

Product datasheet for **RG238536**

Lamin A (LMNA) (NM_001282624) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lamin A (LMNA) (NM_001282624) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LMNA
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG238536 representing NM_001282624.
 Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**GCGATCGCC**
 ATGCAGCCACTCCTGTGCTTGGGGAACCTGGAGGATGCAAGGAAAGGACTGGCACTCTGCTGGCACAG
 CACCCGGCTGGGCGAGGACACGGGCGAAGCCAGGGTCTCCCTCAATACCAAGAAGGAGGGTGACCTG
 ATAGCTGCTCAGGCTCGGCTGAAGGACCTGGAGGCTCTGCTGAACTCCAAGGAGGCCGACTGAGCACT
 GCTCTCAGTGAGAAGCGCACGCTGGAGGCGAGCTGCATGATCTGCGGGGCCAGGTGGCCAACTTGAG
 GCAGCCCTAGGTGAGGCCAAGAAGCAACTTCAGGATGAGATGCTGCGGCGGGTGGATGCTGAGAACAGG
 CTGCAGACCATGAAGGAGGAAGTGGACTCCAGAAGAACATCTACAGTGAGGAGCTGCGTGAGACCAAG
 CGCCGTGATGAGACCCGACTGGTGGAGATTGACAAATGGGAAGCAGCGTGAGTTTGAGAGCCGGCTGGCG
 GATGCGCTGCAGGAAGTGGGGCCAGCATGAGGACCAGGTGGAGCAGTATAAGAAGGAGCTGGAGAAG
 ACTTATTCTGCCAAGCTGGACAATGCCAGGCAGTCTGCTGAGAGGAACAGCAACCTGGTGGGGCTGCC
 CACGAGGAGCTGCAGCAGTCCGCATCCGCATCGACAGCCTCTCTGCCAGCTCAGCCAGCTCCAGAAG
 CAGCTGGCAGCCAAGGAGGCGAAGCTTCGAGACCTGGAGGACTCACTGGCCCGTAGCGGGACACCAGC
 CGGCGGCTGCTGGCGAAAAGGAGCGGGAGATGGCCGAGATGCGGGCAAGGATGCAGCAGCAGCTGGAC
 GAGTACCAGGAGCTTCTGGACATCAAGCTGGCCCTGGACATGGAGATCCACGCCTACCGCAAGCTTTG
 GAGGGCGAGGAGGAGAGGCTACGCCTGTCCCCAGCCCTACCTCGCAGCGCAGCCGTGGCCGTGCTTCC
 TCTCACTCATCCCAGACACAGGGTGGGGCAGCGTCACCAAAAAGCGCAAAGTGGAGTCCACTGAGAGC
 CGCAGCAGCTTCTCACAGCACGCACGCACTAGCGGGCGCGTGGCCGTGGAGGAGGTGGATGAGGAGGGC
 AAGTTTGTCCGGCTGCGCAACAAGTCCAATGAGGACCAGTCCATGGGCAATTGGCAGATCAAGCGCCAG
 AATGGAGATGATCCCTTGTGACTTACCGGTTCCACCAAAGTTCACCCCTGAAGGCTGGCAGGTGGTG
 ACGATCTGGGCTGCAGGAGCTGGGGCCACCCACAGCCCCCTACCGACCTGGTGTGGAAGGCACAGAAC
 ACCTGGGCTGCGGGAACAGCCTGCGTACGGCTCTCATCAACTCCACTGGGGAAGAGTGGCCATGCGC
 AAGCTGTTGCGCTCAGTACTGTGGTTGAGGACGACGAGGATGAGGATGGAGATGACCTGCTCCATCAC
 CACCACGTGAGTGGTAGCCGCCG
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC

Protein Sequence:

>Peptide sequence encoded by RG238536
 Blue=ORF Red=Cloning site Green=Tag(s)

MQPLLCGLNLEDARERTGTLAQHPAWGRTRAKPGSPLNTKKEGDLIAAQARLKDLEALLNSKEAALST
 ALSEKRTLEGELHDLRGQVAKLEAALGEAKKQLQDEMLRRVDAENRLQTMKEELDFQKNIYSEELRETK
 RRHETRLVEIDNGKQREFESRLADALQELRAQHEDQVEQYKKELEKTYSAKLDNARQSAERNLNLVGA
 HEELQQSRIRIDSLSAQLSQLQQLAAKEAKLRDLEDSLARERDTSRRLLAEKEREMAEMRARMQQQLD
 EYQELLDIKLALDMEIHAYRKLLEGEEERLRLSPSPTSQRSRGRASSHSSQTQGGGVTKKRKESTES
 RSSFSQHARTSGRVAVEEVDEEGKFVRLRNKSNEDQSMGNWQIKRQNGDDPLLTYRFPKFTLKAGQVV
 TIWAAGAGATHSPPTDLVWKAQNTWGCNSLRTALINSTGEEVAMRKLVRVSVTVVEDEDEDEDGDDLLHH
 HHVSGSRR
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVI GDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites:

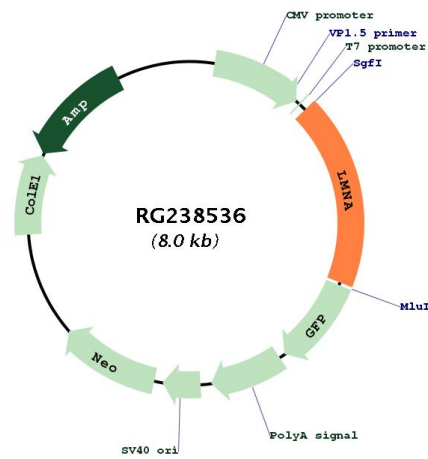
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:	NM_001282624
ORF Size:	1473 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).
RefSeq:	NM_001282624.2
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:	56.2 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]