

## Basic Information

|                    |   |  |
|--------------------|---|--|
| Product Name       | Anti-Laminin gamma 2/LAMC2 Antibody   |  |
| Gene Name          | LAMC2   |  |
| Source             | Rabbit  |  |
| Clonality          | Polyclonal  |  |
| Isotype            | IgG   |  |
| Species Reactivity | human, mouse, rat   |  |
| Tested Application | WB, IHC   |  |
| Contents           | 500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.   |  |
| Immunogen          | A synthetic peptide corresponding to a sequence at the C-terminus of human LAMC2, identical to the related rat and mouse sequences.   |  |
| Concentration      | 500 ug/ml   |  |
| Purification       | Immunogen affinity purified.  |  |
| Observed MW        | 131 kDa   |  |
| Dilution Ratios    | Western blot (WB): 1:500-2000<br>Immunohistochemistry (IHC): 1:50-400<br>(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user. |  |

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

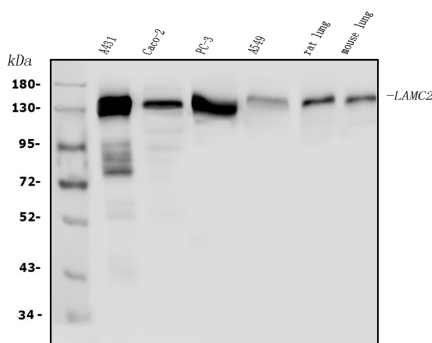
Laminin gamma2, Laminin subunit gamma-2, is a protein that in humans is encoded by the LAMC2 gene. Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes including cell 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 2. The gamma 2 chain, formerly thought to be a truncated version of beta chain(B2t), is highly homologous to the gamma 1 chain; however, it lacks domain VI, and domains V, IV and III are shorter. It is expressed in several fetal tissues but differently from gamma 1, and is specifically localized to epithelial cells in skin, lung and kidney. The gamma 2 chain together with alpha 3 and beta 3 chains constitute laminin 5(earlier known as kalinin), which is an integral part of the anchoring filaments that connect epithelial cells to the underlying basement membrane. The epithelium-specific expression of the gamma 2 chain implied its role as an epithelium attachment molecule, and mutations in this gene have been associated with junctional epidermolysis bullosa, a skin disease characterized.

## Reference

Anti-Laminin gamma 2/LAMC2 Antibody被引用在1文献中。

## Selected Validation Data



Western blot analysis of Laminin gamma 2/LAMC2 using anti-Laminin gamma 2/LAMC2 antibody (BA3650). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysates,

Lane 2: human CACO-2 whole cell lysates,

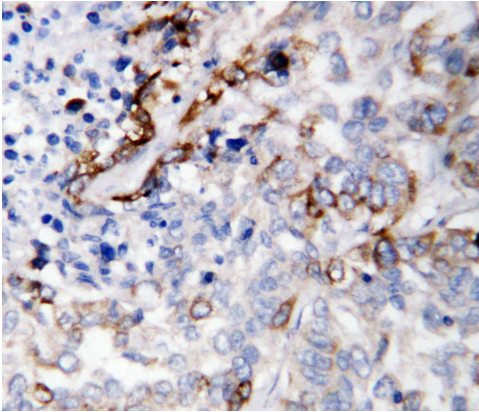
Lane 3: human PC-3 whole cell lysates,

Lane 4: human A549 whole cell lysates,

Lane 5: rat lung tissue lysates,

Lane 6: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Laminin gamma 2/LAMC2 antigen affinity purified polyclonal antibody (BA3650) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Laminin gamma 2/LAMC2 at approximately 131 kDa. The expected band size for Laminin gamma 2/LAMC2 is at 131 kDa.



IHC analysis of Laminin gamma 2/LAMC2 using anti-Laminin gamma 2/LAMC2 antibody (BA3650).

Laminin gamma 2/LAMC2 was detected in a paraffin-embedded section of human lung cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Laminin gamma 2/LAMC2 Antibody (BA3650) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.