

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

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

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <b>Product Overview</b> | LAMB2 MS Standard C13 and N15-labeled recombinant protein (NP_002283) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Description</b>      | <p>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,</p> |

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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  
RTWHVYRYFSYDCGADFPVPLAPPRHWDDVVCESRYSEIEPSTEGEVIYRVLDPA  
IIPDPYSSRIQNLLKITNLRVNLTRLHTLGDNLLDPRREIREKYYYALYELVVRGNCF  
CYGHASECAPAPGAPAHAEGMVHGACICKHNTRGLNCEQCQDFYRDLPWPAED  
GHSHACRKCECHGHTHSCHFDMAVYLASGNVSGGVCDGCQHNTAGRHCELCRPF  
FYRDPTKDLRDPVCRSCDCDPMGSQDGGRCDSHDDPALGLVSGQCRCKEHVVG  
TRCQQCRDGGFFGLSISDRLGCRRCQCNARGTVPGSTPCDPNSGSCYCKRLVTGRG  
CDRCLPGHWGLSHDLLGCRPCDCDVGGALDPQCDEGTGQCHCRQHMGVRRCEQ  
VQPGYFRPFLDHLIWEAEDTRGQVLDVVERLVTPGETPSWTGSGFVRLQEGQTLEF  
LVASVPKAMDYDLLLRLEPQVPEQWAELELIVQRPGPVPAHSLCGHLVPKDDRIQGT  
LQPHARYLIFPNPVCLEPGISYKLHLKLVRTGGSAQPETPYSGPGLLIDSLVLLPRVLV  
LEMFSGGDAAALERQATFERYQCHEEGLVPSKTSPSEACAPLLISLSTLIYNGALPC  
QCNPQGSLSSECNPHGGQCLCKPGVVGRRCDLCAPGYGFGPTGCQACQCSHE  
GALSSLCEKTSQGCLCRTGAFGLRCDRCQRGQWGFPSRCPCVCNGHADECNHTT  
GACLGCRDHTGGEHCERCIAGFHGDPRLPYGGQCRPCPCPEGPGSQRHFATSCH  
QDEYSQQIVCHCRAGYTGLRCEACAPGHFGDPSRPGGRCQLCECSGNIDPMDPDA

CDPHTGQCLRCLHHTEGPHCAHCKPGFHGQAARQSCHRCTCNLLGTNPQQCPSP  
 DQCHCDPSSGQCPCLPNVQGPSCDRCAPNFWNLTSGHGCQPCACHPSRARGPT  
 CNEFTGQCHCRAGFGGRTCSQCQELHWGDPGLQCHACDCDSRGIDTPQCHRFTG  
 HCSCRPGVSGVRCDQCARAFSGIFPACHPCHACFGDWDRVVQDLAARTQRLEQR  
 AQELQQTGVLGAFESSFWHMQEKLQIVQIVGARNTSAASTAQLVEATEELRREIGE  
 ATEHLTQLEADLTDVQDENFNANHALSGLERDRLALNLTQRQLDQHLDLLKHSNFLG  
 AYDSIRHAHSQSAEAERRANTSALAVPSPVSNASARHRTEALMDAQKEDFNSKHM  
 ANQRALGKLSAHTHTLSLTDINELVCGAPGDAPCATSPCGGAGCRDEDGQPRCGG  
 LSCNGAAATADLALGRARHTQAEQRLAEGGSILSRVAETRRQASEAQQRAQAAL  
 DKANASRGQVEQANQELQELIQSVKDFLNQEGADPDSIEMVATRVLELSIPASAEQI  
 QHLAGAIAERVRLADVDAILARTVGDVRRAEQLLQDARRARSWAEDEKQKAETVQ  
 AALEEAQRAQGAIAQGAIRGAVADTRDTEQTLQVQERMAGAERALSSAGERARQLD  
 ALLEALKLKRAGNSLAASTAEETAGSAQGRAQEAQQLRGPLGDQYQTVKALAERK  
 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.

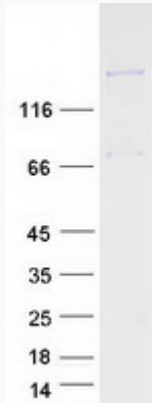
## GENE INFORMATION

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

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