

LAMC2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13984c

Specification

LAMC2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q13753</u> <u>NP_005553.2</u>, <u>NP_061486.2</u> Mouse Rabbit Polyclonal Rabbit IgG 130976 941-970

LAMC2 Antibody (Center) - Additional Information

Gene ID 3918

Other Names

Laminin subunit gamma-2, Cell-scattering factor 140 kDa subunit, CSF 140 kDa subunit, Epiligrin subunit gamma, Kalinin subunit gamma, Kalinin/nicein/epiligrin 100 kDa subunit, Ladsin 140 kDa subunit, Laminin B2t chain, Laminin-5 subunit gamma, Large adhesive scatter factor 140 kDa subunit, Nicein subunit gamma, LAMC2, LAMB2T, LAMNB2

Target/Specificity

This LAMC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 941-970 amino acids from the Central region of human LAMC2.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LAMC2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

LAMC2 Antibody (Center) - Protein Information

Name LAMC2



Synonyms LAMB2T, LAMNB2

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. Ladsin exerts cell-scattering activity toward a wide variety of cells, including epithelial, endothelial, and fibroblastic cells.

Cellular Location

Secreted, extracellular space, extracellular matrix, basement membrane. Note=Major component

Tissue Location

The large variant is expressed only in specific epithelial cells of embryonic and neonatal tissues. In 17-week old embryo the small variant is found in cerebral cortex, lung, and distal tubes of kidney, but not in epithelia except for distal tubuli

LAMC2 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

LAMC2 Antibody (Center) - Images



LAMC2 Antibody (Center) (Cat. #AP13984c) western blot analysis in mouse stomach tissue lysates (35ug/lane). This demonstrates the LAMC2 antibody detected the LAMC2 protein (arrow).

LAMC2 Antibody (Center) - 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 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 by blisters due to disruption of the epidermal-dermal junction. Two transcript variants resulting from alternative splicing of the 3' terminal exon, and encoding different isoforms of gamma 2 chain, have been described. The two variants are differentially expressed in embryonic tissues, however, the biological significance of the two forms is not known. Transcript variants utilizing alternative polyA signal have also been noted in literature.

LAMC2 Antibody (Center) - References

Tsubota, Y., et al. Int. J. Cancer 127(9):2031-2041(2010) Drake, J.M., et al. J. Biol. Chem. 285(44):33940-33948(2010) Kariya, Y., et al. J. Biol. Chem. 285(5):3330-3340(2010) Zboralski, D., et al. Mol. Cancer 9 (1), 65 (2010) : Baeten, C.I., et al. Dis. Colon Rectum 52(12):2028-2035(2009)