

#### **OriGene Technologies, Inc.**

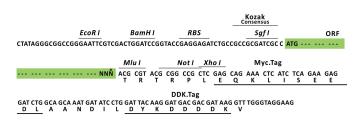
9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Product datasheet for RC204970L3

### Lamin A (LMNA) (NM\_170707) Human Tagged Lenti ORF Clone

## **Product data:**

| Product Type:                | Expression Plasmids  |
|------------------------------|--|
| Product Name:                | Lamin A (LMNA) (NM_170707) Human Tagged Lenti ORF Clone  |
| Tag:                         | Myc-DDK  |
| Symbol:                      | Lamin A  |
| Synonyms:                    | CDCD1; CDDC; CMD1A; CMT2B1; EMD2; FPL; FPLD; FPLD2; HGPS; IDC; LDP1; LFP; LGMD1B;<br>LMN1; LMNC; LMNL1; MADA; PRO1 |
| Mammalian Cell<br>Selection: | Puromycin  |
| Vector:                      | pLenti-C-Myc-DDK-P2A-Puro (PS100092)   |
| E. coli Selection:           | Chloramphenicol (34 ug/mL)   |
| ORF Nucleotide<br>Sequence:  | The ORF insert of this clone is exactly the same as(RC204970).   |
| <b>Restriction Sites:</b>    | Sgfl-Mlul  |
| Cloning Scheme:              | Cloning sites used for ORF Shuttling:  |



--- GCG ATC GCC ATG --- // --- NNN ACG CGT ---

\* The last codon before the Stop codon of the ORF.

ACCN: ORF Size: NM\_170707 1992 bp



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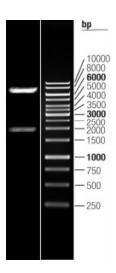
| of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore,<br>OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts<br>of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a<br>reduced cost. Please contact our customer care team at <u>custsupport@origene.com</u> or by<br>calling 301.340.3188 option 3 for pricing and delivery.The molecular sequence of this clone aligns with the gene accession number as a point of<br>reference only. However, individual transcript sequences of the same gene can differ through<br>naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This<br>clone is substantially in agreement with the reference, but a complete review of all prevailing<br>variants is recommended prior to use. More infoOTI Annotation:This clone was engineered to express the complete ORF with an expression tag. Expression<br>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<br>containing 10u go fransfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).Reconstitution Method:1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and ado 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly ortex the tube and advis spin (less than 5000xg) to concentrate the liquid<br>at the bottom.<br>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of<br>shipping when stored at -20°C.<br>The DNA is stable for at least one year from date of<br>shipping when stored at -20°C.<br>The DNA is stable for at least one year from date of<br>shipping when stored at -20°C.<br>The DNA is stable for at least one year from date of<br>shipping when stored |                     | amin A (LMNA) (NM_170707) Human Tagged Lenti ORF Clone – RC204970L3  |
|---|---------------------|--|
| reference only. However, individual transcript sequences of the same gene can differ through<br>naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This<br>clone is substantially in agreement with the reference, but a complete review of all prevailing<br>variants is recommended prior to use. <u>More info</u> OTI Annotation:This clone was engineered to express the complete ORF with an expression tag. Expression<br>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<br>containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).Reconstitution Method:1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and dad 100ul of sterile water to dissolve the DNA.<br>3. Sclose the suspended plasmid at -20°C. The DNA is stable for at least one year from date of<br>shipping when stored at -20°C.RefSeq:NM 170707.1<br>195 bpLocus ID:4000UniProt ID:P02545Cytogenetics:1q22Protein Families:Druggable GenomeProtein Families:Druggable GenomeProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy,<br>Hypertrophic cardiomyopathy (HCM)  | OTI Disclaimer:     | of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore,<br>OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts<br>of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a<br>reduced cost. Please contact our customer care team at <u>custsupport@origene.com</u> or by            |
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| containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).Reconstitution Method:1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid<br>at the bottom.<br>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of<br>shipping when stored at -20°C.RefSeq:NM 170707.1RefSeq ORF:1995 bpLocus ID:4000UniProt ID:P02545Cytogenetics:1q22Protein Families:Druggable GenomeProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy,<br>  | OTI Annotation:     |  |
| 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid<br>at the bottom.<br>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of<br>shipping when stored at -20°C.RefSeq:NM 170707.1RefSeq ORF:1995 bpLocus ID:4000UniProt ID:P02545Cytogenetics:1q22Protein Families:Druggable GenomeProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy,<br>Hypertrophic cardiomyopathy (HCM)  | Components:         |  |
| RefSeq Size:3239 bpRefSeq ORF:1995 bpLocus ID:4000UniProt ID:P02545Cytogenetics:1q22Protein Families:Druggable GenomeProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)   | Reconstitution Metl | <ol> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of</li> </ol> |
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| Locus ID:4000UniProt ID:P02545Cytogenetics:1q22Protein Families:Druggable GenomeProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy,<br>Hypertrophic cardiomyopathy (HCM)   | RefSeq Size:        | 3239 bp  |
| UniProt ID:P02545Cytogenetics:1q22Protein Families:Druggable GenomeProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy,<br>Hypertrophic cardiomyopathy (HCM)  | RefSeq ORF:         | 1995 bp  |
| Cytogenetics:1q22Protein Families:Druggable GenomeProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy,<br>Hypertrophic cardiomyopathy (HCM)   | Locus ID:           | 4000   |
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| Protein Pathways:       Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy,         Hypertrophic cardiomyopathy (HCM)   | Cytogenetics:       | 1q22   |
| Hypertrophic cardiomyopathy (HCM)   | Protein Families:   | Druggable Genome   |
| <b>MW:</b> 74.1 kDa   | Protein Pathways:   |  |
|   | MW:                 | 74.1 kDa   |

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#### Serigene Lamin A (LMNA) (NM\_170707) Human Tagged Lenti ORF Clone – RC204970L3

Gene Summary:The nuclear lamina consists of a two-dimensional matrix of proteins located next to the inner<br/>nuclear membrane. The lamin family of proteins make up the matrix and are highly<br/>conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the<br/>lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear<br/>stability, chromatin structure and gene expression. Vertebrate lamins consist of two types, A<br/>and B. Alternative splicing results in multiple transcript variants. Mutations in this gene lead<br/>to several diseases: Emery-Dreifuss muscular dystrophy, familial partial lipodystrophy, limb<br/>girdle muscular dystrophy, dilated cardiomyopathy, Charcot-Marie-Tooth disease, and<br/>Hutchinson-Gilford progeria syndrome. [provided by RefSeq, Apr 2012]

### **Product images:**



Double digestion of RC204970L3 using Sgfl and Mlul

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