abcam

Product datasheet

Recombinant Human LAMA3 protein ab158810

1 Image

Description

Product name Recombinant Human LAMA3 protein

Expression system Wheat germ

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence SSQQQRVPFLQPPGQSQLQASYVEFRPSQGCSPGYYRD

HKGLYTGRCVPC

NCNGHSNQCQDGSGICVNCQHNTAGEHCERCQEGYYGN

AVHGSCRACPCP HTNSFATGCV

Amino acids 29 to 138

Tags GST tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of ab158810 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications ELISA

Western blot

Form Liquid

Additional notes This product was previously labelled as Laminin subunit alpha-3, Laminin 5 alpha 3.

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

Canaral Info

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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.

Laminin-5 is thought to be involved in (1) cell adhesion via integrin alpha-3/beta-1 in focal adhesion and integrin alpha-6/beta-4 in hemidesmosomes, (2) signal transduction via tyrosine phosphorylation of pp125-FAK and p80, (3) differentiation of keratinocytes.

Tissue specificity

Skin; respiratory, urinary, and digestive epithelia and in other specialized tissues with prominent secretory or protective functions. Epithelial basement membrane, and epithelial cell tongue that migrates into a wound bed. A differential and focal expression of the subunit alpha-3 is observed in the CNS.

Involvement in disease

Defects in LAMA3 are a cause of epidermolysis bullosa junctional Herlitz type (H-JEB) [MIM:226700]; also known as junctional epidermolysis bullosa Herlitz-Pearson type. JEB defines a group of blistering skin diseases characterized by tissue separation which occurs within the dermo-epidermal basement membrane. H-JEB is a severe, infantile and lethal form. Death occurs usually within the first six months of life. Occasionally, children survive to teens. H-JEB is marked by bullous lesions at birth and extensive denudation of skin and mucous membranes that may be hemorrhagic.

Defects in LAMA3 are the cause of laryngoonychocutaneous syndrome (LOCS) [MIM:245660]. LOCS is an autosomal recessive epithelial disorder confined to the Punjabi Muslim population. The condition is characterized by cutaneous erosions, nail dystrophy and exuberant vascular granulation tissue in certain epithelia, especially conjunctiva and larynx.

Sequence similarities

Contains 15 Iaminin EGF-like domains.
Contains 5 Iaminin G-like domains.

Contains 1 Iaminin IV type A domain.

Contains 1 Iaminin N-terminal domain.

Domain

The alpha-helical domains I and II are thought to interact with other laminin chains to form a coiled

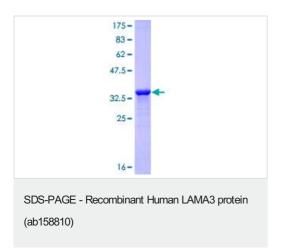
coil structure.

Domain G is globular.

Cellular localization

Secreted > extracellular space > extracellular matrix > basement membrane. Major component.

Images



ab158810 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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