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Product datasheet for RG223251

Leiomodin 3 (LMOD3) (NM_198271) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Leiomodin 3 (LMOD3) (NM_198271) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Leiomodin 3
Synonyms:	NEM10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG223251 representing NM_198271
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCAGAGCACAGCAGAAATTCAGATCAAGAAGAACTTCTCGATGAGGAGATTAATGAAGATGAAATCT
TGGCCAACTTGTCTGCTGAAGAACTGAAAGAACTGCAGTCGGAAATGGAAGTCATGGCCCCTGACCCCAG
CCTTCCCGTGGGAATGATTCAGAAAGATCAAACTGACAAGCCACCGACAGGAAACTTCAATCATAAATCT
CTTGTTGATTATATGTATTGGGAAAAGGCATCCAGGCGCATGCTGGAAGAGGAACGAGTTCCTGTCACCT
TTGTGAAATCCGAGGAAAAGACTCAAGAAGAGCATGAAGAAATAGAAAAACGTAATAAAAATATGGCCCA
GTATTTAAAAGAAAAGCTCAATAATGAAATAGTTGCAAATAAAAGAGAATCAAAGGGCAGCAGCAATATC
CAAGAAACAGATGAAGAAGATGAAGAAGAAGAAGATGATGATGATGACGACGAAGGAGAAGATGATGGTG
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CTGCCAGCAGGTAACTGACAAAGCATTCAAAGAACAGAGAGACAGACCAGAGGCCCAAGAACAAAGTGAG
AAAAAAATATCGAAATTAGATCCTAAGAAGTTAGCTCTAGACACCAGCTTTTTGAAGGTAAGTACAAGGC
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ACTCAACCTGAACAACATTGAAAACATCCCCAAAGAAATGTTACTGGACTTTGTCAATGCAATGAAGAAA
AACAAGCACATCAAAACATTCAGTTTAGCCAATGTGGGTGCAGATGAGAATGTAGCATTTGCCTTGGCTA
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AATGATGAAAAAGCCATCGCAGGCCCCGAAGTACAGGACAGACCCTGACTCCTTCCGGGTGGTGAAGCTG
AAGAGAATCCAGCGCAAATCTCGGATGCCGGAAGCCAGAGAACCACCCGAGAAAACCAACCTCAAAGATG
TCATCAAAACGCTCAAGCCAGTGCCGAGAAACAGGCCACCCCCATTGGTGGAAATCACTCCCAGAGATCA
GCTGCTAAACGACATTCGTCACAGCAGTGTCGCCTATCTTAAACCTGTGCAACTGCCAAAAGAACTGGCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

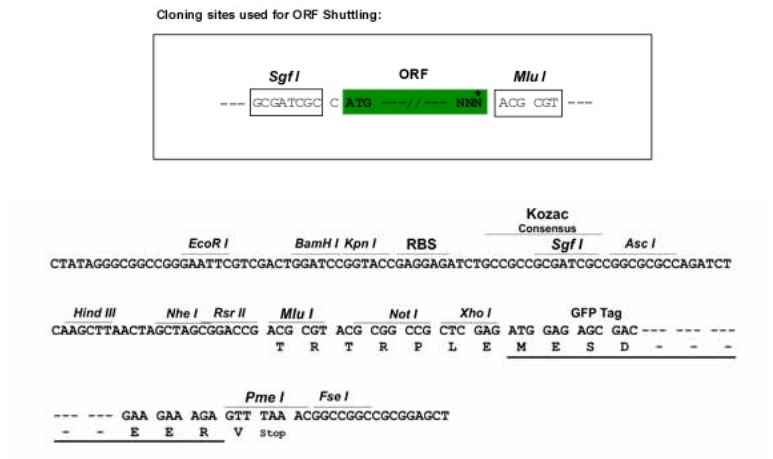
>RG223251 representing NM_198271
Red=Cloning site Green=Tags(s)

MSEHSRNSDQEELLDEEINEDEILANLSAEELKELQSEMEVMAPDPSLPVGMIQKDQTDKPPTGNFNHKS
LVDYMYWEKASRRMLEEERVPVTFVKSEEKTQEEHEEIEKRNKNMAQYLKEKLNNEIVANKRESKGSSNI
QETDEEDEEEEDDDDDDEGEDDGEESEETNREEEGKAKEQIRNCENNCQQVTDKAFKEQRDRPEAQEQSE
KKISKLDPKKLALDTSFLKVSTRPSGNQTDLDGSLRRVRKNDPDMKELNLNNIENIPKEMLLDFVNAMKK
NKHIKTFSLANVGADENVAFALANMLRENRSITTLNIESNFITGKGIVAIMRCLQFNETLTELRFHNQRH
MLGHHAEMEIARLLKANNTLLKMGYHFELPGPRMVVTNLLTRNQDKQRQKRQEEQKQQQLKEQKKLIAML
ENGLGLPPGMWELLGGPKPDSRMQEFFQPPPPRPPNPQNVPFSQRSEMMKKPSQAPKYRTDPDSFRVVKL
KRIQRKSRMPEAREPPEKTNLKDVIKTLKPVPRNRPPPLVEITPRDQLLNDIRHSSVAYLKPVQLPKELA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

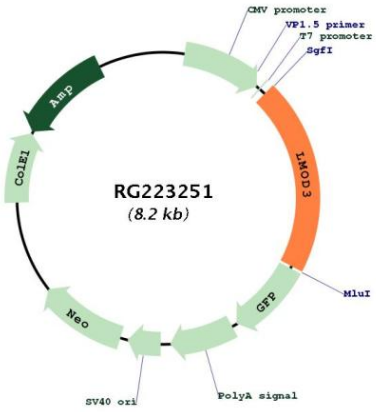


ACCN:	NM_198271
ORF Size:	1680 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_198271.5
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]

Product images:



Circular map for RG223251