

Product datasheet for **SC101048**

Lamin A (LMNA) (NM_170707) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lamin A (LMNA) (NM_170707) Human Untagged Clone
Tag:	Tag Free
Symbol:	Lamin A
Synonyms:	CDCD1; CDDC; CMD1A; CMT2B1; EMD2; FPL; FPLD; FPLD2; HGPS; IDC; LDP1; LFP; LGMD1B; LMN1; LMNC; LMNL1; MADA; PRO1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC101048 sequence for NM_170707 edited (data generated by NextGen Sequencing)

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ATGGAGACCCCGTCCCAGCGGCGGCCACCCGACGCGGGGCGCAGGCCAGCTCCACTCCG
CTGTGCCCCACCCGCATCACCCGGCTGCAGGAGAAGGAGGACCTGCAGGAGCTCAATGAT
CGCTTGGCGGTCTACATCGACCGTGTGCGCTCGCTGGAAACGGAGAACGCAGGGCTGCGC
CTTCGCATCACCGAGCTGAAGAGGTGGTCAGCCGCGAGGTGTCCGGCATCAAGGCCGCC
TACGAGGCCGAGCTCGGGGATGCCCGCAAGACCCTTGACTCAGTAGCCAAGGAGCGCGCC
CGCTGCAGCTGGAGCTGAGCAAAGTGCCTGAGGAGTTTAAGGAGCTGAAAGCGCGCAAT
ACCAAGAAGGAGGGTGACCTGATAGCTGCTCAGGCTCGGCTGAAGGACCTGGAGGCTCTG
CTGAACTCCAAGGAGGCCGCACTGAGCACTGCTCTCAGTGAGAAGCGCACGCTGGAGGGC
GAGCTGCATGATCTGCGGGGCCAGGTGGCCAAGCTTGAGGCAGCCCTAGGTGAGGCCAAG
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CGCAAGCTGGTGCCTCAGTGACTGTGGTTGAGGACGACGAGGATGAGGATGGAGATGAC
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AGCGGCTCAGGAGCCAGGTGGGCGGACCCATCTCCTCTGGCTCTTCTGCCTCCAGTGTC
ACGGTCACTCGCAGCTACCGCAGTGTGGGGGCGAGTGGGGGTGGCAGCTTCGGGGACAAT
CTGGTACCCGCTCCTACCTCCTGGGCAACTCCAGCCCCGAACCCAGAGCCCCCAGAAC
TGCAGCATCATGTAA
    
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Clone variation with respect to NM_170707.2
 861 t=>c;1338 t=>c

5' Read Nucleotide Sequence: >OriGene 5' read for NM_170707 unedited
 GGATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCGCACCTACA
 CCAGCCAAACCCANATCCCAGGTCGACAGCGCCCGCCAGATCCCACGCCTGCCAGG
 AGCAAGCCGAGAGCCAGCCGGCCGGCGCACTCCGACTCCGAGCAGTCTCTGTCTTCGAC
 CCGAGCCCCGCGCCCTTCCGGGACCCCTGCCCGCGGGCAGCGCTGCCAACCTGCCGGC
 CATGGAGACCCCGTCCCAGCGCGCGCCACCCGACGCGGGGCGCAGGCCAGCTCCAATCC
 GCTGTGCCCCACCCGCATCACCCGGCTGCAGGAGAAGGAGGACCTGCAGGAGCTCAATGA
 TCGCTTGGCGGTCTACATCGACCGTGTGCGCTCGCTGAAACGGAGAACGAGGGCTGCG
 CCTTCGCATCACCGAGTCTGAAGAGGTGGTCAGCCGCGAGGTGTCCGGCATCAAGGCCGC
 CTACGAGGCCGAGCTCGGGGATGCCCGCAAGACCCCTTGACTCAGTAGCCAAGGAGCGCGC
 CCGCCTGCAGCTGGAGCTGAGCAAAGTGCCTGAGGAGTTAAAGGAGCTGAAAGCGCGCAA
 TACCAAGAAGGAGGGTGACCTGATAGCTGCTCAGGCTCGGCTGAAGGACCTGGAGGCTCT
 GCTGAACCTCAAGAGGCCGCACTGAGCACTGCTCTCAGTGAGAAGCGCACGCTGGAGGGC
 GAGCTGCATGATCTCGGGGCCAGGTGGCCAAGCTTGAGGCAGCCCTAGGTGAGGCCAG
 AAAGCACTTCAGGATGAAATGCTGCGGGCGGTGGATGCTGANAACCAGCTGCACACATTG
 AGGAGGACTGGACTCCAGAAGACATCC

3' Read Nucleotide Sequence: >OriGene 3' read for NM_170707 unedited
 ACATTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGGCTTGTGTTTTTCCTTCGTATAAAACCA
 CTGTAGAAAATAACTTCTTTAGAAAAAAAATACAGAAGAAAAAACAAAGGGTTATT
 TTTCTTTGGCTTCAAGCCCCCTCCCATGAGGTGCAGGGCAGGGGGTGGGCATGAGGTGAG
 GAGGACGCAGGAAGCCTCCACCCACCCCTGCCTGGCAGTCCAGATTACATGATGCT
 GCAGTTCTGGGGCTCTGGGTTCGGGGCTGGAGTTGCCAGGAGGTAGGAGCGGGTGAC
 CAGATTGTCCCCGAAGCTGCCACCCCACTGCCCCACACTGCGGTAGCTGCGAGTGAC
 CGTGACACTGGAGGCAGAAGAGCCAGAGGAGATGGGTCCGCCACCTGGGCTCCTGAGCC
 GCTGGCAGATGCCTTGTGCGCAGGCTGCCCGCAGGTCCCGCACAGCACGGTGCGCGAGCG
 CAGGTTGTACTCAGCGGGGTCCCCGAGCTGCTGCAGTGGGAGCCGTGGTGGTGATGGAG
 CANGTCATCTCCATCCTCATCTCGTCCTCAACCACAGTCACTGAGCGCACCAAGCTT
 GCGCATGGCCACTTCTTCCCAAGTGGGAGTGATGAGAGCCGTACGAGGGCTGTTCCGCA
 CCCCCAGTTGTTCTGTGCCCTTACACCAAGTGGTAAGGGGGCTGTGGGTGGCCCAAC
 TCCTTGACGCCAGATCGTNACCACCTGCCACCCCTTCCAGGGTGAACCTTGGTGGGGAACG
 GTAATTACCAAGGATCATCTCCATTCCGCCCTTGATTTGGCCAATGCAATGGAATG
 GGCCTAATTGGACTTGTGGCCACCGACACAATTGGCTCTCCCGTCTCTTTCCG
 GCCCTCCCCCCCCATCGGTGCTGTGTATACACCCCTTGCGCCCTCACAGTCTCCCA
 TGTGCCCTTCCGGACCCTTCGCCACATTCTGTTTGGCCCCGCCACAGAAACAGTT
 TTCTCCCCCAG

Restriction Sites: NotI-NotI

ACCN: NM_170707

Insert Size: 2560 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:	<ol style="list-style-type: none">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_170707.1 , NP_733821.1
RefSeq Size:	3181 bp
RefSeq ORF:	1995 bp
Locus ID:	4000
UniProt ID:	P02545
Cytogenetics:	1q22
Protein Families:	Druggable Genome
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)
Gene Summary:	<p>The nuclear lamina consists of a two-dimensional matrix of proteins located next to the inner nuclear membrane. The lamin family of proteins make up the matrix and are highly conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. Vertebrate lamins consist of two types, A and B. Alternative splicing results in multiple transcript variants. Mutations in this gene lead to several diseases: Emery-Dreifuss muscular dystrophy, familial partial lipodystrophy, limb girdle muscular dystrophy, dilated cardiomyopathy, Charcot-Marie-Tooth disease, and Hutchinson-Gilford progeria syndrome. [provided by RefSeq, Apr 2012]</p> <p>Transcript Variant: This variant (1) encodes isoform A. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>