


Product datasheet

Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] ab108922

Recombinant RabMAb

★★★★★ 5 Abreviews 21 References 17 Images

Overview

Product name	Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068]
Description	Rabbit monoclonal [EPR4068] to Lamin A + Lamin B1 + Lamin C
Host species	Rabbit
Specificity	The antibody recognizes full length Lamin A/B1/C and the cleaved small unit.
Tested applications	Suitable for: ICC/IF, Flow Cyt (Intra), WB, IP, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human, Recombinant fragment Predicted to work with: Spermophilus tridecemlineatus 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse heart and rat heart tissue lysates and HeLa, HepG2 and HACAT cell lysates, ab83472 . IHC-P: Human ovarian carcinoma, human liver carcinoma, human breast, human uterus, human kidney mouse liver and rat liver tissues. ICC/IF: HeLa cells. Flow Cyt: HeLa cells. IP: HepG2 lysate.
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>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

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. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 49% PBS, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4068
Isotype	IgG

Applications

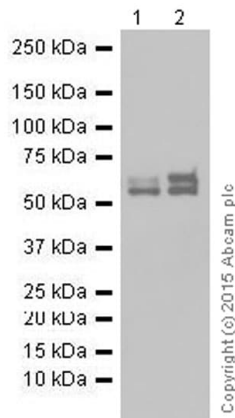
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab108922 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100 - 1/250.
Flow Cyt (Intra)		1/20.
WB	★★★★★ (4)	1/1000 - 1/10000. Predicted molecular weight: 74 kDa.
IP		1/10 - 1/100.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Cellular localization	Lamin A: Nucleus. Nucleus envelope. Farnesylation of prelamin-A/C facilitates nuclear envelope targeting and subsequent cleavage by ZMPSTE24/FACE1 to remove the farnesyl group produces mature lamin-A/C, which can then be inserted into the nuclear lamina. EMD is required for proper localization of non-farnesylated prelamin-A/C. Lamin B1: Nucleus inner membrane. Lamin C: Nucleus. Nucleus envelope. Farnesylation of prelamin-A/C facilitates nuclear envelope targeting and subsequent cleavage by ZMPSTE24/FACE1 to remove the farnesyl group produces mature lamin-A/C, which can then be inserted into the nuclear lamina. EMD is required for proper localization of non-farnesylated prelamin-A/C.
Form	Lamin C: There are 3 isoforms produced by alternative splicing. Isoform A also known as Lamin A; Isoform C also known as Lamin C; Isoform ADelta10 also known as Lamin ADelta10.

Images



Western blot - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

All lanes : Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922) at 1/10000 dilution (purified)

Lane 1 : mouse heart lysate

Lane 2 : rat heart lysate

Lysates/proteins at 10 µg per lane.

Secondary

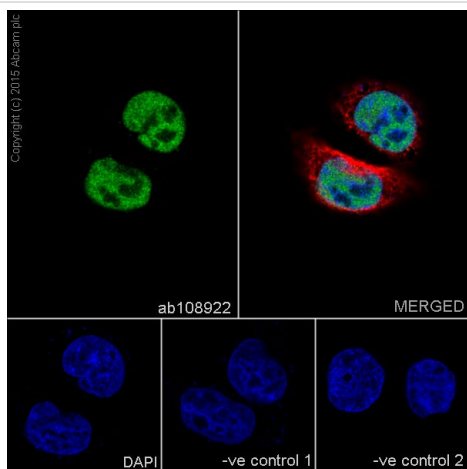
All lanes : HRP goat anti-rabbit IgG (H+L) at 1/100000 dilution

Predicted band size: 74 kDa

Additional bands at: 65 kDa (possible isoform), 70 kDa (possible isoform), 74 kDa (possible isoform)

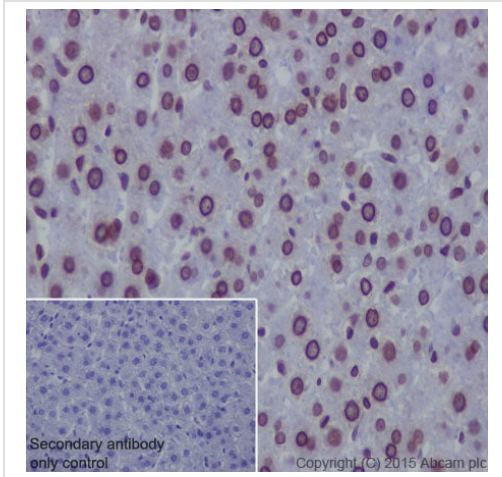
Blocking buffer: 5% NFDN/TBST

Dilution buffer: 5% NFDN/TBST



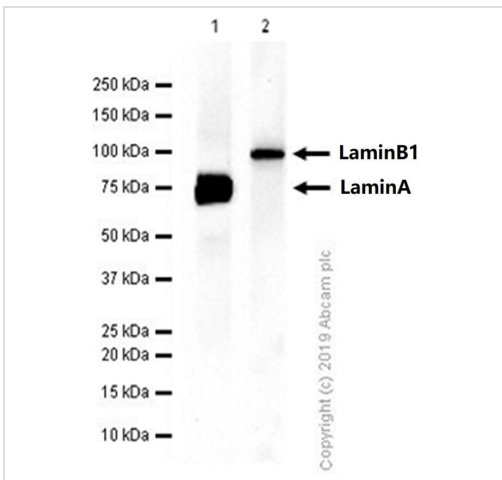
Immunocytochemistry/ Immunofluorescence - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Immunofluorescence staining of HeLa cells with purified ab108922 at a working dilution of 1/250, counter-stained with DAPI. The secondary antibody was Alexa Fluor[®] 488 goat anti-rabbit (ab150077), used at a dilution of 1/1000. ab7291, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with ab150120 (Alexa Fluor[®] 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab108922 was used at a dilution of 1/500 followed by an Alexa Fluor[®] 594 goat anti-mouse antibody (ab150120) at a dilution of 1/500. For negative control 2, ab7291 (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor[®] 488 goat anti-rabbit antibody (ab150077) at a dilution of 1/400.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Immunohistochemical staining of paraffin embedded rat liver with purified ab108922 at a working dilution of 1/200. The secondary antibody used is HRP goat anti-rabbit IgG H&L (ab97051) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Western blot - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

All lanes : Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922) at 1/1000 dilution

Lane 1 : Recombinant Human Lamin A protein (ab83472)

Lane 2 : GST tagged recombinant Human Lamin B1 protein (1 to 586) (91 KDa)

Lysates/proteins at 10 µg per lane.

Secondary

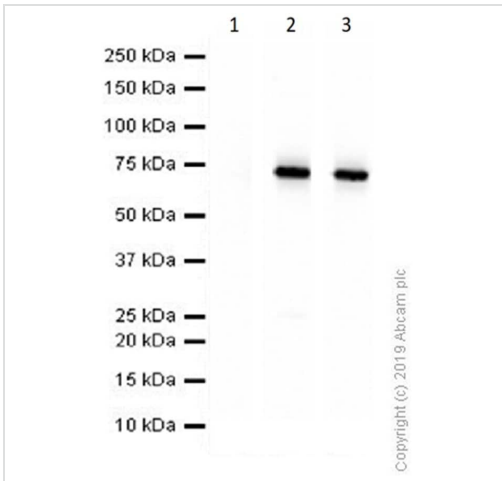
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 74 kDa

Observed band size: 75, 91 kDa

Exposure time: 180 seconds

Blocking/Diluting buffer and concentration 5% NFDm/TBST



Western blot - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Lane 1 : Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922) at 1/1000 dilution

Lane 2 : Anti-Myc tag antibody at 1/10000 dilution

Lane 3 : Anti-DDDDK tag (Binds to FLAG® tag sequence) antibody [EPR20018-251] (ab205606) at 1/5000 dilution

All lanes : Myc and DDK tagged recombinant Human Lamin B2 protein

Lysates/proteins at 0.01 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

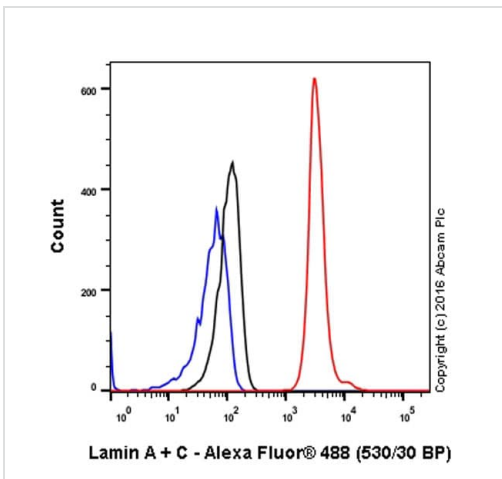
Predicted band size: 74 kDa

Observed band size: 68 kDa

Exposure time: 7 seconds

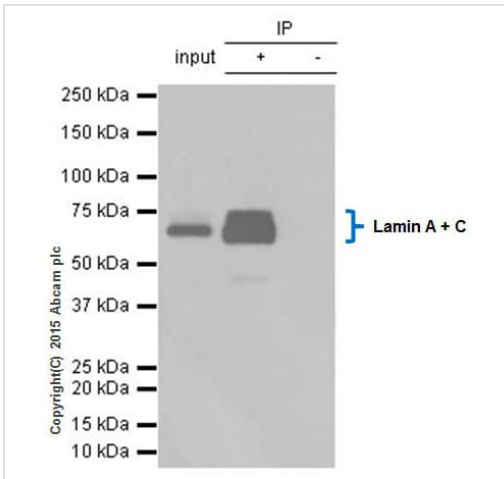
Blocking/Diluting buffer and concentration: 5% NFDM/TBST.

ab108922 does not cross react with Lamin B2.



Flow Cytometry (Intracellular) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Flow Cytometry analysis of HeLa cells labelling Lamin A + B1 + C with purified ab108922 at a dilution of 1/20 (red). Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

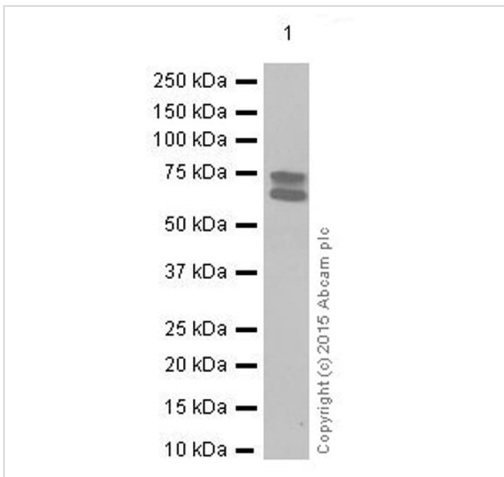


Immunoprecipitation - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

ab108922 (purified) at 1/20 immunoprecipitating Lamin A + B1 + C in 10 µg HepG2 (Lanes 1 and 2, observed at 70, 74, and 65 kDa - ab108922 recognises three isoforms). Lane 3 - PBS. For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution.

Blocking buffer and concentration: 5% NFDm/TBST.

Dilution buffer and concentration: 5% NFDm/TBST.



Western blot - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922) at 1/10000 dilution (purified) + HeLa cell lysate at 10 µg

Secondary

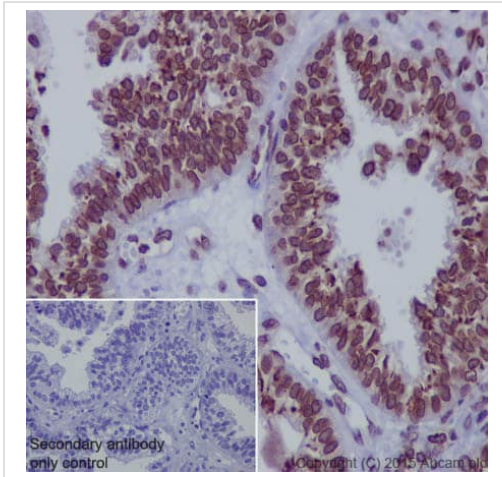
HRP goat anti-rabbit IgG (H+L) at 1/100000 dilution

Predicted band size: 74 kDa

Additional bands at: 65 kDa (possible isoform), 70 kDa (possible isoform), 74 kDa (possible isoform)

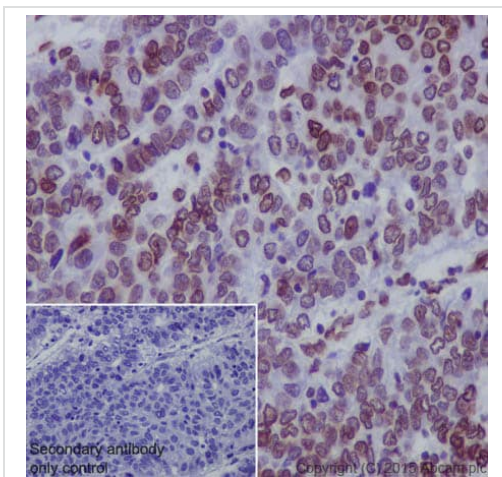
Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



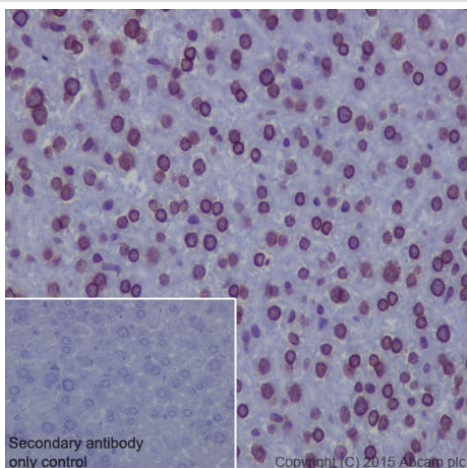
Immunohistochemical staining of paraffin embedded human ovarian carcinoma with purified ab108922 at a working dilution of 1/200. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)



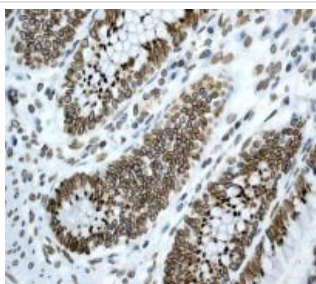
Immunohistochemical staining of paraffin embedded human liver carcinoma with purified ab108922 at a working dilution of 1/200. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)



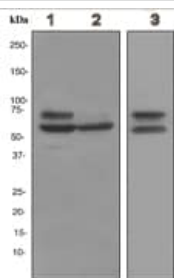
Immunohistochemical staining of paraffin embedded mouse liver with purified ab108922 at a working dilution of 1/200. The secondary antibody used is HRP goat anti-rabbit IgG H&L (ab97051) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)



Immunohistochemical analysis of paraffin-embedded human colonic tissue using unpurified ab108922 at a dilution of 1/100

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)



All lanes : Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922) at 1/1000 dilution (unpurified)

Lane 1 : HeLa cell lysate

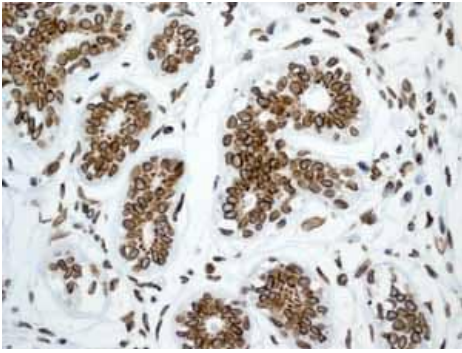
Lane 2 : HepG2 cell lysate

Lane 3 : HACAT cell lysate

Western blot - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

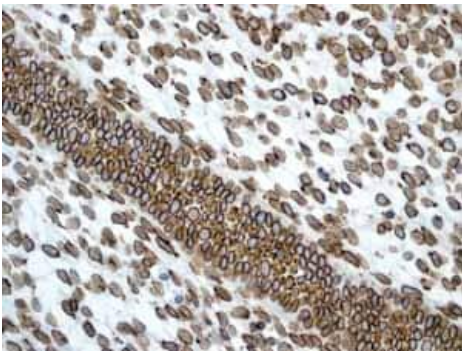
Lysates/proteins at 10 µg per lane.

Predicted band size: 74 kDa



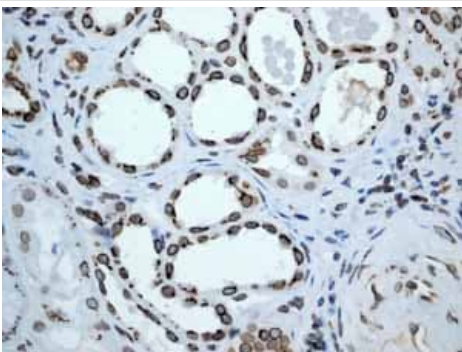
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Unpurified ab108922 showing positive staining in Normal human breast tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Unpurified ab108922 showing positive staining in Normal human uterus tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin A + Lamin B1 + Lamin C antibody [EPR4068] (ab108922)

Unpurified ab108922 showing positive staining in Normal human kidney tissue.

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-Lamin A + Lamin B1 + Lamin C antibody

[EPR4068] (ab108922)

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

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