

Product Name: KD-Validated LAMB1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAAb00361

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000
Molecular Weight	Calculated MW: 198.0kDa

Antigen Information

Gene Name	LAMB1
Alternative Names	LAMB1; Laminin Subunit Beta 1; Laminin Subunit Beta-1; Laminin B1 Chain; Laminin, Beta 1; CLM; Cutis Laxa With Marfanoid Phenotype; Laminin-10 Subunit Beta; Laminin-12 Subunit Beta; Laminin-1 Subunit Beta; Laminin-2 Subunit Beta; Laminin-6 Subunit Beta; Laminin-8 Subunit Beta; LIS5
Gene ID	3912.0
SwissProt ID	P07942
Immunogen	A synthesized peptide derived from human LAMB1

Background

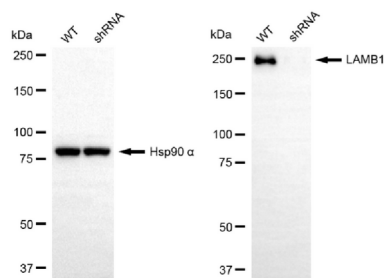
Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes.

They have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Laminins are composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively) and they 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 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 beta chain isoform laminin, beta 1. The beta 1 chain has 7 structurally distinct domains which it shares with other beta chain isomers. The C-terminal helical region containing domains I and II are separated by domain alpha, domains III and V contain several EGF-like repeats, and domains IV and VI have a globular conformation. Laminin, beta 1 is expressed in most tissues that produce basement membranes, and is one of the 3 chains constituting laminin 1, the first laminin isolated from Engelbreth-Holm-Swarm (EHS) tumor. A sequence in the beta 1 chain that is involved in cell attachment, chemotaxis, and binding to the laminin receptor was identified and shown to have the capacity to inhibit metastasis. [provided by RefSeq, Aug 2011]

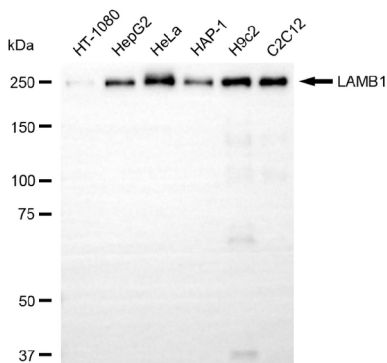
Research Area

Cardiovascular, Signal Transduction

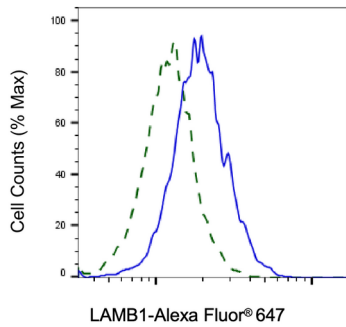
Image Data



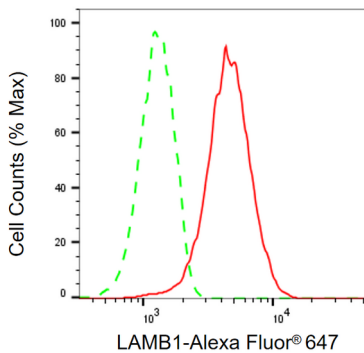
Western blotting analysis using LAMB1 antibody (KVA00361). LAMB1 expression in wild-type (WT) and LAMB1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with LAMB1 antibody (KVA00361, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using LAMB1 antibody (KVA00361). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with LAMB1 antibody (KVA00361, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Validation of LAMB1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with LAMB1 antibody (KVA00361, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of LAMB1 expression in C2C12 cells using LAMB1 antibody (KVA00361, 1:2,000). Green, isotype control; red, LAMB1.