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Tel: 858.875.1900 Fax: 858.875.1999

Anti-Laminin Gamma 1 Antibody

Catalog # ABO10895

Specification

Anti-Laminin Gamma 1 Antibody - 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.

Anti-Laminin Gamma 1 Antibody - 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 MW KDa

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).

Protein Name
Laminin subunit gamma-1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

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.

Anti-Laminin Gamma 1 Antibody - 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.

Cellular Location
Secreted, extracellular space, extracellular matrix, basement membrane

Tissue Location
Found in the basement membranes (major component).

Anti-Laminin Gamma 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Laminin Gamma 1 Antibody - Images

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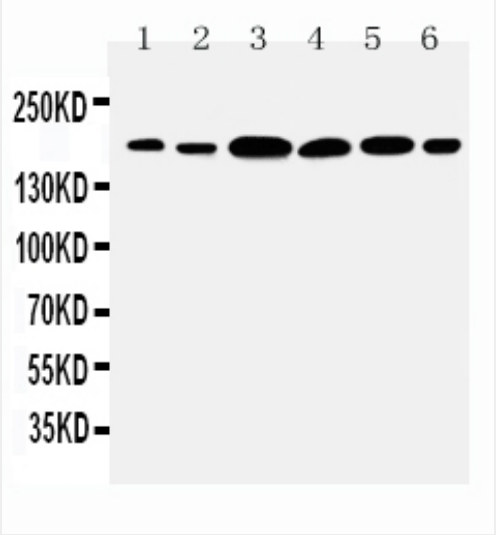
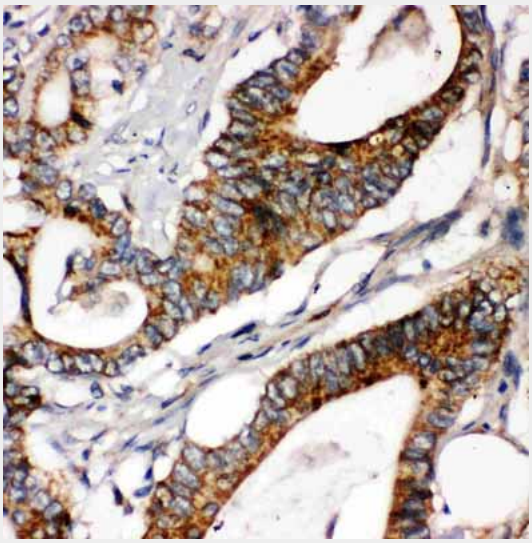


Anti-Laminin gamma 1 antibody, ABO10895, Western blottingLane 1: Rat Kidney Tissue LysateLane 2: Rat Lung Tissue LysateLane 3: U87 Cell LysateLane 4: SMMC Cell LysateLane 5: HELA Cell LysateLane 6: SKOV1 Cell Lysate



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

Anti-Laminin Gamma 1 Antibody - 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.