

Product datasheet

Anti-Laminin gamma 1 antibody [EPR21199] ab233389

Recombinant **RabMAb**

[1 References](#) [8 Images](#)

Overview

Product name	Anti-Laminin gamma 1 antibody [EPR21199]
Description	Rabbit monoclonal [EPR21199] to Laminin gamma 1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment within Human Laminin gamma 1 aa 1000-1150. The exact sequence is proprietary. Database link: P11047
Positive control	WB: A431, NIH:OVCAR-3, HeLa, MCF7, C6, PC-12 and A549 whole cell lysates; Human fetal heart and fetal kidney tissue lysates; rat kidney, brain and spleen tissue lysates; mouse brain tissue lysate. IP: A431 whole cell lysate. IHC-P: Human pancreas tissue; mouse kidney tissue; rat stomach tissue. Flow cyt: A431 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p>

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21199
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab233389** 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
WB		1/1000. Detects a band of approximately 210-250 kDa (predicted molecular weight: 178 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt		1/50.
IP		1/30.

Target

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	Found in the basement membranes (major component).
Sequence similarities	Contains 11 laminin EGF-like domains.

Contains 1 laminin IV type A domain.
Contains 1 laminin N-terminal domain.

Domain

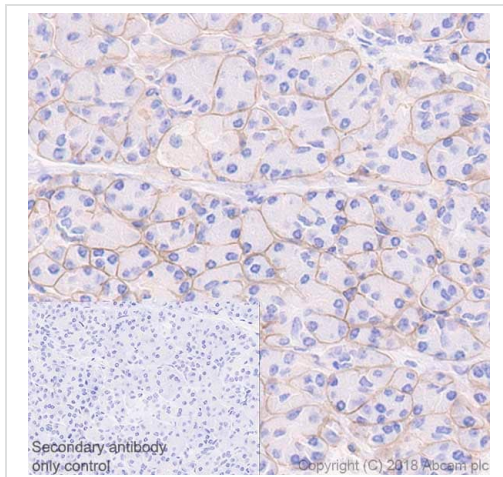
The alpha-helical domains I and II are thought to interact with other laminin chains to form a coiled coil structure.

Domains VI and IV are globular.

Cellular localization

Secreted > extracellular space > extracellular matrix > basement membrane.

Images

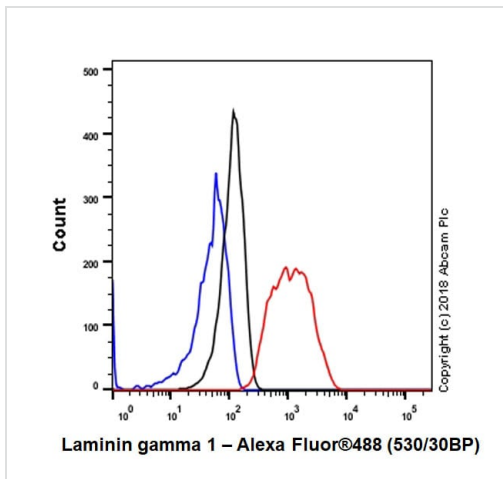


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Laminin gamma 1 antibody [EPR21199] (ab233389)

Immunohistochemical analysis of paraffin-embedded human pancreas tissue labeling Laminin gamma 1 with ab233389 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in basement membrane of human pancreas (PMID: 15159456) is observed. Counter stained with Hematoxylin.

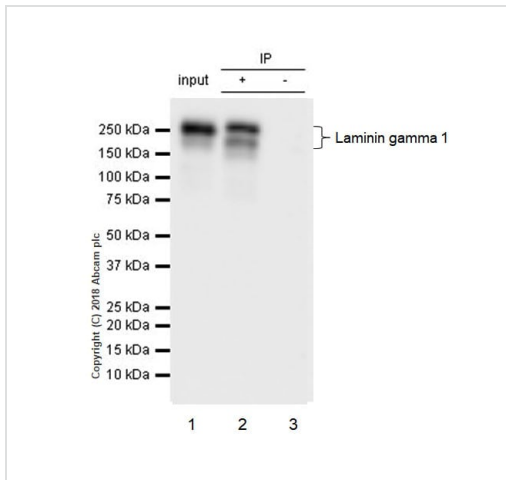
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat-mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Flow Cytometry - Anti-Laminin gamma 1 antibody [EPR21199] (ab233389)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized A431 (human epidermoid carcinoma cell line) cell line labeling Laminin gamma 1 with ab233389 at 1/50 (red) compared with Rabbit monoclonal IgG Isotype control ([ab172730](#)) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) ([ab150077](#)), at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Laminin gamma 1 antibody [EPR21199] (ab233389)

Laminin gamma 1 was immunoprecipitated from 0.35 mg of A431 (human epidermoid carcinoma cell line) whole cell lysate with ab233389 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab233389 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

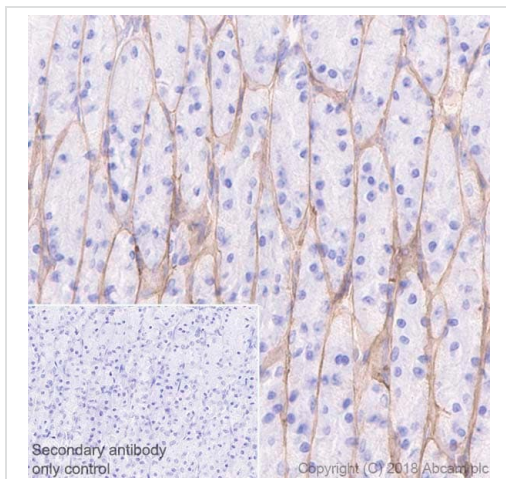
Lane 1: A431 whole lysate 10 µg (Input).

Lane 2: ab233389 IP in A431 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab233389 in A431 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 15 seconds.

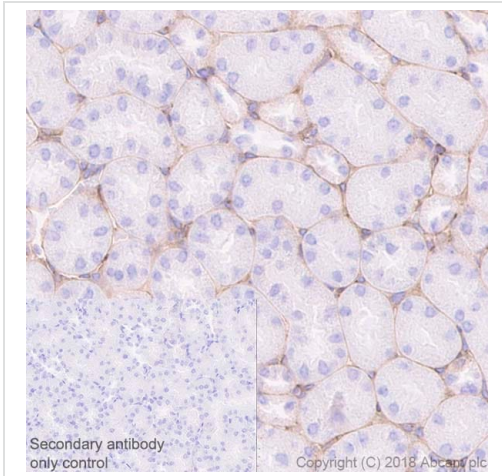


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Laminin gamma 1 antibody [EPR21199] (ab233389)

Immunohistochemical analysis of paraffin-embedded rat stomach tissue labeling Laminin gamma 1 with ab233389 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in basement membrane of rat stomach (PMID: 12571278) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

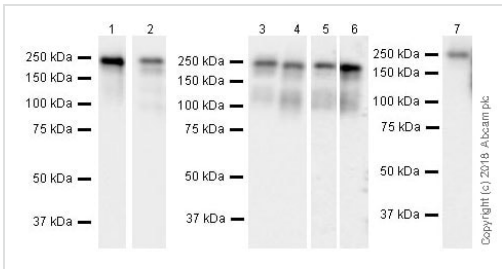


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Laminin gamma 1 antibody [EPR21199] (ab233389)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling Laminin gamma 1 with ab233389 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in the basement membrane of mouse kidney (PMID: 21903675) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat-mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Western blot - Anti-Laminin gamma 1 antibody [EPR21199] (ab233389)

All lanes : Anti-Laminin gamma 1 antibody [EPR21199] (ab233389) at 1/5000 dilution

Lane 1 : C6 (rat glial tumor glial cell line) whole cell lysate at 10 µg

Lane 2 : PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate at 20 µg

Lane 3 : Rat heart lysate at 10 µg

Lane 4 : Rat kidney lysate at 10 µg

Lane 5 : Rat brain lysate at 10 µg

Lane 6 : Rat spleen lysate at 10 µg

Lane 7 : Mouse brain lysate at 10 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 178 kDa

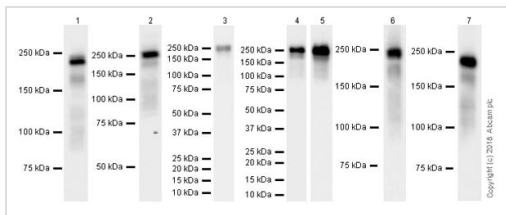
Observed band size: 210-250 kDa [why is the actual band size different from the predicted?](#)

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times.

Lane 1: 70 seconds. Lane 2: 15 seconds. Lanes 3 & 4: 10 seconds. Lanes 5 & 6: 3 minutes. Lane 7: 48 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID: 18263645, 11067943, 23857767, 28928891).



Western blot - Anti-Laminin gamma 1 antibody [EPR21199] (ab233389)

Lanes 1-3 & 6-7 : Anti-Laminin gamma 1 antibody [EPR21199] (ab233389) at 1/5000 dilution

Lanes 4-5 : Anti-Laminin gamma 1 antibody [EPR21199] (ab233389) at 1/1000 dilution

Lane 1 : A431 (human epidermoid carcinoma cell line) whole cell lysate

Lane 2 : NIH:OVCA3 (human ovary adenocarcinoma cell line) whole cell lysate

Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 4 : MCF7 (human breast adenocarcinoma cell line) whole cell lysate

Lane 5 : A549 (human lung carcinoma cell line) whole cell lysate

Lane 6 : Human fetal heart lysate

Lane 7 : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

Lanes 1-5 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Lanes 6-7 : VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/4000 dilution

Predicted band size: 178 kDa

Observed band size: 210-250 kDa [why is the actual band size different from the predicted?](#)

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times.

Lanes 1, 2 & 7: 15 seconds. Lane 3: 8 seconds. Lanes 4: 37 seconds. Lanes 5 & 6: 10 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID: 18263645, 11067943, 23857767, 28928891).

Why choose a recombinant antibody?



- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

Anti-Laminin gamma 1 antibody [EPR21199]
(ab233389)

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

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