

Product datasheet for **PH317480**

Laminin beta 2 (LAMB2) (NM_002292) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	LAMB2 MS Standard C13 and N15-labeled recombinant protein (NP_002283)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC217480
Predicted MW:	196 kDa



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Protein Sequence: >RC217480 representing NM_002292
 Red=Cloning site Green=Tags(s)

MELTSRERGRGQPLPWELRLGLLL SVLAATLAQAPAPDVPGCSRGCYPATGDLLVGRADRLTASSTCGL
 NGPQPYCIVSHLQDEKKCFLCDSRRPFSARDNPHSHRIQNVVTSFAPQRRAAWQSENGIPAVTIQLDLE
 AEFHFTHLIMTFKTFRPAAMLVERSADFGRTWHVYRYFSYDCGADFPVPLAPPRHWDDVVCESRYSEIE
 PSTEGEVYRVLDPAPIIPDPYSSRIQNLKITNLRVNLTRLHTLGDNLDPREIREKYYALYELVVR
 GNCFCYGHASECAPAGPAPAHAEGMVHGACICKHNTRGLNCEQCQDFYRDL PWRPAEDGHSACRKECH
 GHTSCHFDMAVYLASGNVSGGVCDCGQHNTAGRHCCEL CRPFFYRDPTKDLRDPAVCRSCDCDPMGSQDG
 GRCDSHDDPALGLVSGQCRCKEHHVVGTRCQQCRDGF FGLSISDRLGCRRCQCNARGTVPGSTPCDPNSGS
 CYCKRLVTGRGCDRCLPGHWGLSHDLLGCRPCDCDVGGALDPQCDEGTGQCHCRQHVMVGRRCQVQPGYF
 RPFLDHLIWEAEDTRGQVLDVVERLVTGETPSWTGSGFVRLQEGQTFLEFLVASVPKAMDYDLLRLEPQ
 VPEQWAELELIVQRPGVPAHSLCGHLVPKDDRIQGTLPHARYLIFPNPVCLEPGISYKHLHLKLVRTGG
 SAQPETPYSGPGLLIDSLVLLPRVLVLEMFSGDAAALERQATFERYQCHEEGLVPSKTSPEACAPLLI
 SLSTLIYNGALPCQCNPGSLSSECNPHGGQCLCKPGVVGRRCDLCAPGYGFGPTGCQACQCSHEGALS
 SLCEKTSQQLCRTGAFGLRCDRCQRGWGFPSCRPCVCNGHADECNHTHTGACLGRDHTGGEHCERCIA
 GFHGDPRLPYGGQCRPCPEGPGSQRHFATSCHQDEYSQQIVCHCRAGYTLRCEACAPGHFGDP SRPG
 GRCQLCECSGNI DMPDADCPHTGQCLRCLHHTEGPHCAHCKPGFHGQAARQSCHRCTCNLLGTNPQQC
 PPSDQCHCDPSSGQCPCLPNVQGPSCDRCAPNFWNL TSGHGCQPCACHPSRARGPTCNEFTGQCHCRAGF
 GGRTCSECQELHWGDPGLQCHACDCDSRGIDTPQCHRFTGHCSCRPGVSGVRCDDQCARAFSGIFPACHPC
 HACFGDWRVVDLAARTQRLEQRAQELQQTGVLGAFESSFWMQEKLGIVQIGVARNTSAASTAQLVE
 ATEELRREIGEATEHLTQLEADLTDVQDENFNANHALSGLERDRLALNLT LRQLDQHLDLLKHSNFLGAY
 DSIRHAHSQSAEAERRANTSALAVSPVSNASARHRTEALMDAQKEDFNSKHMANQRALGKLSAHTHTL
 SLTDINELVCGAPGDAPCATSPCGGAGCRDEDGQPRCGGLSCNGAAATADLALGRARHTQAE LQRALAE
 GSILSRVAETRRQASEAQQAALDKANASRGQVEQANQELQELIQSVKDFLNQEGADPDSIEMVATRV
 LELSIPASAEQIQHLAGAI AERVRLADVDAILARTVGDVRRAEQLLQDARRARSWAEDEKQKAETVQAA
 LEEAQAQGAIAQGAIRGAVADTRDTEQTLYQVQERMAGAERALSSAGERARQLDALLEALKLKRAGNSLA
 ASTAEETAGSAQGRAQEAQQLLRGPLGDQYQTVKALAERKAQGVLAQAQARAEQLRDEARDLLQAAQDKLQ
 RLQLEGTYEENERALESKAAQLDGL EARMRSVLQAINLQVQIYNTCQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

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

Concentration: >0.05 µg/µL as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

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

RefSeq: [NP_002283](#)

RefSeq Size: 5815

RefSeq ORF: 5394

Synonyms: LAMS; NPHS5

Locus ID: 3913

UniProt ID: [P55268](#)

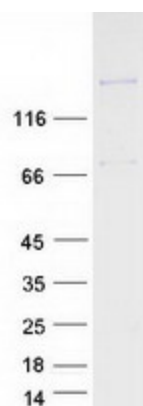
Cytogenetics: 3p21.31

Summary: 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, 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 nature of the spliced transcript is not known. [provided by RefSeq, Aug 2011]

Protein Families: Druggable Genome, Secreted Protein

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

Product images:



Coomassie blue staining of purified LAMB2 protein (Cat# [TP317480]). The protein was produced from HEK293T cells transfected with LAMB2 cDNA clone (Cat# [RC217480]) using MegaTran 2.0 (Cat# [TT210002]).