OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC204860

Lin28a (NM_145833) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lin28a (NM_145833) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Lin28a
Synonyms:	AL024421; ENSMUSG00000070700; Gm10299; Lin-28; lin-28A; Lin28; Tex17
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

Fully Sequenced ORF:

>BC068304
GGGGCCCGGGGCCACGGGCTCAGCAGACGACCATGGGCTCGGTGTCCAACCAGCAGTTTGCAGGTGGCTG
CGCCAAGGCAGCGGAGAAGGCGCCAGAGGAGGCGCCGCCTGACGCGGCCCGAGCGGCAGACGAGCCGCAG
CTGCTGCACGGGGCCGGCATCTGTAAGTGGTTCAACGTGCGCATGGGGTTCGGCTTCCTGTCTATGACCG
CCCGCGCTGGGGTCGCGCTCGACCCCCCGGTGGACGTCTTTGTGCACCAGAGCAAGCTGCACATGGAAGG
GTTCCGAAGCCTCAAGGAGGGTGAGGCGGTGGAGTTCACCTTTAAGAAGTCTGCCAAGGGTCTGGAATCC
ATCCGTGTCACTGGCCCTGGTGGTGTGTTCTGTATTGGGAGTGAGCGGCGGCCAAAAGGGAAGAACATGC
AGAAGCGAAGATCCAAAGGAGACAGGTGCTACAACTGCGGTGGGCTAGACCATCATGCCAAGGAATGCAA
GCTGCCACCCCAGCCCAAGAAGTGCCACTTTTGCCAAAGCATCAACCATATGGTGGCCTCGTGTCCACTG
AAGGCCCAGCAGGGCCCCAGTTCTCAGGGAAAGCCTGCCTACTTCCGGGAGGATGAGGAAGAGATCCACA
GCCCTGCCCTGCTCCCAGAAGCCCAGAATTGAGGCCCAGGAGTCAGGGTTATTCTTTGGCTAATGGGGAG
TTTAAGGAAAGAGGCATCAATCTGCAGAGTGGAGAAAGTGGGGGTAAGGGTGGGTTGCGTGGGTAGCTTG
CACTGCCGTGTCTCAGGCCGGGGTTCCCAGTGTCACCCTGTCTTTCCTTGGAGGGAAGGAAAGGATGAGA
CAAAGGAACTCCTACCACACTCTATCTGAAAGCAAGTGAAGGCTTTTGTGGGGAGGAACCACCCTAGAAC
CCGAGGCTTTGCCAAGTGGCTGGGCTAGGGAAGTTCTTTTGTAGAAGGCTGTGTGATATTTCCCTTGCCA
GACGGGAAGCGAAACAAGTGTCAAACCAAGATTACTGAACCTACCCCTCCAGCTACTATGTTCTGGGGAA
GGGACTCCCAGGAGCAGGGCGAGGTTATTTTCACACCGTGCTTATTCATAACCCTGTCCTTTGGTGCTGT
GCTGGGAATGGTCTCTAGCAACGGGTTGTGATGACAGGCAAAGAGGGTGGTTGGGGAGACAACTGCTGAC
CTGCTGCCCACACCTCACTCCCAGCCCTTTCTGGGCCAATGGGATTTTAATTTATTTGCTCCCTTAGGTA
ACTGCACCTTGGGTCCCACTTTCTCCAGGATGCCAACTGCACTATCTACGTGCGAATGACGTATCTTGTG
CGTTTTTTTTTTTTTTTAATTTTTAAAATTTTTTTTCATCTTCTTAATATAAATAATGGGTTTGTATTTTT
GTATATTTTAATCTTAAGGCCCTCATTCCTGCACTGTGTTCTCAGGTACATGAGCAATCTCAGGGATAAT
AAGTCCGTAGCAGCTCCAGGTCTGCTCAGCAGGAATACTTTGTTTTGTTTTGTTTTGATCACCATGGAGA
CCAACCATTTGGAGTGCACAGCCTGTTGAACTACCTCATTTTTGCCGATTACAGCTGGCTTTTCTGCCAT
AGCGTCCTTGAAAAATGTGTCTCACGGGTTTCGATTGAGCTGCCCCAAGACTTGATCTGGATTTGGCAAA
ACATAGGACATCACTCTAAACAGGAAAGGGTGGTACAGAGACATTAAAAGGCTGGGCCAGGTGAAAGGCA
CAAGAGGAACTTTCCATACCAGATCCATCCTTTTGCCAGATTAGTGGAAGCCTGCCATGCACAGCAGGGT
GTGAGAGAGAGAGTGTGTATGTATGTGTGTGTGGATTTTTTTTTAATGCAAATTTATGAAGACGAGGTGG
GTTTTGTTTATTTGATTGCTTTTTGTGCTGGGGATGGAATCTTGGGCTTCATTTGTGCTAGGAAGTACAC
TGCCACTGAGTTATCCCAGTAAGAATGCAACTTAAGACCAGTACCCTTATTCCCACACTGTGCTGTCCAG
GCATGGGAACATGAGGCAGGGACTCAACTCCTTAGCCTTTCACAATCTTGGCTTTCTGAGAGACTCATGA
GTATGGGCCTCAGTGGCAAGTGTCCTGCCCTGCTGTAACGTGATGGTTGATAGCTAAAGGAAAGAGGGGG
TGGGGAGTTTCGTTTACATGCTTTGAGATCGCCACAAACCTACCTCACTGTGTTGAAACGGGACAAATGC
AATAGAACACATTGGGTGGTGTGTGTGTGTGTCTGATCTTGGTTTCTTGTCTCCCTCTCCCCCCAAATGC
TGCCCTCACCCCTAGTTAATTGTATTCGTCTGGCCTTTGTAGGACTTTTACTGTCTCTGAGTTGGTGATT
GCTAGGTGGCCTAGTTGTGTAAATATAAATGTGTTGGTCTTCATGTTCTTTTGGGGTTTTATTGTTTACA
AAACTTTTGTTGTATTGAGAGAAAAATAGCCAAAGCATCTTTGACAGAAAGCTCTGCACCAGACAACACC
ATCTGAAACTTAAATGTGCGGTCCTCTTCTCAAAGTGAACCTCTGGGACCATGGCTTATCCTTACCTGTT
CCTCCTGTGTCTCCCATTCTGGACCACAGTGACCTTCAGACAGCCCCTCTTCTCCCTCGTAAGAAAACTT
AGGCTCATTTACTTCTTTGAGCATCTCTGTAACTCTTGAAGGACCCATGTGAAAATTCTGAAGAAGCCAG
GAACCTCATTCTTTCCTTGTCCCTAACTCAGTGAAGAGTTTTGGTTGGTGGTTTTGAGACAGGGCCTCAT
TCTGTAGCTGGAGATAGAGAGCCTCGGGTTCCTGGCTCTCCTCCTGCCTTCTGCACAGAGTCCCCTGTGC
AGGGATTGCAGGTGCCGCTTCTCCCTGGCAAGACCATTTATTTCATGGTGTGATTCGCCTTTGGATGGAT
CAAACCAATGTAATCTGTCACCCTTAGGTCGAGAGAAGCAATTGTGGGGCCTTCCATGTAGAAAGTTGGA
ATCTGGACACCAGAAAAGGGACTATGAATGTACAGTGAGTCACTCAGGAACTTAATGCCGGTGCAAGAAA
CTTATGTCAAAGAGGCCACAAGATTGTTACTAGGAGACGGACGAATGTATCTCCATGTTTACTGCTAGAA
ACCAAAGCTTTGTGAGAAATCTTGAATTTATGGGGAGGGTGGGAAAGGGTGTACTTGTCTGTCCTTTCCC
CATCTCTTTCCTGAACTGCAGGAGACTAAGGCCCCCCACCCCCCGGGGCTTGGATGACCCCCACCCCTGC
CTGGGGTGTTTTATTTCCTAGTTGATTTTTACTGTACCCGGGCCCTTGTATTCCTATCGTATAATCATCC
TGTGACACATGCTGACTTTTCCTTCCCTTCTCTTCCCTGGGAAAATAAAGACTTATTGGTACTCCAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAA

Restriction Sites:	RsrII-NotI
ACCN:	NM_145833
Insert Size:	630 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:	BC068304, AAH68304
RefSeq Size:	3505 bp
RefSeq ORF:	630 bp
Locus ID:	83557
UniProt ID:	Q8K3Y3
Cytogenetics:	4 D2.3

Gene Summary: RNA-binding protein that inhibits processing of pre-let-7 miRNAs and regulates translation of mRNAs that control developmental timing, pluripotency and metabolism (PubMed:17473174, PubMed:18604195, PubMed:18566191, PubMed:18292307, PubMed:19703396, PubMed:23102813, PubMed:24209617). Seems to recognize a common structural G-quartet (G4) feature in its miRNA and mRNA targets (PubMed:26045559). 'Translational enhancer' that drives specific mRNAs to polysomes and increases the efficiency of protein synthesis. Its association with the translational machinery and target mRNAs results in an increased number of initiation events per molecule of mRNA and, indirectly, in mRNA stabilization. Binds IGF2 mRNA, MYOD1 mRNA, ARBP/36B4 ribosomal protein mRNA and its own mRNA. Essential for skeletal muscle differentiation program through the translational up-regulation of IGF2 expression (PubMed:17473174). Suppressor of microRNA (miRNA) biogenesis, including that of let-7, miR107, miR-143 and miR-200c. Specifically binds the miRNA precursors (pre-miRNAs), recognizing an 5'-GGAG-3' motif found in pre-miRNA terminal loop, and recruits TUT4 and TUT7 uridylyltransferaseS. This results in the terminal uridylation of target pre-miRNAs. Uridylated pre-miRNAs fail to be processed by Dicer and undergo degradation. The repression of let-7 expression is required for normal development and contributes to maintain the pluripotent state by preventing let-7-mediated differentiation of embryonic stem cells (PubMed:19703396, PubMed:28671666). Localized to the periendoplasmic reticulum area, binds to a large number of spliced mRNAs and inhibits the translation of mRNAs destined for the ER, reducing the synthesis of transmembrane proteins, ER or Golgi lumen proteins, and secretory proteins (PubMed:23102813). Binds to and enhances the translation of mRNAs for several metabolic enzymes, such as PFKP, PDHA1 or SDHA, increasing glycolysis and oxidative phosphorylation. Which, with the let-7 repression may enhance tissue repair in adult tissue (PubMed:24209617).[UniProtKB/Swiss-Prot Function]