

LAMC2 Antibody (Center) Blocking peptide Synthetic peptide

Catalog # BP13984c

Specification

LAMC2 Antibody (Center) Blocking peptide - Product Information

Primary Accession

<u>Q13753</u>

LAMC2 Antibody (Center) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody AP13984c was selected from the Center region of LAMC2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LAMC2 Antibody (Center) Blocking peptide - 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) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

LAMC2 Antibody (Center) Blocking peptide - Images

LAMC2 Antibody (Center) Blocking peptide - 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 nonidentical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively) and they form a cruciform structureconsisting of 3 short arms, each formed by a different chain, and along arm composed of all 3 chains. Each laminin chain is amultidomain protein encoded by a distinct gene. Several isoformsof each chain have been described. Different alpha, beta and gammachain isomers combine to give rise to different heterotrimericlaminin isoforms which are designated by Arabic numerals in theorder of their discovery, i.e. alpha1beta1gamma1 heterotrimer islaminin 1. The biological functions of the different chains andtrimer molecules are largely unknown, but some of the chains havebeen 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), ishighly homologous to the gamma 1 chain; however, it lacks domainVI, and domains V, IV and III are shorter. It is expressed inseveral fetal tissues but differently from gamma 1, and isspecifically localized to epithelial cells in skin, lung andkidney. The gamma 2 chain together with alpha 3 and beta 3 chainsconstitute laminin 5 (earlier known as kalinin), which is an integral part of the anchoring filaments that connect epithelialcells to the underlying basement membrane. The epithelium-specificexpression of the gamma 2 chain implied its role as an epitheliumattachment molecule, and mutations in this gene have beenassociated with junctional epidermolysis bullosa, a skin diseasecharacterized by blisters due to disruption of the epidermal-dermaljunction. Two transcript variants resulting from alternativesplicing of the 3' terminal exon, and encoding different isoformsof 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. Transcriptvariants utilizing alternative polyA signal have also been noted inliterature.

LAMC2 Antibody (Center) Blocking peptide - 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)