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Anti-Laminin gamma 1/LAMC1 Antibody Picoband®

Catalog Number: PA1581

About LAMC1

Laminin gamma1, Laminin subunit gamma-1, is a protein that in humans is encoded by the LAMC1 gene. 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 gamma chain isoform laminin, gamma 1. The gamma 1 chain, formerly though to be a beta chain, contains structural domains similar to beta chains, however, lacks the short alpha region separating domains I and II. The structural organization of this gene also suggested that it had diverged considerably from the beta chain genes. Embryos of transgenic mice in which both alleles of the gamma 1 chain gene were inactivated by homologous recombination, lacked basement membranes, indicating that laminin, gamma 1 chain is necessary for laminin heterotrimer assembly. It has been inferred by analogy with the strikingly similar 3' UTR sequence in mouse laminin gamma 1 cDNA, that multiple polyadenylation sites are utilized in human to generate the 2 different sized mRNAs (5.5 and 7.5 kb) seen on Northern analysis.

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Overview

Product Name	Anti-Laminin gamma 1/LAMC1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Laminin gamma 1/LAMC1 Antibody catalog # PA1581. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not

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	compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P11047

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Laminin gamma 1, different from the related mouse sequence by one amino acid and rat sequence by three amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

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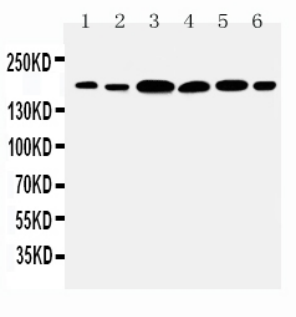
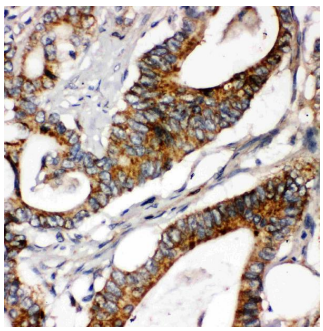
Anti-Laminin gamma 1/LAMC1 Antibody Picoband® (PA1581) Images



Anti-Laminin gamma 1 antibody, PA1581, Western blottingLane 1: Rat Kidney Tissue LysateLane 2: Rat Lung Tissue LysateLane 3: U87 Cell LysateLane 4: SMMC Cell LysateLane 5: HELA Cell LysateLane 6: SKOV1 Cell Lysate



Anti-Laminin gamma 1 antibody, PA1581, IHC(P)IHC(P): Human Intestinal Cancer Tissue

15 Publications Citing This Product

1. PubMed ID: -, Yan X,Niu Q,Gao X,Shen S,He N,Wang H,Fang R,Gao Y,Chang H.2021.Differential protein metabolism and regeneration in gastrocnemius muscles in high-fat diet fed mice and pre-hibernation Daurian ground squirrels: a comparison between pathological and healthy

2. PubMed ID: 25063144, Lin Cy, Li Lt, Su Wt. Mater Sci Eng C Mater Biol Appl. 2014 Sep;42:474-8. Doi: 10.1016/J.Msec.2014.05.063. Epub 2014 Jun 6. Three Dimensional Chitosan Scaffolds Influence The Extra Cellular Matrix Expression In Schwann Cells.

3. PubMed ID: 23856441, Xu L, Zheng N, He Q, Li R, Zhang K, Liang T. Phytomedicine. 2013 Oct 15;20(13):1172-9. Doi: 10.1016/J.Phymed.2013.06.008. Epub 2013 Jul 13. Puerarin, Isolated From Pueraria Lobata (Willd.), Protects Against Hepatotoxicity Via Specific Inhibition O...

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