Overview

Product name: Anti-Laminin antibody
Description: Rabbit polyclonal to Laminin
Host species: Rabbit
Specificity: In dot blot immunoassay this antibody does not react with Fibronectin, Vitronectin, Collagen IV, or Chondroitin sulfate types A, B, and C.

Tested applications: Suitable for: IHC-FoFr, IHC-Fr, WB, IP, IHC - Wholemount, Dot blot, IHC-P, ICC/IF
Species reactivity: Reacts with: Mouse, Rat, Horse, Dog, Human, Pig, Xenopus laevis
Predicted to work with: Reptile, Mammals, Amphibian

Immunogen: Full length native protein (purified) corresponding to Laminin. The immunogen is laminin isolated from the basement membrane of Englebreth Holm-Swarm (EHS) mouse sarcoma.

Positive control: IHC-P: Human skin tissue; mouse skin neoplasia tissue. IHC-Fr: Mouse skin, placenta, anterior tibialis skeletal muscle and testis tissue.

General notes: Storage in frost-free freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Storage buffer: pH: 7.40
Preservative: 0.097% Sodium azide
Constituents: 0.0268% PBS, 1% BSA

Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab11575 in the following tested applications.
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.

Tissue specificity

Broadly expressed in: skin, heart, lung, and the reproductive tracts.

Sequence similarities

Contains 11 laminin EGF-like domains.
Contains 1 laminin IV type A domain.
Contains 1 laminin 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 IV is globular.

Cellular localization

Secreted > extracellular space > extracellular matrix > basement membrane.

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<tr>
<td>IHC-FoFr</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration. PubMed: 17418408</td>
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<tr>
<td>IHC-Fr</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>WB</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>IP</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC - Wholemount</td>
<td>★★★★★</td>
<td>1/300. PubMed: 25419850</td>
</tr>
<tr>
<td>Dot blot</td>
<td></td>
<td>1/1000. This concentration was determined using laminin at 50 ng per dot.</td>
</tr>
<tr>
<td>IHC-P</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration. PubMed: 20064216</td>
</tr>
</tbody>
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Target

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

Images
Cellular and embryonic localisation of CL-L1

Immunofluorescence showing co-localisation of CL-L1 and Laminin in E13.5 mouse embryos sections. CL-L1 is expressed in the basal membrane of the epithelium in the palate shelf of the maxilla (arrows). In contrast Laminin expression is present all around the epithelium membrane. A faint but clear CL-L1 expression is also observed in the cytoplasm of the epithelium and in the mesenchyme of the palate. PSM; rostral extremity of right palatal shelf of maxilla. Scale bar 100 μm.

(After Figure 2 E of Munye et al)

This image shows formalin fixed paraffin embedded human skin stained for Laminin (proteinase K digestion, anti-laminin 1:200 – 30 minutes RT). The picture was kindly supplied as part of the review submitted by Elizabeth Chlipala.

ab11575 staining Laminin (red) in mouse postnatal day 14 testes tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with 4% paraformaldehyde and blocked with 0.3% Triton X-100 + 5% BSA for 1 hour at 25°C. Samples were incubated with primary antibody (1/500) for 16 hours at 4°C. A TRITC-conjugated donkey anti-rabbit IgG (H+L) polyclonal (1/200) was used as the secondary antibody. Green - HSD3V1-FITC.
ab11575 staining Laminin in mouse anterior tibialis skeletal muscle tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was permeabilized with 0.5% Triton X in PBS for 5 minutes. Samples were incubated with primary antibody (1/1000 in PBS) for 30 minutes at 25°C. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/600) was used as the secondary antibody.

ab11575 at a 1/200 dilution staining mouse placenta tissue sections by Immunohistochemistry (frozen sections). The tissue was paraformaldehyde fixed and blocked with serum prior to incubation with the antibody for 12 hours. Bound antibody was detected using an Alexa Fluor® 594 conjugated goat anti-rabbit IgG.
ab11575 staining Laminin in mouse oocytes by Immunohistochemistry (PFA fixed, paraffin embedded sections). Grafts were fixed overnight in 4% paraformaldehyde, embedded in paraffin, and sectioned in 5 to 8 µm intervals. In brief, sections on slides were de-paraffinized, re-hydrated, antigens unmasked by incubating in target retrieval solution at 95°C for 30 minutes, permeabilized in 0.1% Triton-X100 for 5 minutes, blocked with 10% chicken serum in TBST overnight, and incubated with primary antibody at 1/200, in TBST with 1% serum for 1 hour at room temperature. After washing in TBST, slides were incubated with secondary antibody at 1/1000, for 30 minutes at room temperature. Cover slips were mounted with Prolong Gold Antifade with DAPI.

Immunofluorescence revealed TRA98+ oocytes and FOXL2+ granulosa cells in ovarian cord-like structures (dashed lines) and Laminin+ basement membrane (red) following five days of intact e12.5 female genital ridge transplantation.

ab11575 staining Laminin in Mouse skin neoplasia - papilloma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 10% serum for 1 hour at room temperature; antigen retrieval was by heat mediation in citrate buffer. Samples were incubated with primary antibody (1/200) for 8 hours at 4°C. A biotin-conjugated goat anti-rabbit IgG polyclonal (1/1000) was used as the secondary antibody.

ab11575 staining Laminin in Mouse skin tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with acetone, permeabilized with PBST (Triton X 100 0.025%) and blocked with 10% serum for 1 hour at room temperature. Samples were incubated with primary antibody (1/250) for 1 hour. An undiluted Alexa Fluor®488-conjugated Donkey anti-rabbit IgG polyclonal was used as the secondary antibody. The image shows 2 different skin sections with Laminin (green) staining in the basal layer of the epidermis. DAPI staining in blue.

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