

Recombinant Human LAMC2 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. LAMC2-4879H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	LAMC2 MS Standard C13 and N15-labeled recombinant protein (NP_005553) 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), have 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 gamma chain isoform laminin, gamma 2. The gamma 2 chain, formerly thought to be a truncated version of beta chain (B2t), is highly homologous to the gamma 1 chain; however, it

 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

lacks domain VI, and domains V, IV and III are shorter. It is expressed in several fetal tissues but differently from gamma 1, and is specifically localized to epithelial cells in skin, lung and kidney. The gamma 2 chain together with alpha 3 and beta 3 chains constitute laminin 5 (earlier known as kalinin), which is an integral part of the anchoring filaments that connect epithelial cells to the underlying basement membrane. The epithelium-specific expression of the gamma 2 chain implied its role as an epithelium attachment molecule, and mutations in this gene have been associated with junctional epidermolysis bullosa, a skin disease characterized by blisters due to disruption of the epidermal-dermal junction. Two tr

Molecular Mass 130.99 kDa

AA Sequence

MPALWLGCCCLCFSLLLPAARATSRREVCDCNGKSRQCIFDRELHRQTGNGFRCLN
CNDNTDGIHCEKCKNGFYRHRERDRCLPCNCNSKGSLSARCDNSGRCSCKPGVT
GARCDRCLPGFHMLTDAGCTQDQRLLDKDCDPAIAGPCDAGRCVCKPAVTGE
RCDRCRSGYYNLDGGNPEGCTQCFCYGHASCRSSAEYSVHKITSTFHQDVGW
KAVQRNGSPAKLQWSQRHQDVFSQAQRLDPVYFVAPAKFLGNQQVSYGQSLSFYD
RVDRGGRHPSAHDVILEGAGLRITAPLMPLGKTLPCGLTKTYTFRNLNEHPSNNWSP
QLSYFEYRRLRLNLALTALRIRATYGEYSTGYIDNVTLISARPVSGAPAPWVEQCICPVG
YKGQFCQDCASGYKRDSARLGPFGTICIPCNCQGGGACDPDTGDCYSGDENPDIEC
ADCPIGFYNDPHDRSCKPCPCHNGFSCSVMPETEEVVCNNCPPGVTGARCELCA
DGYFGDPFGEHGPVRPCQPCQCNNDVPSASGNCDRLTGRCCLKCIHNTAGIYCDQ
CKAGYFGDPLAPNPADKCRACNCNPMGSEPVGCRSDGTCVCKPGFGGPNCEHGA
FSCPACYNQVKIQMDQFMQQLQRMEALISKAQGGDGVVPDTELEGRMQQAEQAL
QDILRDAQISEGASRSLGLQLAKVRSQENSYSRLDDLKMTVERVRALGSQYQNRV
RDTHRLITQMQLSLAESEASLGNTNIPASDHYVGPNGFKSLAQEATRLAESHVESAS
NMEQLTRETEDYSKQALSLVRKALHEGVGSGSGSPDGAVVQGLVEKLEKTKSLAQ
QLTREATQAEIEADRSYQHSLRLLDVSRLQGVSDQSFQVEEAKRIKQKADSLSTLV
TRHMDEFKRTQKNLGNWKEEAQQLLQNGKSGREKSDQLLSRANLAKSRAQEALSM
GNATFYEVESILKNLREFDLQVDNRKAEAEAMKRLSYISQKVSASDKTQQAERAL

GSAAADAQRAKNGAGEALEISSEIEQEIGSLNLEANVTADGALAMEKGLASLKSEMR
EVEGELERKELEFDTNMDAVQMVITEAQKVDTRAKNAGVTIQDTLNTLDGLLHLMQ
PLSVDEEGLVLLEQKLSRAKTQINSQLRPMMSELEERARQQRGHLHLLTSDIGILAD
VKNLENIRDNLPPGCYNTQALEQQTRTRPLEQKLISEEDLAANDILDYKDDDDKV

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 LAMC2 laminin subunit gamma 2 [Homo sapiens (human)]

Official Symbol LAMC2

Synonyms LAMC2; laminin, gamma 2; EBR2, EBR2A, LAMB2T, laminin, gamma 2 (nicein (100kD), kalinin (105kD), BM600 (100kD), Herlitz junctional epidermolysis bullosa)), LAMNB2; laminin subunit gamma-2; BM600 100kDa; kalinin 105kDa; nicein 100kDa; BM600-100kDa; laminin B2t chain; CSF 140 kDa subunit; nicein subunit gamma; kalinin subunit gamma; ladsin 140 kDa subunit; epiligrin subunit gamma; cell-scattering factor 140 kDa subunit; large adhesive scatter factor 140 kDa subunit; B2T; CSF; EBR2; BM600; EBR2A; LAMB2T; LAMNB2; MGC138491; MGC141938;

Gene ID 3918

 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

mRNA Refseq	NM_005562
Protein Refseq	NP_005553
MIM	150292
UniProt ID	Q13753

 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