



# Rabbit Anti-Human LAMC2 Polyclonal Antibody (CABT-L2188)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Polyclonal Antibody to Laminin Gamma 2 (Knockout Validated)
<b>Specificity</b>	The antibody is a rabbit polyclonal antibody raised against LAMC2. It has been selected for its ability to recognize LAMC2 in immunohistochemical staining and western blotting.
<b>Target</b>	LAMC2
<b>Immunogen</b>	Recombinant fragment corresponding to human LAMC2 (Cys28~Cys196)
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Antigen-specific affinity chromatography followed by Protein A affinity chromatography
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB
<b>Format</b>	Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	200 µg
<b>Buffer</b>	Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.
<b>Preservative</b>	0.05% Proclin-300

<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months.
<b>Ship</b>	4°C with ice bags

## BACKGROUND

### Introduction

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]

<b>Keywords</b>	B2T;EBR2;EBR2A;LAMB2T;LAMNB2;Kalinin/nicein/epiligrin 100 kDa subunit;Cell-scattering factor 140 kDa subunit;Ladsin 140 kDa;Large adhesive scatter factor 140 kDa
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## GENE INFORMATION

**Gene Name** LAMC2 laminin, gamma 2 [ Homo sapiens (human) ]

**Official Symbol** LAMC2

<b>Synonyms</b>	LAMC2; laminin, gamma 2; B2T; CSF; EBR2; BM600; EBR2A; LAMB2T; LAMNB2; laminin subunit gamma-2; 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;
<b>Entrez Gene ID</b>	<a href="#">3918</a>
<b>Protein Refseq</b>	NP_005553
<b>UniProt ID</b>	<a href="#">Q13753</a>
<b>Chromosome Location</b>	1q25-q31
<b>Pathway</b>	Alpha6-Beta4 Integrin Signaling Pathway; Amoebiasis; Anchoring fibril formation; Assembly of collagen fibrils and other multimeric structures; Cell junction organization; Cell-Cell communication; Collagen formation; Degradation of the extracellular matrix;
<b>Function</b>	heparin binding;