abcam

ab234429

Anti-Laminin gamma 3 antibody [EPR22699-151]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22699-151
Purification technique	Affinity purification Protein A
Concentration	0.499 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/500
Notes	-

ICC/IF

Not recommended

Species	Mouse
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Target data

See full target information Lamc3

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.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Laminin gamma 3 often referred to as lam γ3 is a subunit of the laminin protein complex which plays an important role in the structure of the extracellular matrix. Alternate names include LAMC3. This protein has a molecular mass of approximately 180 kDa and is expressed in various tissues including the skin brain and reproductive systems. Laminin gamma 3 contributes to the structural integrity and organization of the basement membrane.
Biological function summary	Laminin gamma 3 is involved in cell adhesion differentiation migration and survival. It integrates into laminin trimers forming part of the laminin-332 complex known for its role in hemidesmosome formation and epithelial cell anchorage. These interactions are critical for maintaining tissue architecture and function influencing processes such as wound healing and tissue repair.

Pathways	Laminin gamma 3 operates within pathways that regulate cell-matrix interactions and intracellular signaling. It engages in the integrin and PI3K/AKT/mTOR pathways which are critical for cellular growth and survival. Laminin gamma 3 interacts with integrins such as α3β1 and α6β4 helping to transmit signals from the extracellular matrix to the cell interior therefore influencing cell behavior and fate.
Associated diseases and disorders	Laminin gamma 3 has been linked to conditions such as skin blistering disorders and certain forms of muscular dystrophy. In skin disorders it interacts with proteins like collagen VII highlighting its role in maintaining the structural integrity of the skin. In muscular dystrophy improper laminin gamma 3 interactions can disrupt normal muscle function contributing to disease progression.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

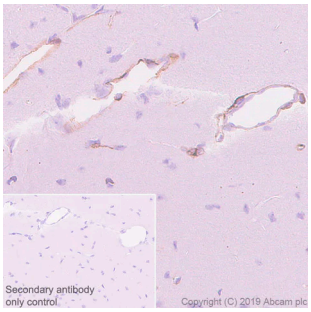
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images

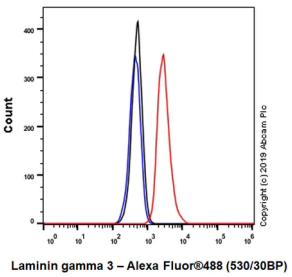


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Laminin gamma 3 antibody [EPR22699-151] (ab234429)

Laminin gamma 3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Laminin gamma 3 antibody

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling Laminin gamma 3 with ab234429 at 1/500 followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on the blood vessels in the mouse cerebrum (PMID:15824114) is observed. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

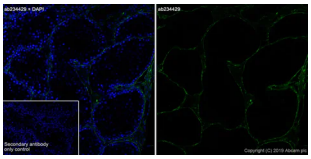
Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



Flow Cytometry (Intracellular) - Anti-Laminin gamma 3 antibody [EPR22699-151] (ab234429)

Laminin gamma 3 Flow Cytometry (Intracellular) staining using rabbit Anti-Laminin gamma 3 antibody

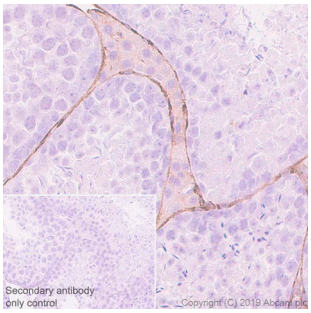
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) cells labelling Laminin gamma 3 with ab234429 at 1/50 (Red) compared with a Rabbit monoclonal IgG (ab172730, Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 was used as the secondary antibody.



Immunohistochemistry (Frozen sections) - Anti-Laminin gamma 3 antibody [EPR22699-151] (ab234429)

Laminin gamma 3 Immunohistochemistry (Frozen sections) staining using rabbit Anti-Laminin gamma 3 antibody

Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Mouse testis tissue labeling Laminin gamma 3 with ab234429 at 1/100 (4.99 µg/ml) dilution followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution. The nuclear counterstain was DAPI (Blue). Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.

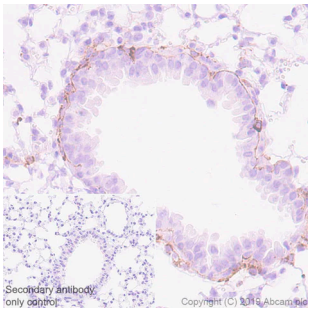


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Laminin gamma 3 antibody [EPR22699-151] (ab234429)

Laminin gamma 3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Laminin gamma 3 antibody

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling Laminin gamma 3 with ab234429 at 1/500 followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on the basement membrane in the mouse testis (PMID: 15824114) is observed. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

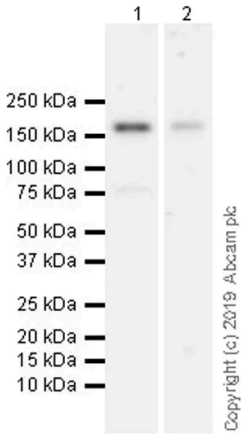


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Laminin gamma 3 antibody [EPR22699-151] (ab234429)

Laminin gamma 3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Laminin gamma 3 antibody

Immunohistochemical analysis of paraffin-embedded Mouse lung tissue labeling Laminin gamma 3 with ab234429 at 1/500 followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on the basement membrane in the mouse lung is observed. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



Western blot - Anti-Laminin gamma 3 antibody [EPR22699-151] (ab234429)

Blocking and diluting buffer and concentration: 5% NFDM/TBST Exposure time: 3 minutes
All lanes:
Western blot - Anti-Laminin gamma 3 antibody [EPR22699-151] (ab234429) at 1/10000 dilution

Lane 1:
Mouse testis tissue lysate 20 µg

Lane 2:
Mouse kidney tissue lysate 20 µg

Secondary

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

Predicted band size: 172 kDa

Observed band size: 172 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.