abcam

Product datasheet

Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free ab240124

Recombinant RabMAb

11 Images

Overview

Product name	Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free
Description	Rabbit monoclonal [EPR9701(B)] to Lamin B2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), IP, ICC/IF, IHC-P, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IP: HepG2 cell lysate; IHC: Human bladder cancer tissue; Mouse and rat testis; mouse kidney and cerebrum. ICC/IF: HepG2 cells; WB: HepG2 and HeLa cells, Mouse and rat testis and rat spleen lysates. Flow Cyt (intra): HepG2 cells.
General notes	ab240124 is the carrier-free version of **ab151735**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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 production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR9701(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab240124 in the following tested applications.

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

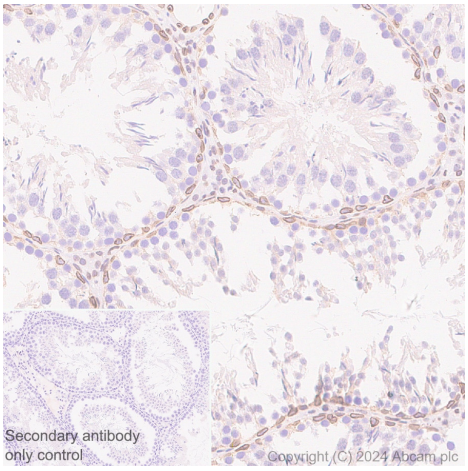
Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**. The human and rat recommendation is based on the WB results. We do not guarantee IHC-P for human and rat.
WB		Use at an assay dependent concentration. Predicted molecular weight: 68 kDa.

Target

Function	Lamins are components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane, which is thought to provide a framework for the nuclear envelope and may also interact with chromatin.
Involvement in disease	Defects in LMNB2 are a cause of partial acquired lipodystrophy (APLD) [MIM:608709]. A rare childhood disease characterized by loss of subcutaneous fat from the face and trunk. Fat deposition on the pelvic girdle and lower limbs is normal or excessive. Most frequently, onset between 5 and 15 years of age. Most affected subjects are females and some show no other

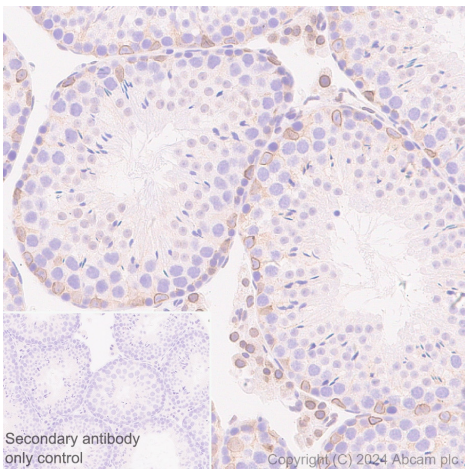
	abnormality, but many develop glomerulonephritis, diabetes mellitus, hyperlipidemia, and complement deficiency. Mental retardation in some cases. APLD is a sporadic disorder of unknown etiology.
Sequence similarities	Belongs to the intermediate filament family.
Post-translational modifications	B-type lamins undergo a series of modifications, such as farnesylation and phosphorylation. Increased phosphorylation of the lamins occurs before envelope disintegration and probably plays a role in regulating lamin associations.
Cellular localization	Nucleus inner membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

This data was developed using **ab151735**, the same antibody clone in a different buffer formulation. Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat testis tissues labelling Lamin B2 with **ab151735** at 1:2000 dilution and ready to use secondary LeicaDS9800 (Bond™ Polymer Refine Detection) counterstainined with Hematoxylin. Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins. Nuclear envelope staining on rat testis. The section was incubated with **ab151735** for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument



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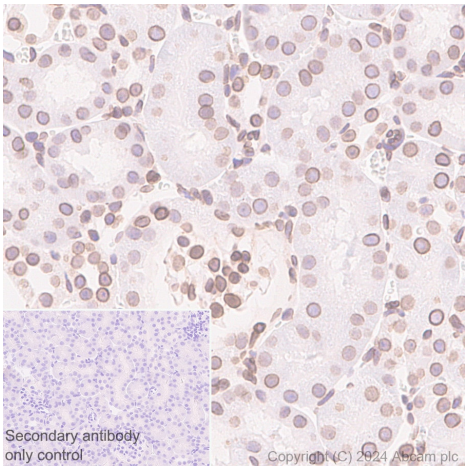
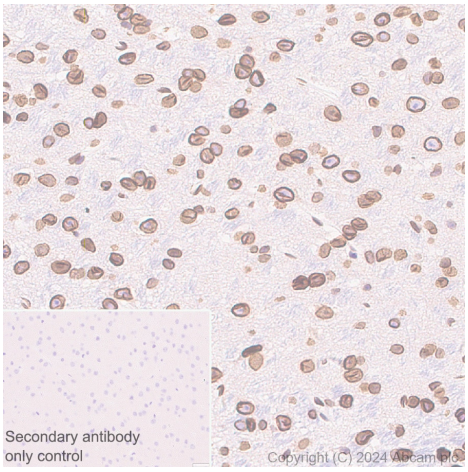


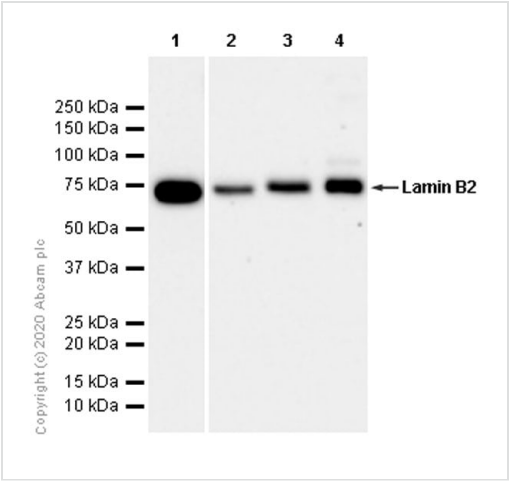
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

This data was developed using **ab151735**, the same antibody clone in a different buffer formulation. Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissues labelling Lamin B2 with **ab151735** at 1:2000 dilution and ready to use secondary LeicaDS9800 (Bond™ Polymer Refine Detection) counterstainined with Hematoxylin. Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins. Nuclear envelope staining on mouse kidney. The section was incubated with **ab151735** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

This data was developed using **ab151735**, the same antibody clone in a different buffer formulation. Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebrum tissues labelling Lamin B2 with **ab151735** at 1:2000 dilution and ready to use secondary LeicaDS9800 (Bond™ Polymer Refine Detection) counterstainined with Hematoxylin. Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins. Nuclear envelope staining on mouse cerebrum. The section was incubated with **ab151735** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument



Western blot - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

All lanes : Anti-Lamin B2 antibody [EPR9701(B)] (**ab151735**) at 1/2000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : Mouse testis lysate
Lane 3 : Rat spleen lysate
Lane 4 : Rat testis lysate

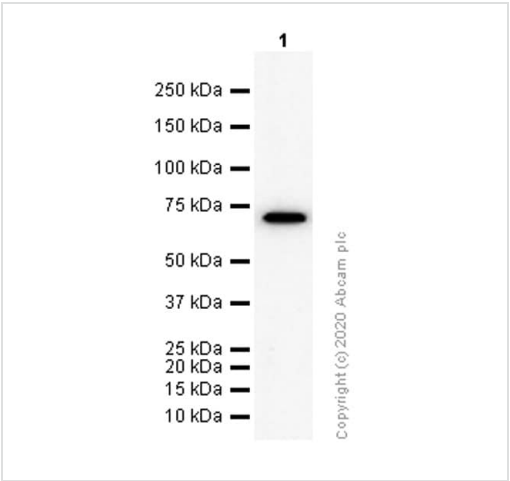
Lysates/proteins at 20 µg per lane.

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

Predicted band size: 68 kDa
Observed band size: 68 kDa

This data was developed using **ab151735**, the same antibody clone in a different buffer formulation.

Blocking Buffer and concentration: 5% NFDM/TBST



Western blot - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

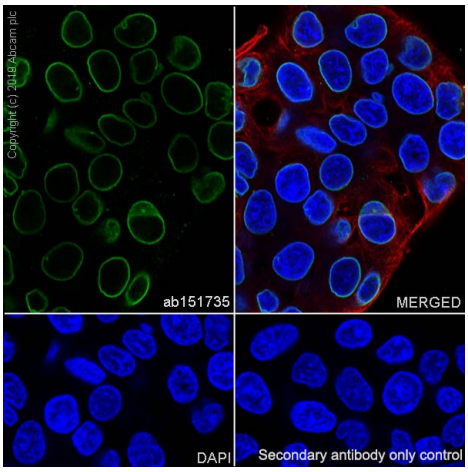
Anti-Lamin B2 antibody [EPR9701(B)] (**ab151735**) at 1/2000 dilution (Purified) + HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate at 15 µg

Secondary
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 68 kDa
Observed band size: 68 kDa

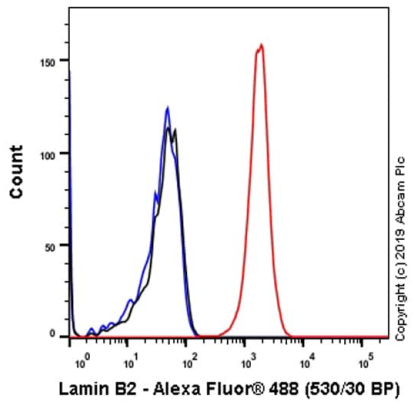
This data was developed using **ab151735**, the same antibody clone in a different buffer formulation.

Blocking Buffer and concentration: 5% NFDM/TBST



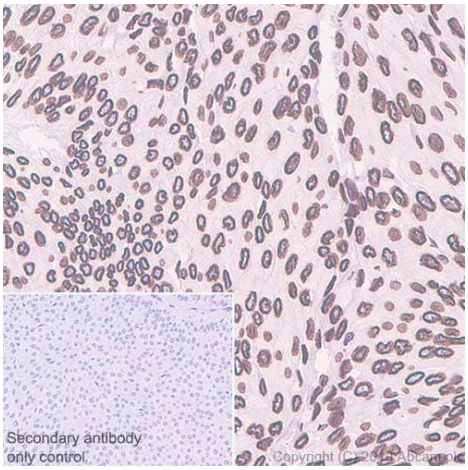
Immunocytochemistry/ Immunofluorescence - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

This data was developed using **ab151735**, the same antibody clone in a different buffer formulation.
Immunocytochemistry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Lamin B2 with Purified ab240124 at 1:50 dilution (2.18 ?g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



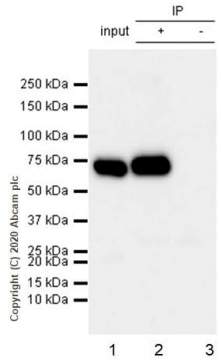
Flow Cytometry (Intracellular) - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

This data was developed using **ab151735**, the same antibody clone in a different buffer formulation.Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Lamin B2 with Purified ab240124 at 1/20 dilution (10µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

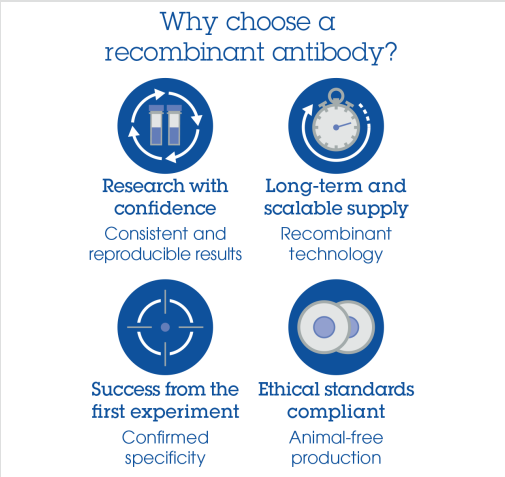
This data was developed using **ab151735**, the same antibody clone in a different buffer formulation.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human bladder cancer tissue sections labeling Lamin B2 with Purified ab240124 at 1:100 dilution (1.09 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunoprecipitation - Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

This data was developed using **ab151735**, the same antibody clone in a different buffer formulation.

Purified **ab151735** at 1/20 dilution (0.5µg) immunoprecipitating Lamin B2 in HepG2 whole cell lysate.
Lane 1 (input): HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate 10µg
Lane 2 (+): **ab151735** + HepG2 whole cell lysate.
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab151735** in HepG2 whole cell lysate.
VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.
Blocking Buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Observed band size: 68 kDa



Anti-Lamin B2 antibody [EPR9701(B)] - BSA and Azide free (ab240124)

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