

# **Product datasheet for SC336430**

### 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

## Lamin A (LMNA) (NM\_001282624) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Lamin A (LMNA) (NM\_001282624) 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:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)



**Fully Sequenced ORF:** 

>SC336430 representing NM\_001282624.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCAGCCACTCCTGTGCTTGGGGAACCTGGAGGATGCAAGGGAAAGGACTGGCACTCTGCTGGCACAG CACCCGGCCTGGGGCAGGACACGGGCGAAGCCAGGGTCTCCCCTCAATACCAAGAAGGAGGGTGACCTG ATAGCTGCTCAGGCTCGACGACCTGGAGGCTCTGCTGAACTCCAAGGAGGCCGCACTGAGCACT GCTCTCAGTGAGAAGCGCACGCTGGAGGGCGAGCTGCATGATCTGCGGGGCCAGGTGGCCAAGCTTGAG GCAGCCCTAGGTGAGGCCAAGAAGCAACTTCAGGATGAGATGCTGCGGCGGGTGGATGCTGAGAACAGG CTGCAGACCATGAAGGAGGAACTGGACTTCCAGAAGAACATCTACAGTGAGGAGCTGCGTGAGACCAAG CGCCGTCATGAGACCCGACTGGTGGAGATTGACAATGGGAAGCAGCGTGAGTTTGAGAGCCGGCTGGCG GATGCGCTGCAGGAACTGCGGGCCCAGCATGAGGACCAGGTGGAGCAGTATAAGAAGGAGCTGGAGAAG ACTTATTCTGCCAAGCTGGACAATGCCAGGCAGTCTGCTGAGAGGAACAGCAACCTGGTGGGGGCTGCC CAGCTGGCAGCCAAGGAGGCGAAGCTTCGAGACCTGGAGGACTCACTGGCCCGTGAGCGGGACACCAGC CGGCGGCTGCTGGCGGAAAAGGAGCGGGAGATGCCGAGATGCGGGCAAGGATGCAGCAGCAGCTGGAC GAGTACCAGGAGCTTCTGGACATCAAGCTGGCCCTGGACATGGAGATCCACGCCTACCGCAAGCTCTTG GAGGGCGAGGAGGAGAGGCTACGCCTGTCCCCCAGCCCTACCTCGCAGCCCAGCCCTGGCCGTGCTTCC TCTCACTCATCCCAGACACAGGGTGGGGGCAGCGTCACCAAAAAGCGCAAACTGGAGTCCACTGAGAGC CGCAGCAGCTTCTCACAGCACGCACGCACTAGCGGGCGCGTGGCCGTGGAGGAGGTGGATGAGGAGGGC AAGTTTGTCCGGCTGCGCAACAAGTCCAATGAGGACCAGTCCATGGGCAATTGGCAGATCAAGCGCCAG AATGGAGATGATCCCTTGCTGACTTACCGGTTCCCACCAAAGTTCACCCTGAAGGCTGGGCAGGTGGTG ACGATCTGGGCTGCAGGAGCTGGGGCCCACCCACAGCCCCCTACCGACCTGGTGTGGAAGGCACAGAAC ACCTGGGGCTGCGGAACAGCCTGCGTACGGCTCTCATCAACTCCACTGGGGAAGAAGTGGCCATGCGC AAGCTGGTGCGCTCAGTGACTGTGGTTGAGGACGACGAGGATGAGGATGAGCATGACCTGCTCCATCAC CACCACGTGAGTGGTAGCCGCCGCTGA

ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul

ACCN: NM\_001282624

**Insert Size:** 1476 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.

### Lamin A (LMNA) (NM\_001282624) Human Untagged Clone - SC336430

**RefSeq:** NM 001282624.1

 RefSeq Size:
 1759 bp

 RefSeq ORF:
 1476 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)

**MW:** 55.8 kDa

**Gene Summary:** 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]

Transcript Variant: This variant (5) differs in both UTRs and has multiple differences in the coding region compared to variant 1. This variant encodes isoform E, which is shorter and has

distinct N- and C-termini compared to isoform prelamin A.