

Recombinant Human LAMB2 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. LAMB2-3172H Lot. No. (See product label)

SPECIFICATION

Product Overview

LAMB2 MS Standard C13 and N15-labeled recombinant protein (NP_002283) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.

Species

Human

Source

HEK293

Description

Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Laminins, composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively), form a cruciform structure consisting of 3 short arms, each formed by a different chain, and a long arm composed of all 3 chains. Each laminin chain is a multidomain protein encoded by a distinct gene. Several isoforms of each chain have been described. Different alpha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isoforms which are designated by Arabic numerals in the order of their discovery, i.e. alpha1beta1gamma1 heterotrimer is laminin 1. The biological functions of the different chains and trimer molecules are largely unknown, but some of the chains have been shown to differ with respect to their tissue distribution, presumably reflecting diverse functions in vivo. This gene encodes the beta chain isoform laminin, beta 2. The beta 2 chain contains the 7 structural domains typical of beta chains of laminin, including the short alpha region. However, unlike beta 1 chain,

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

beta 2 has a more restricted tissue distribution. It is enriched in the basement membrane of muscles at the neuromuscular junctions, kidney glomerulus and vascular smooth muscle. Transgenic mice in which the beta 2 chain gene was inactivated by homologous recombination, showed defects in the maturation of neuromuscular junctions and impairment of glomerular filtration. Alternative splicing involving a non consensus 5' splice site (gc) in the 5' UTR of this gene has been reported. It was suggested that inefficient splicing of this first intron, which does not change the protein sequence, results in a greater abundance of the unspliced form of the transcript than the spliced form. The full-length nat

Molecular Mass 196 kDa

AA Sequence

MELTSRERGRGQPLPWELRLGLLLSVLAATLAQAPAPDVPGCSRGCYPATGDLLV
 GRADRLTASSTCGLNGPQPYCIVSHLQDEKKCFLCDSRRPFSARDNPHSHRIQNVV
 TSFAPQRRAAWWQSENGIPAVTIQLDLEAEFHFTHLIMTFKTRPAAMLVERSADFG
 RTWHVYRYFSYDCGADFPVPLAPPRHWDDVVCESTRYSEIEPSTEGEVIYRVLDP
 A IPIPDYSSRIQNLLKITNLRVNLTRLHTLGDNLLDPRREIREKYYYALYELVVRGNCF
 CYGHASECAPAGAPAHAEGMVHGACICKHNTRGLNCEQCQDFYRDLPWRPAED
 GHSHACRKCECHGHTHSCHFDMAVYLASGNVSGGVCDGCQHNTAGRHCCELCPF
 FYRDPTKDLRDPVCRSCDCDPMGSQDGGRCDSHDDPALGLVSGQCRCRKEHVVG
 TRCQQCRDGGFFGLSISDRLGCRRCQCNARGTVPGSTPCDPNSGSCYCKRLVTGRG
 CDRCLPGHWGLSHDLLGCRPCDCDVGGALDPQCDEGTGQCHCRQHMGVRRCEQ
 VQPGYFRPFLDHLIWEAEDTRGQVLDVVERLVTPGETPSWTGSGFVRLQEGQTLEF
 LVASVPKAMDYDLLLLRLEPQVPEQWAELELIVQRPGVPAHSLCGHLVPKDDRIQGT
 LQPHARYLIFPNPVCLEPGISYKLHLKLVRTGGSAQPETPYSGPGLLIDSLVLLPRVLV
 LEMFSGGDAAALERQATFERYQCHEEGLVPSKTSPSEACAPLLISLSTLIYNGALPC
 QCNPQGSLSSECNPHGGQCLCKPGVVGRRCDLAPGYYGFGPTGCQACQCSHE
 GALSSLCEKTSQCLCRTGAFGLRCDRCRQGWGFPSCRPCVCNGHADECNHTT
 GACLGCRDHTGGEHCERCIAGFHGDPRLPYGGQCRPCPCPEGPGSQRHFATSCH
 QDEYSQQIVCHCRAGYTGLRCEACAPGHFGDPSRPGGRCQLCECSGNIDPMDPDA

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

CDPHTGQCLRCLHHTEGPHCAHCKPGFHGQAARQSCHRCTCNLLGTNPQQCPSP
 DQCHCDPSSGQCPCLPNVQGPSCDRCAPNFWNLTSGHGQCPCACHPSRARGPT
 CNEFTGQCHCRAGFGGRTCSECQELHWGDPGLQCHACDCDSRGIDTPQCHRFTG
 HCSCRPGVSGVRCDQCARAFSGIFPACHPCHACFGDWDRVVQDLAARTQRLEQR
 AQELQQTGVLGAFESSFWMQEKLIVQGIVGARNTSAASTAQLVEATEELRREIGE
 ATEHLTQLEADLTDVQDENFNANHALSGLERDRLALNLTLRQLDQHLDLLKHSNFLG
 AYDSIRHAHSQSAAEERRANTSALAVPSPVSNASARHRTEALMDAQKEDFNSKHM
 ANQRALGKLSAHTHTLSLTDINELVCGAPGDAPCATSPCGGAGCRDEDGQPRCGG
 LSCNGAAATADLALGRARHTQAE LQRALAE GGSILSRVAETRRQASEAQQRAQAAL
 DKANASRGQVEQANQELQELIQSVKDFLNQEGADPDSIEMVATRVLELSIPASAEQI
 QHLAGAIAERVRLADVDAILARTVGDVRRAEQLLQDARRARSWAEDEKQKAETVQ
 AALEEAQRAQGIAQGAIRGAVADTRDTEQTLYQVQERMAGAERALSSAGERARQLD
 ALLEALKLKRAGNSLAASTAETAGSAQGRAQEAQQLLRGPLGDQYQTVKALAERK
 AQGVLAQAQARAEQLRDEARDLLQAAQDKLQRLQELEGTYEENERALESKAAQLDGL
 EARMRSVLQAINLQVQIYNTCQTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining

Stability Stable for 3 months from receipt of products under proper storage and handling conditions.

Storage Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

Concentration 50 µg/mL as determined by BCA

Storage Buffer 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

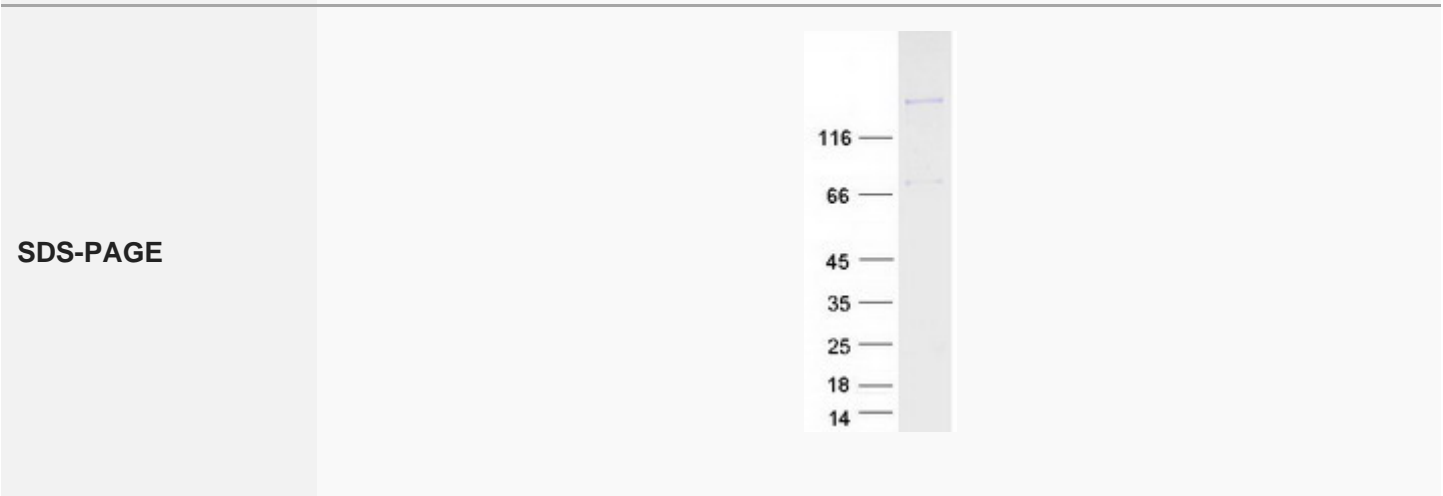
Gene Name [LAMB2 laminin subunit beta 2 \[Homo sapiens \(human\) \]](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|------------------------|--|
| Official Symbol | LAMB2 |
| Synonyms | LAMB2; laminin, beta 2 (laminin S); LAMS; laminin subunit beta-2; laminin S; S-LAM beta; laminin B1s chain; S-laminin subunit beta; NPHS5; |
| Gene ID | 3913 |
| mRNA Refseq | NM_002292 |
| Protein Refseq | NP_002283 |
| MIM | 150325 |
| UniProt ID | P55268 |



Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA