

Product name:	Laminin β -2 Rabbit Polyclonal Antibody
Cat number:	ABN13201
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human LAMB2. AA range:61-110
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight:	210kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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 function: Defects in LAMB2 are a cause of congenital nephrotic syndrome [MIM:609049]. Congenital nephrotic syndrome constitutes a heterogeneous group of conditions having in common the disruption of normal glomerular permselectivity. Congenital nephrotic syndrome due to LAMB2 mutations may be associated with ocular abnormalities. Defects in LAMB2 are the cause of Pierson syndrome [MIM:609049]; also known as microcoria-congenital nephrotic syndrome. Pierson syndrome is characterized by nephrotic syndrome with neonatal onset, diffuse mesangial sclerosis and eye abnormalities with microcoria as the leading clinical feature. Death usually occurs within the first weeks of life. Disease severity depends on the mutation type: nontruncating LAMB2 mutations may display variable phenotypes ranging from a milder variant of Pierson syndrome to isolated congenital nephrotic syndrome. Domain: Domains VI and IV are globular. The alpha-helical domains I and II are thought to interact with other laminin chains to form a coiled coil structure. Function: Binding to cells via a high affinity receptor, laminin is thought to mediate the attachment, migration and organization of cells into tissues during embryonic development by interacting with other extracellular matrix components. Similarity: Contains 1 laminin IV type B domain. Similarity: Contains 1 laminin N-terminal domain. Similarity: Contains 13 laminin EGF-like domains. Subcellular location: S-laminin is concentrated in the synaptic cleft of the neuromuscular junction. Subunit: Laminin is a complex glycoprotein, consisting of three different polypeptide chains (alpha, beta, gamma), which are bound to each other by disulfide bonds into a cross-shaped molecule comprising one long and three short arms with globules at each end. Beta-2 is a subunit of laminin-3 (S-laminin), laminin-4 (S-merosin), and laminin-7 (KS-laminin).