

## Product datasheet for TP318516

### LAMC2 (NM\_018891) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human laminin, gamma 2 (LAMC2), transcript variant 2, 20 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA Clone or AA Sequence:** >RC218516 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MPALWLGCCCLFSLLLPAARATSRREVCDNCGKSRQCIFDRELHRQTGNGFRCLNCNDNTDGIHCEKCKN  
GFYRHRERDRCLPCNCNSKGSLSARCDNSGRCSCKPGVTGARCDRCLPGFHMLMDAGCTQDQRLDLSKCD  
CDPAGIAGPCDAGRCVCKPAVTGERCDRCRSGYYNLDGGNPEGCTQCFYGHASCRSSAEYSVHKITST  
FHQDVDGWKAVQRNGSPAKLQWSQRHQDVSSAQRLDPVYFVAPAKFLGNQQVSYGQSLSFDRVDRGGR  
HPSAHDVILEGAGLRITAPLMPLGKTLPCGLTKTYTFRLEHPSNNWSPQLSYFEYRRLRNLTALRIRA  
TYGEYSTGYIDNVTLISARVSGAPAPWVEQCICPVGYKGFQDCASGYKRDSARLPGFGTICPCNCQG  
GGACDPDTGDCYSGDENPDIECADCPYGFYNDPHDPRSCPCCHNGFSCSVMPEEVCNCPGVTG  
ARCELCADGYFGDPFGEHGPVRCPCQCNNVDPASGNCNDRLTGRCLCKIHNATAGIYCDQCKAGYFGD  
PLAPNPADKCRACNCPMGSEPVGCRSDGTCVCKPGFGGPNCEHGAFSCPACYNQVKIQMDQFMQQLQRM  
EALISKAQGGDGVVPDTELEGRMQAEQALQDILRDAQISEGASRSLGLQAKVRSQENSYSRLDDLKML  
TVERVRALGSQYQNRVDRTHRLITQMQLSLAESEASLGNTNIPASDHVYVGPNGFKSLAQEATRLAESHVE  
SASNMEQLTRETEDYSKQALSIVRKALHEGVGSGSPDGAVVQGLVEKLEKTKSLAQQLTREATQAEIE  
ADRSYQHSLRLLDSVSRLLQGVSDQSFQVEEAKRIKQKADSLSSLVTRHMDEFKRTQKNLGNWKEEAQQLL  
QNGKSGREKSDQLLSRANLAKSRAQEALSMGNATFYEVESEILKLNREFDLQVDNRKAEAEAMKRLSYIS  
QKVSDASDKTQQAERALGSAADAQRAKNGAGEALEISSEIEQEIGSLNLEANVTADGALAMEKGLASLK  
SEMREVEGELERKELEFDTNMDAVQMVITEAQKVDTRAKNAGVTIQDTLNTLDGLLHLMGM

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK  
**Predicted MW:** 119.3 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method  
**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining  
**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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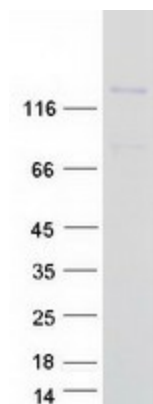
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_061486</a>
<b>Locus ID:</b>	3918
<b>UniProt ID:</b>	<a href="#">Q13753</a>
<b>RefSeq Size:</b>	4522
<b>Cytogenetics:</b>	1q25.3
<b>RefSeq ORF:</b>	3333
<b>Synonyms:</b>	B2T; BM600; CSF; EBR2; EBR2A; LAMB2T; LAMNB2

**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), 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 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 transcript variants resulting from alternative splicing of the 3' terminal exon, and encoding different isoforms of gamma 2 chain, have been described. The two variants are differentially expressed in embryonic tissues, however, the biological significance of the two forms is not known. Transcript variants utilizing alternative polyA\_signal have also been noted in literature. [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 LAMC2 protein (Cat# TP318516). The protein was produced from HEK293T cells transfected with LAMC2 cDNA clone (Cat# [RC218516]) using MegaTran 2.0 (Cat# [TT210002]).