

### LAMB1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13983b

#### Specification

## LAMB1 Antibody (C-term) - Product Information

<b>WB, IHC-P,E</b> <u>P07942</u> <u>NP 002282.2</u>
Mouse
Rabbit
Polyclonal
Rabbit IgG
1691-1720

## LAMB1 Antibody (C-term) - Additional Information

#### Gene ID 3912

#### **Other Names**

Laminin subunit beta-1, Laminin B1 chain, Laminin-1 subunit beta, Laminin-10 subunit beta, Laminin-12 subunit beta, Laminin-2 subunit beta, Laminin-6 subunit beta, Laminin-8 subunit beta, LAMB1

#### Target/Specificity

This LAMB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1691-1720 amino acids from the C-terminal region of human LAMB1.

**Dilution** WB~~1:1000 IHC-P~~1:10~50 E~~Use at an assay dependent concentration.

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

LAMB1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### LAMB1 Antibody (C-term) - Protein Information

#### Name LAMB1



**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. Involved in the organization of the laminar architecture of cerebral cortex. It is probably required for the integrity of the basement membrane/glia limitans that serves as an anchor point for the endfeet of radial glial cells and as a physical barrier to migrating neurons. Radial glial cells play a central role in cerebral cortical development, where they act both as the proliferative unit of the cerebral cortex and a scaffold for neurons migrating toward the pial surface.

#### **Cellular Location**

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

### LAMB1 Antibody (C-term) - 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>

#### LAMB1 Antibody (C-term) - Images



LAMB1 Antibody (C-term) (Cat. #AP13983b) western blot analysis in mouse lung tissue lysates (35ug/lane).This demonstrates the LAMB1 antibody detected the LAMB1 protein (arrow).





LAMB1 Antibody (C-term) (Cat. #AP13983b)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of LAMB1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## LAMB1 Antibody (C-term) - 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 beta chain isoform laminin, beta 1. The beta 1 chain has 7 structurally distinct domains which it shares with other beta chain isomers. The C-terminal helical region containing domains I and II are separated by domain alpha, domains III and V contain several EGF-like repeats, and domains IV and VI have a globular conformation. Laminin, beta 1 is expressed in most tissues that produce basement membranes, and is one of the 3 chains constituting laminin 1, the first laminin isolated from Engelbreth-Holm-Swarm (EHS) tumor. A sequence in the beta 1 chain that is involved in cell attachment, chemotaxis, and binding to the laminin receptor was identified and shown to have the capacity to inhibit metastasis.

# LAMB1 Antibody (C-term) - References



Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010) McGovern, D.P., et al. Nat. Genet. 42(4):332-337(2010) Wheeler, H.E., et al. PLoS Genet. 5 (10), E1000685 (2009) : Rooney, J.E., et al. Proc. Natl. Acad. Sci. U.S.A. 106(19):7991-7996(2009) Delektorskaya, V.V., et al. Bull. Exp. Biol. Med. 146(5):616-619(2008)