

Anti-Laminin Gamma 1 Antibody

Catalog # ABO10895

Product Information

Application	WB, IHC-P
Primary Accession	P11047
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Laminin subunit gamma-1(LAMC1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3915
Other Names	Laminin subunit gamma-1, Laminin B2 chain, Laminin-1 subunit gamma, Laminin-10 subunit gamma, Laminin-11 subunit gamma, Laminin-2 subunit gamma, Laminin-3 subunit gamma, Laminin-4 subunit gamma, Laminin-6 subunit gamma, Laminin-7 subunit gamma, Laminin-8 subunit gamma, Laminin-9 subunit gamma, S-laminin subunit gamma, S-LAM gamma, LAMC1, LAMB2
Calculated MW	177603
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse
Subcellular Localization	Secreted, extracellular space, extracellular matrix, basement membrane.
Tissue Specificity	Found in the basement membranes (major component).
Source	Eukaryota
Protein Name	Laminin subunit gamma-1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Laminin gamma 1(1566-1579aa KKQEAAIMDYNRDI), different from the related mouse sequence by one amino acid and rat sequence by three amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 11 laminin EGF-like domains.

Protein Information

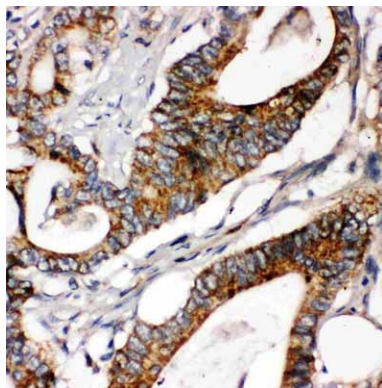
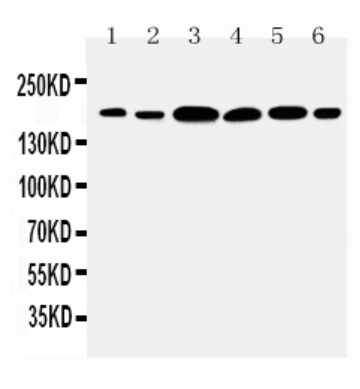
Name	LAMC1 {ECO:0000303 PubMed:28397838, ECO:0000312 HGNC:HGNC:6492}
Function	Binding to cells via a high affinity receptor, laminin is thought to mediate the attachment, migration and organization of cells into tissues during embryonic development by interacting with other extracellular matrix components. As a subunit of laminin-1 (also known as laminin-111 or EHS laminin), it is involved in the stimulation of agrin-induced receptor clustering through a MuSK-independent pathway.
Cellular Location	Secreted, extracellular space, extracellular matrix, basement membrane
Tissue Location	Found in the basement membranes (major component).

Background

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.

Images

Anti-Laminin gamma 1 antibody, ABO10895, Western blotting
Lane 1: Rat Kidney Tissue Lysate
Lane 2: Rat Lung Tissue Lysate
Lane 3: U87 Cell Lysate
Lane 4: SMMC Cell Lysate
Lane 5: HELA Cell Lysate
Lane 6: SKOV1 Cell Lysate



Anti-Laminin gamma 1 antibody, ABO10895,
IHC(P)IHC(P): Human Intestinal Cancer Tissue

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