

RefSeq Size: 7866 bp

RefSeq ORF: 4686 bp

Locus ID: 233335

UniProt ID: [Q70IV5](#)

Cytogenetics: 7 C

MW: 173.7 kDa

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]