

Product datasheet for **RG238938**

Lamin A (LMNA) (NM_001282625) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lamin A (LMNA) (NM_001282625) 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)



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ORF Nucleotide Sequence:

>RG238938 representing NM_001282625.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGAGACCCCGTCCCAGCGGCGGCCACCCGACGCGGGGCGCAGGCCAGCTCCACTCCGCTGTCGCCC
ACCCGCATCACCCGGCTGCAGGAGAAGGAGGACTGCAGGAGCTCAATGATCGCTTGGCGGTCTACATC
GACCGTGTGCGCTCGCTGGAAACGGAGAACGCAGGGCTGCGCCTTCGCATCACCGAGTCTGAAGAGGTG
GTCAGCCGCGAGGTGTCCGGCATCAAGGCCGCTACGAGGCCGAGCTCGGGGATGCCCGCAAGACCTT
GACTCAGTAGCCAAGGAGCGCGCCGCTGACAGCTGGAGCTGAGCAAAGTGCCTGAGGAGTTAAGGAG
CTGAAAGCGCGCAATACCAAGAAGGAGGGTGACCTGATAGCTGCTCAGGCTCGGCTGAAGGACTGGAG
GCTCTGCTGAACCCAAGGAGGCCGCACTGAGCACTGCTCTCAGTGAGAAGCGCACGCTGGAGGGCGAG
CTGCATGATCTGCGGGGCCAGGTGGCAAGCTTGAGGCAGCCCTAGGTGAGGCCAAGAAGCAACTTCAG
GATGAGATGCTGCGGGCGGTGGATGCTGAGAACAGGCTGCAGACCATGAAGGAGGAACTGGACTCCAG
AAGAACATCTACAGTGAGGAGCTGCGTGAGACCAAGCGCCGTATGAGACCCGACTGGTGGAGATTGAC
AATGGGAAGCAGCGTGAGTTTGGAGCCGGCTGGCGGATGCGCTGCAGGAACTGCGGGCCAGCATGAG
GACCAGGTGGAGCAGTATAAGAAGGAGCTGGAGAAGACTTATTCTGCCAAGCTGGACAATGCCAGGCAG
TCTGCTGAGAGGAACAGCAACCTGGTGGGGGCTGCCACGAGGAGCTGCAGCAGTCGCGCATCCGCATC
GACAGCCTCTCTGCCAGCTCAGCCAGCTCCAGAAGCAGCTGGCAGCCAAGGAGGCGAAGCTTCGAGAC
CTGGAGGACTCACTGGCCCGTGAGCGGGACACCAGCCGGCGGCTGCTGGCGGAAAAGGAGCGGGAGATG
GCCGAGATGCGGGCAAGGATGCAGCAGCAGCTGGACGAGTACCAGGAGCTTCTGGACATCAAGCTGGCC
CTGGACATGGAGATCCACGCCTACCGCAAGCTCTTGAGGGGCGAGGAGGAGGCTACGCCTGTCCCCC
AGCCCTACCTCGCAGCGCAGCCGTGGCCGTGCTTCTCTCACTCATCCAGACACAGGGTGGGGGCGAGC
GTACCAAAAAGCGCAAACCTGGAGTCCACTGAGAGCCGACAGCTTCTCACAGCACGCACGCACTAGC
GGGCGCGTGGCCGTGGAGGAGGTGGATGAGGAGGCAAGTTTGTCCGGCTGCGCAACAAGTCCAATGAG
GACCAGTCCATGGGCAATTGGCAGATCAAGCGCCAGAATGGAGATGATCCCTTGCTGACTTACCGTTTC
CCACCAAAGTTCACCCTGAAGGCTGGGCAGGTGGTACGATCTGGGCTGCAGGAGCTGGGGCCACCCAC
AGCCCCCTACCGACCTGGTGTGGAAGGCACAGAACCTGGGGCTGCGGGAACAGCCTGCGTACGGCT
CTCATCAACTCCACTGGGAAGAAGTGGCCATGCGCAAGCTGGTGCCTCAGTACTGTGGTTGAGGAC
GACGAGGATGAGGATGGAGATGACTGCTCCATCACCACCAGTGAAGTGGTAGCCGCCG
ACCGGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
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Protein Sequence:

>Peptide sequence encoded by RG238938
 Blue=ORF Red=Cloning site Green=Tag(s)

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METPSQRRATRSGAQASSTPLSPTRITRLQEKEDLQELNDRLAVYIDRVRSLETENAGRLRLRITESEEV
VSREVSGIKAAYEALGDARKTLDSVAKERARLQLELSKVREEFKELKARNTKKEGDLIAAQARLKDLE
ALLNSKEAALSTALSEKRTLEGELHDLRGQVAKLEAALGEAKKQLQDEMLRRVDAENRLQTMKEELDFQ
KNIYSEELRETKRRHETRLVEIDNGKQREFESRLADALQELRAQHEDQVEYKKELEKTYSAKLDNARQ
SAERNLNLVGAAHEELQQSRIRIDSLSAQLSQLQKQLAAKEAKLRDLEDLARERDTSRRLLAEKEREM
AEMRRMQQLDEYQELLDIKLALDMEIHAYRKLLEGEERLRLSPSPTSQRSRGRASSHSQTQGGGS
VTKKRKLESTESRSSFSQHARTSGRVAVEEVDEEGKFVRLRNKSNEDQSMGNWQIKRQNGDPLLTYRF
PPKFTLKAGQVVTIWAAGAGATHSPPTDLVWKAQNTWGCNLSLRTALINSTGEEVAMRKLVRSVTVVED
DEDEDGDDLLHHHHVSGSRR
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPYSGYENPFLHAINNGGYNTRIEKYEDGGVLHVFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSLRDGGYSSVVDSDSHMHFSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
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Restriction Sites:

SgfI-MluI

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_001282625.2
RefSeq Size:	2501 bp
RefSeq ORF:	1719 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:	65.1 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]