

Product datasheet for SC307663

OriGene Technologies, Inc.

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Leiomodin 3 (LMOD3) (NM_198271) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Leiomodin 3 (LMOD3) (NM_198271) Human Untagged Clone

Tag: Tag Free

Symbol: Leiomodin 3

Synonyms: NEM10

Vector: <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for NM_198271, the custom clone sequence may differ by one or more

nucleotides

ATGTCAGAGCACAGCAGAAATTCAGATCAAGAAGAACTTCTCGATGAGGAGATTAATGAA GATGAAATCTTGGCCAACTTGTCTGCTGAAGAACTGAAAGAACTGCAGTCGGAAATGGAA GTCATGGCCCCTGACCCCAGCCTTCCCGTGGGAATGATTCAGAAAGATCAAACTGACAAG CCACCGACAGGAAACTTCAATCATAAATCTCTTGTTGATTATATGTATTGGGAAAAGGCA TCCAGGCGCATGCTGGAAGAGGAACGAGTTCCTGTCACCTTTGTGAAATCCGAGGAAAAG ACTCAAGAAGAGCATGAAGAAATAGAAAAACGTAATAAAAATATGGCCCAGTATTTAAAA GAAAAGCTCAATAATGAAATAGTTGCAAATAAAAGAGAATCAAAGGGCAGCAGCAATATC CAAGAAACAGATGAAGAAGATGAAGAAGAAGAAGATGATGATGACGACGAAGGAGAA ATTAGAAATTGTGAGAACAACTGCCAGCAGGTAACTGACAAAGCATTCAAAGAACAGAGA GACAGACCAGAGGCCCAAGAACAAAGTGAGAAAAAAATATCGAAATTAGATCCTAAGAAG CTGGATGGGAGCTTGAGGAGAGTTAGGAAAAATGATCCTGACATGAAGGAACTCAACCTG AACAACATTGAAAACATCCCCAAAGAAATGTTACTGGACTTTGTCAATGCAATGAAGAAA AACAAGCACATCAAAACATTCAGTTTAGCCAATGTGGGTGCAGATGAGAATGTAGCATTT GCCTTGGCTAACATGTTGCGTGAAAATAGAAGCATCACCACTCTCAACATCGAGTCCAAT TTCATCACAGGTAAAGGGATTGTGGCCATCATGAGGTGTCTCCAGTTTAATGAGACGCTA ACTGAGCTTCGGTTTCACAATCAGAGGCACATGTTGGGTCACCATGCTGAAATGGAAATA GCCAGGCTTTTGAAGGCAAACAACACTCTCCTGAAGATGGGCTACCATTTTGAGCTTCCG GGTCCCAGAATGGTGGTCACTAATCTGCTCACCAGGAATCAGGATAAACAAAGGCAGAAA CGACAGGAAGAGCAAAAACAGCAGCAACTCAAGGAACAGAAGAAGCTGATAGCCATGTTA GAGAATGGGTTGGGGCTGCCCCCTGGGATGTGGGAGCTGTTGGGAGGACCCAAGCCAGAT TCCAGAATGCAGGAATTCTTCCAGCCACCGCCACCTCGGCCTCCCAACCCCCAAAATGTC CCCTTTAGTCAACGCAGTGAAATGATGAAAAAGCCATCGCAGGCCCCGAAGTACAGGACA GACCCTGACTCCTTCCGGGTGGTGAAGCTGAAGAGAATCCAGCGCAAATCTCGGATGCCG GAAGCCAGAGAACCACCCGAGAAAACCAACCTCAAAGATGTCATCAAAACGCTCAAGCCA GTGCCGAGAAACAGGCCACCCCATTGGTGGAAATCACTCCCAGAGATCAGCTGCTAAAC GACATTCGTCACAGCAGTGTCGCCTATCTTAAACCTGTGCAACTGCCAAAAGAACTGGCG TAA



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Restriction Sites: Please inquire

ACCN: NM_198271

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 198271.2</u>, <u>NP 938012.2</u>

 RefSeq Size:
 4067 bp

 RefSeq ORF:
 1683 bp

 Locus ID:
 56203

 UniProt ID:
 Q0VAK6

 Cytogenetics:
 3p14.1

Gene Summary: The protein encoded by this gene is a member of the leiomodin family of proteins. This

protein contains three actin-binding domains, a tropomyosin domain, a leucine-rich repeat domain, and a Wiskott-Aldrich syndrome protein homology 2 domain (WH2). Localization of this protein to the pointed ends of thin filaments has been observed, and there is evidence that this protein acts as a catalyst of actin nucleation, and is important to the organization of sarcomeric thin filaments in skeletal muscles. Mutations in this gene have been associated as one cause of Nemaline myopathy, as other genes have also been linked to this disorder. Nemaline myopathy is a disorder characterized by nonprogressive generalized muscle weakness and protein inclusions (nemaline bodies) in skeletal myofibers. Patients with mutations in this gene often present with a severe congenital form of the disorder. [provided

by RefSeq, Jan 2015]

Transcript Variant: This variant (1) represents the longer transcript. Both variants 1 and 2

encode the same protein.