

## Product datasheet for **MC224097**

### Sym (NM\_207663) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sym (NM\_207663) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Sym  
**Synonyms:** 4930412K21Rik; AI852401; Dmn; E130104F11; Syn; Synemin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224097 representing NM\_207663  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCTGTCCTGGCGGCTGCAGACGGCTCTGAAAAGCGGAGCTGCAGGAGCTCAACGCCCGGCTTTACG  
 ACTACGTGTGCCGGTGCAGAGCTGGAGCGGAGAACCTGCTACTGGAGGAGGAGTTGCGCAGCCGGCT  
 GAGCCGGGAGGACCGCTGGGCTGAGGATCAGGCACTCTACGCCGAGGAGGCGCGCAGCCTACGACAGCAG  
 CTAGATGAACTGAACTGGTCCACAGCCCTGGCCGAGGGCGAGCGCGACCGCTGCCGAGGGAACCTGCTGG  
 AGCTGCAGCGGGAGGGTGTGGAAGCCGGCACTGCCCGCAGCCGCCTGGATGCCGAGCTGGGAGCGCAACG  
 GCGGGAGCTAGAGGAGGCTCTGGGCGCGCGCCGCCCTCGAGGCGCTGCTGGGCGGCTGGAACTGAG  
 CGCCGCGACTTGGACGCTGCCCACGAACGCCAAGTGCAGATCTACGAGCCCGCGCTGCCAGCCTACCA  
 TGCACTTCCGAGCCCGCCACCAGCCCGCCGCGCCCGCCCGCGCTGCGGGACGTGCACGACAGCTA  
 CGCCCTGCTGGTGGCCGAGTCGTGGAGGGAGAGCGTGCAGCTGTACGAGGACGAGGTGCGCGAGCTGGAG  
 CAGGCGCTGCCCGCGGCAAGAGAGCCGGCTCCAGGCGGAGGACGAGGCGCGGCTGTGCCGACAGGAG  
 CAGACCGCTGCCGGAACCAGGCGCTGGAGTTGGAGCAGCTGCGCGGAGGCTGGAGGATGAGCTGCTGCG  
 GATGCGCGAGGAGTACGGGATGCAGGCGGAGGAGCGGAGAGAGTATTGACAGCCTGGAGGATGAGAAG  
 GAAGCCCTTACCTTGGCCATGGCTGACCGGCTGCGGGATTACCAGGAGCTCCTGCAGGTGAAGACTGGAC  
 TCAGCTTGGAGGTAGCCACCTACAGGCGCTTGTGGAAGGAGAAAAGCAATCCGGAGATATTGATCTGGAC  
 TGAGAACATTGAAAACGTGCCACAAGAGCCAGAAAACACATCCTATCGCTACACCAACTCAGTATTGCAG  
 AGGAAAAATGAGAAAAATCTCTTTCCAAGGCGAAAAACACCTTGGGCGAGCTGTAATCACAGCTCGGCCCT  
 CGTATTCTAACTGGCCAGGGCACCTTGACTCACAGACAACCACAGCTGTAGGAAGTGTGCCAGAAGGGG  
 TCTCCTGACCTCCCGCCATTCTCCTCAGCTACAACCTCAGGGCAGCAAAAGCCCTGGAGAAAACCATC  
 AGCAGCCGAGCAATTTAAGACCGTACGCCAACCCACGGCTTTCTAAGAACTGATGCTCAAATGA  
 AAACACTCCCCATAGATCCAAAGTCGAAGGCACGGGGGACACCCACGCACGGCGGGCTACAGAGTCTGT  
 TATTACCAGAGATCATACAGAGTCCACAGGGCCATGTGGCAGCAGGTGCCGTGAGCAGCACTCCGTCA  
 AATGAGAGGACTGCATTCTGGGAAAGAAATTAGAAGCGCAAGCCACTAAGAACAAGAAAGGGACAGAT



CAGGGGTCATCAGAATAAAGCCAGAAGAGAAAATGTTTGATTCTAAAGAGAAGGCTTCAGAGGAAAGAAA  
 CTTGAGGTGGGAAGAGCTAACCAAGTTAGATAGAGATGCCAGAAAAGAGAGAAAAGCCGGCATTGAGGGAT  
 GAGGCCAGAGAGAAGGAAGCACTGAAGGAGAGAAGTGTAAAAGAAAAGAGAGGTGCCCATCAGTCTAGAAG  
 TATCCCGGGGCAGCAGAGCAGAGGTGTCCACCATACACTTGCAGTCACCTGGAAGGAAGGACGTTAGCCA  
 CAGTGGGGGAAGAGAGGCAGAGACCAAAAGACAAAGGTTCCGGCTGGATACCCAGGACACTGCCAGCTCT  
 CTGCAAAGTGACTCAACGACAGAAAACATAGCCGAAAGCATTGTCACCACCATCCTTAAGCAGTTTACCC  
 AGTCTCCAGGTGCCGAGGAGGAGCCACTTCTTTCCCGACACAAAGGTCACCTTATGTGGACAGGAAAGA  
 GTTTCCTGGTGATGGGAAAACCAAGACAGAAATCGTTGTGGAGTCGAAGCTGACAGATGTTGTTGATGTT  
 TCTGATGAAGCAGGCCTGGACTACCTTCTAAGCAAGGATGTCAAGGAAGTAGGACTGAAGGGGAAGTCAA  
 CGGAGACGATGATCGGAGAGATGATCAACCTGGGTCTGAAAGGCAGGGAGGGGAGAGCTAAAGTCGTAAA  
 TGTGGAGATTGTGAAGAGCCCATGAGCTACATAGGTGGTGGGAAAATAGACTTTTCTACCCCTTTTCAG  
 GTAGAAGAAGTCGACGACGTGTCTCCAGCCCCAAGGGCTTTGTGGAGGAAGAGGATGGTGAAGGAGAGA  
 CCCACATGGCATTCTCAATGCGTCCACATCAGACCAACAGCCCCAGGGGACCATCCCTCACGTGGAAGA  
 AGTGACGGAGGCGGGGACTCAGAGGGGAGCAGAGCTATTTTGTGTCTACCCAGATGAGTACCCCGG  
 GGCATGACAGAGAAGATGATGGCTCAGTGTATGGGCAGATTCATATCGAGGAAGAGTCTACCATCCGGT  
 ACTCATGGCAAGACGAAAATTGCGCAGGGGACCTGGAGAAGGAAAATGAGAGGTGACGTGGGGGAGAGAA  
 GCCTGTGAAGGTCTGGAGGTCCAGCACTTTCCTGGGTGGTGTATTGGTTCTGCTCACTTGAAGGAA  
 GAAGCCAGTGGTGAACCTCCGTGCTGAACCCACAGTCATTGAGAAAAGAGATCAAAATACCCGATGAATTCC  
 ACACCTCCATCAAGGGTGTCTTCTCCAGTGAGCCCCGGCACCAGCTGGTGGAGGTGATCGGGCAGCTGGA  
 GGAAACATTGCCCGAGCGCATGAAGGAGGAGCTGTCTGCCCTGACCAGACAGAGTCAAGGAGAGTCAGGG  
 AGCGTTTCTGTGGACGTAAGAAAAGTCCAGAGCGCTGCTGGTGGTTCTGTGACTTTGATGGCTGAGGTCA  
 ACCTCTCACAGACTGTAGATGCTGATCAGTTGGACCTGGAGCAGTTGAGCAGAGATGAAGCTGGGAAAT  
 AGAGAGGGCTGTGGAGTCTGTGGTCAGAGAGAGCTTGGCCAAGCGCTCCAGCCCAGTGCCTAGAAGCCCA  
 GACAGGGGAAGATGGAGAGGAGGTGCCTGCTGGTGGCATTCTCTCAAGCGCTGGGCCACCGGGAGCTGT  
 ATAGCCATCTGGTGAGAGGGATGATGCTGCCAGGTCTCTCCAGCTCAGATCAGCGTGTATCCAGGG  
 CCCAGTGTGAGTACTGTGGAAGTGACCAGCCCAACGGGTTTTGTACAGTCTCATGTGCTGGAGGATGTG  
 AGCCAGTCTGTAAGGCATGTTAACTAGGTCCCCTGAAATGTGGAGGACAGAACAGGTGACCTTCGGAG  
 GACCCACCGCACAGGTGGTGGAGATGGATCTGAGCGACACGAGAGCGATCCGCAGCTGGACCCGAGACAC  
 AGGGTCGGAAGTGAAGCTCACGGCGTGTCTACCGTGGTGGCTGGAGAATTGCACACAGTAGGGATGAG  
 CGAGTGGCCAGCACTGGCTCTGGGGCTCCCCTGGGGATGCACACCAGGCCCTGGAGAGAAAGGCACGG  
 AGCAGGCTGGATTGACAAGACGGTACAGTTGCAGAGAATGGTAGACCAAGGTCGGTGGCCTCAGATGA  
 GAAGAAAAGTGGCTCTTTATCTAGACAATGAAGAGGAGGAGGAGGAGGGCCGAAGGGTGGTTTGA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-Mlul

**ACCN:**

NM\_207663

**Insert Size:**

3780 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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]

Transcript Variant: This variant (2) uses an alternate splice site in the 3' coding region, compared to variant 1, that results in a shorter protein (isoform M), compared to isoform H.