

### Anti-Laminin 5 antibody [P3H9-2] ab78286

★★★★★ [2 Abreviews](#) [17 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-Laminin 5 antibody [P3H9-2]
<b>Description</b>	Mouse monoclonal [P3H9-2] to Laminin 5
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-Fr
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-Fr: Normal human colon and skin frozen sections.
<b>General notes</b>	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 50% Glycerol (glycerin, glycerine)</p>
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	P3H9-2
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab78286 in the following tested applications.

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

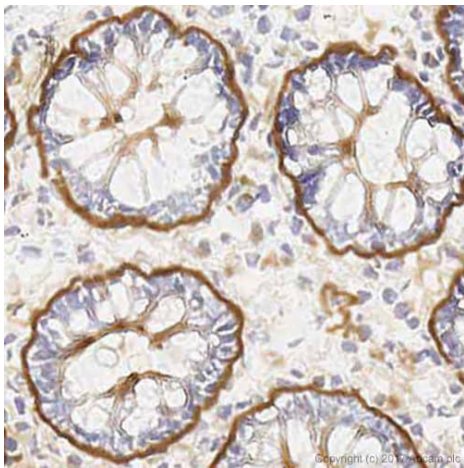
Application	Abreviews	Notes
IHC-Fr	★★★★★ (2)	Use a concentration of 1 - 5 µg/ml.

## Target

### Relevance

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, composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively), have 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.

## Images

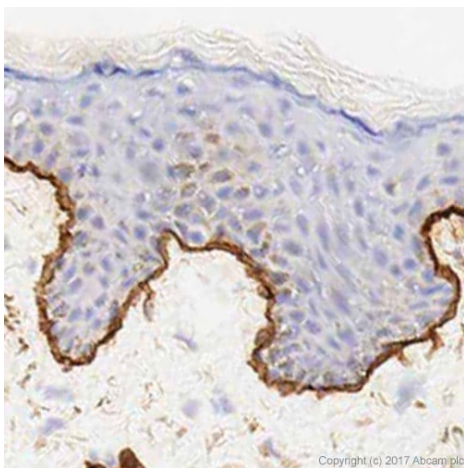


Immunohistochemistry (Frozen sections) - Anti-Laminin 5 antibody [P3H9-2] (ab78286)

IHC image of Laminin 5 staining in a section of frozen normal human colon\*, performed on a Leica Bond™ system using the standard protocol F. No antigen retrieval step was performed prior to staining. The section was incubated with ab78286, 1 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

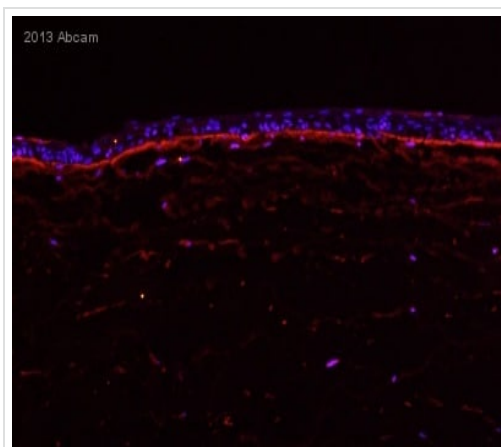


Immunohistochemistry (Frozen sections) - Anti-Laminin 5 antibody [P3H9-2] (ab78286)

IHC image of Laminin 5 staining in a section of frozen normal human skin\*, performed on a Leica Bond™ system using the standard protocol F. No antigen retrieval step was performed prior to staining. The section was incubated with ab78286, 1 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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Immunohistochemistry (Frozen sections) - Anti-Laminin 5 antibody [P3H9-2] (ab78286)

This image is courtesy of an anonymous Abreview

ab78286 staining Laminin 5 in Human cultured skin (NHEK, NB1RGB) tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with formaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% Blocking One® for 1 hour at 25°C. Samples were incubated with primary antibody (1/500 in 10% Blocking One® in PBS) for 1 hour at 25°C. An Alexa Fluor® 555-conjugated Rabbit anti-mouse IgG polyclonal (1/200) was used as the secondary antibody.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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