

A16020

Leader in Biomolecular Solutions for Life Science



LAMC1 Rabbit pAb

Catalog No.: A16020

2 Publications

Basic Information

Observed MW

220kDa

Calculated MW

178kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,ELISA

Cross-Reactivity

Human,Mouse,Rat

Recommended Dilutions

WB 1:1000 - 1:5000

IHC-P 1:50 - 1:200

Contact



www.abclonal.com

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), have 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 thought 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.

Immunogen Information

Gene ID

3915

Swiss Prot

P11047

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1030-1275 of human LAMC1 (NP_002284.3).

Synonyms

LAMB2; LAMC1

Product Information

Source

Rabbit

Isotype

IgG

Purification

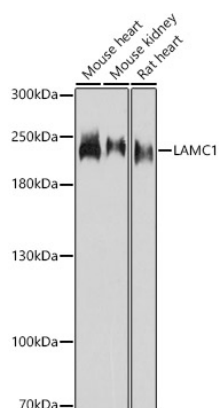
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of various lysates using LAMC1 Rabbit pAb (A16020) at 1:3000 dilution.

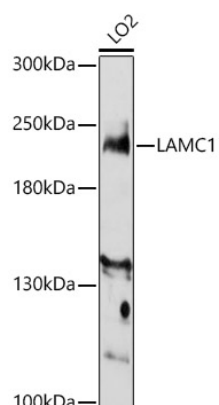
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.



Western blot analysis of lysates from LO2 cells, using LAMC1 Rabbit pAb (A16020) at 1:3000 dilution.

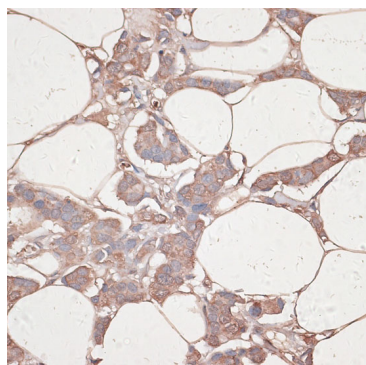
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

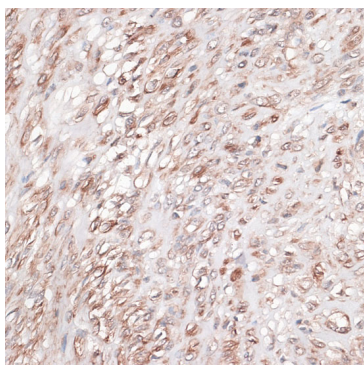
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Enhanced Kit (RM00021).

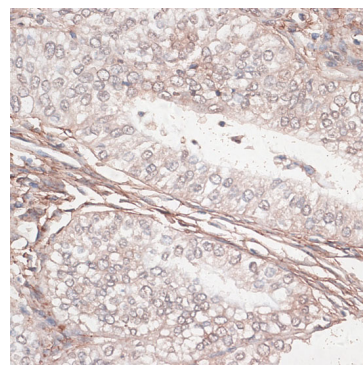
Exposure time: 30s.



Immunohistochemistry analysis of paraffin-embedded human breast cancer using LAMC1 Rabbit pAb (A16020) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded human uterus using LAMC1 Rabbit pAb (A16020) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded human uterine cancer using LAMC1 Rabbit pAb (A16020) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.