

Product datasheet for RC215510

Laminin 5 (LAMB3) (NM_000228) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Laminin 5 (LAMB3) (NM_000228) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Laminin 5 |
| Synonyms: | A11A; BM600-125KDA; LAM5; LAMNB1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC215510 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGAGACCATTCTCCTCTTGTGTTTTGCCCTGCCTGGCCTCCTGCATGCCCAACAAGCCTGCTCCCGTG
GGGCTGTATCCACCTGTTGGGACCTGCTTGTGGGAGGACCCGGTTTCTCCGAGCTTCATCTACCTG
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GGTGGCAGTCCCAGAATGATGTGAACCCGTCTCTCTGCAGCTGGACCTGGACAGGAGATTCCAGCTTCA
AGAAGTCATGATGGAGTTCCAGGGGCCATGCCTGCCGGCATGCTGATTGAGCGCTCCTCAGACTTCGGT
AAGACCTGGCGAGTGTACCAGTACCTGGCTGCCGACTGCACCTCCACCTCCCTCGGGTCCGCCAGGGTC
GGCCTCAGAGCTGGCAGGATGTTCCGGTCCAGTCCCTGCCTCAGAGGCCTAATGCACGCCTAAATGGGGG
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GTGGGGGAGATCACAACCTTGAGAGTCAATTTACCAGGCTGGCCCTGTGCCCAAGGGGCTACCACC
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TCGCTGCGCACCAAGCCTGGGGCCTCTGCAGGCCCTCCACCGCTGTGCAGGTCCACGATGTCTGTGTC
TGCCAGCACAACTGCCGGCCAAATTTGAGCGCTGTGCACCTTCTACAACAACCGCCCTGGAGAC
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GTGACGAGGAGAGTGGGCGCTGCCTTTGTCTGCCAACGTGGTGGTCCCAAATGTGACCAAGTGTGCTCC
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CCACAGTGAACCAAGTTCACAGGGCAGTGCCCTGTCGGGAAGGCTTTGGTGGCCTGATGTGCAGCGCTG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215510 protein sequence
 Red=Cloning site Green=Tags(s)

MRPFFLLCFALPGLLHAQQACSRGACYPPVGDLLVGRTRFLRASSTCGLTKPETYCTQYGEWQMKCKCD
 SRQPHNYSHRVENVASSGPMRWWQSQNDVNPVSLQLDLDRRFQLQEVMMEFQGPMPAGMLIERSDFG
 KTWVYQYLAADCTSTFPRVRQGRPQSQWQDVRCSLQRPNARLNGGKVQLNMDLVSGIPATQSQKIQE
 VGEITNLRVNFTRLAPVPQRGYHPPSAYYAVSQLRLQGSCFCHGHADRCAPKPGASAGPSTAVQVHDVCV
 CQHNTAGPNCERCAPFYNNRPWRPAEGQDAHECQRCDNCGHSECHFDPAVFAASQGAYGGVCDNCRDHT
 EGKNCERCQLHYFRNRRPGASIQETCISCECDPDGAVPGAPCDPVTGQCVCKEHVQGERCDLCKPGFTGL
 TYANPQGCHRDCNILGSRDMPDDEESGRCLCLPNVVGPKCDQCAPYHWKLASGQCEPCACDPHNSLS
 PQCNQFTGQCPCREGFGLMCSAAAIRQCPDRTYGDVATGCRACDCDFRGTEGPGCDKASGRCLCRPGLT
 GPRCDQCQRGYCNRYPCVACHPCFQTYDADLREQALRFGRNRNATASLWSGPLEDRGLASRILDAKSK
 IEQIRAVLSSPAVTEQVAQVASAILSLRRTLQGLQLDPLEEETLSLPRDLESLSRDNGLLTMQRKR
 EQFEKISSADPSGAFRMLSTAYEQSAQAQVSDSSRLLDQLRDSRREAERLVRQAGGGGTGSPKLV
 RLEMSSLPDLTPTFNKLCGNSRQMACTPISCPGELCPQDNGTACGSRGVLPRAGGAFLMAGQVAEQLR
 GFNAQLQRTRQMI RAAEESASQIQSSAQRL ETQVSASRSQMEEDVRRTRLLIQQVRDFLTDPTDAATIQ
 EVSEAVLALWLPDTSATVLQKMNEIQAI AARLPNVDLVLSQTKQDIARARLQAEAEARSRAHAVEGQV
 EDVVGNL RQGTVALQEAQDTMQGTSRSLRLIQDRVAEVQVLRPAEKLVTSMTKQLGDFWTRMEELRHQA
 RQQGAEAVQAQLAEGASEQALSAQEGFERIKQKYAELKDRLGQSSMLGEQGARIQSVKTEAEELFGETM
 EMMDRMKDMELELLRGSQAIMLRADLTGLEKRVQIRDHINGRVLYYATCK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6678_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000228

ORF Size: 3516 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by 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 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).

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.

RefSeq: [NM_000228.3](#)

RefSeq Size: 4093 bp

RefSeq ORF: 3519 bp

Locus ID: 3914

UniProt ID: [Q13751](#)

Cytogenetics: 1q32.2

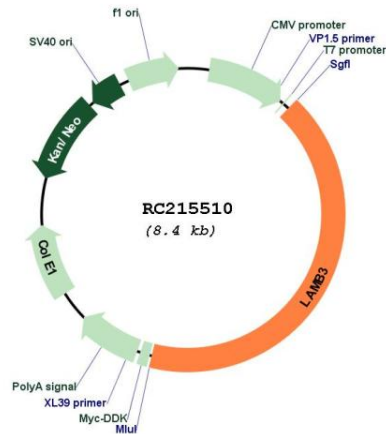
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: ECM-receptor interaction, Focal adhesion, Pathways in cancer, Small cell lung cancer

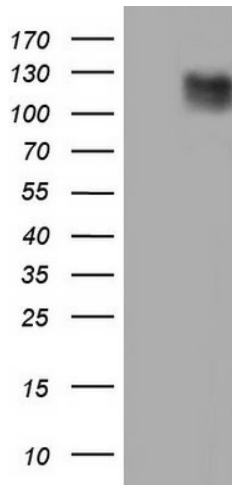
MW: 129.6 kDa

Gene Summary: The product encoded by this gene is a laminin that belongs to a family of basement membrane proteins. This protein is a beta subunit laminin, which together with an alpha and a gamma subunit, forms laminin-5. Mutations in this gene cause epidermolysis bullosa junctional Herlitz type, and generalized atrophic benign epidermolysis bullosa, diseases that are characterized by blistering of the skin. Multiple alternatively spliced transcript variants that encode the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

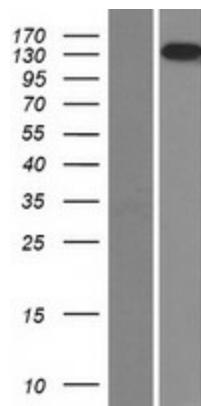
Product images:



Circular map for RC215510



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LAMB3 (Cat# RC215510, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LAMB3 (Cat# [TA804403]). Positive lysates [LY424856] (100ug) and [LC424856] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY426828]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226349] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).