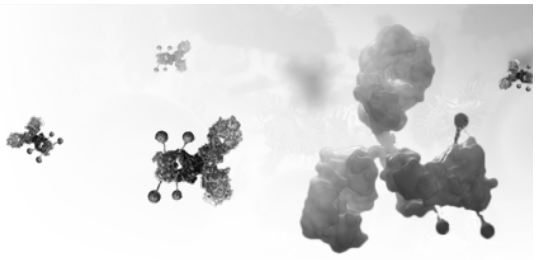

Anti-LAMC2 (aa 1084-1193) polyclonal antibody (DPAB-DC1825)

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

PRODUCT INFORMATION

Antigen 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 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.
Immunogen	LAMC2 (NP_005553, 1084 a.a. ~ 1193 a.a) partial recombinant protein with GST tag. The

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	sequence is VDTRAKNAGVTIQDTLNTLDGLLHLMDQPLSVDEEGLVLLEQKLSRAKTQINSQLRPMMS ELEERARQQRGHLHLLETSIDGILADVKNLENIRDNLPPGCYNTQALEQQ
Source/Host	Mouse
Species Reactivity	Human, Mouse
Conjugate	Unconjugated
Applications	WB (Cell lysate), WB (Cell lysate), WB (Recombinant protein), ELISA,
Size	50 µl
Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	LAMC2 laminin, gamma 2 [Homo sapiens (human)]
Official Symbol	LAMC2
Synonyms	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;
Entrez Gene ID	3918
Protein Refseq	NP_005553
UniProt ID	Q13753
Chromosome Location	1q25-q31
Pathway	Alpha6-Beta4 Integrin Signaling Pathway; Anchoring fibril formation; Cell junction organization; Collagen formation.
Function	heparin binding;

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