abcam

Product datasheet

Anti-Lamin B2 antibody [EPR9701(B)] ab151735



★★★★★ 2 Abreviews 33 References

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Overview

Product name Anti-Lamin B2 antibody [EPR9701(B)]

Description Rabbit monoclonal [EPR9701(B)] to Lamin B2

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IHC-P, IP, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human Lamin B2 aa 550 to the C-terminus (C terminal). The exact

> sequence is proprietary. Database link: Q03252

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 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: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR9701(B)

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab151735 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)		1/20.	
WB		1/2000. Predicted molecular weight: 68 kDa. For unpurified use at 1/1000 - 1/10000.	
IHC-P		1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.	
		For unpurified use at 1/50 - 1/100.	
		The human and rat recommendation is based on the WB results. We do not guarantee IHC-P for human and rat.	
IP		1/10 - 1/100.	
ICC/IF	★★★★ (2)	1/50. For unpurified use at 1/250 - 1/500.	

I	ar	g	et

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

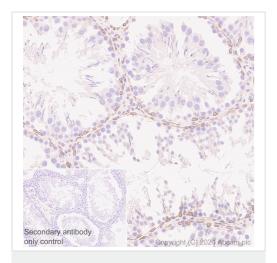
 $\hbox{B-type lamins undergo a series of modifications, such as farnesylation and phosphorylation.}\\$

Increased phosphorylation of the lamins occurs before envelope disintegration and probably plays

a role in regulating lamin associations.

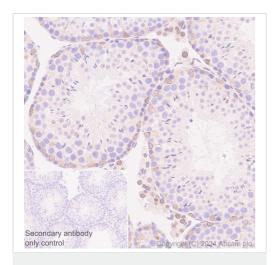
Cellular localization Nucleus inner membrane.

Images



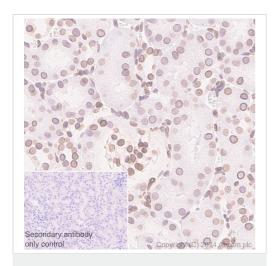
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lamin B2 antibody
[EPR9701(B)] (ab151735)

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



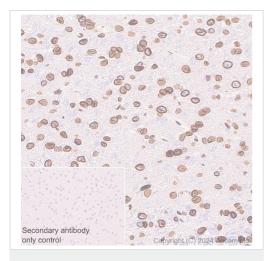
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lamin B2 antibody
[EPR9701(B)] (ab151735)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse 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 mouse testis. The section was incubated with ab151735 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument



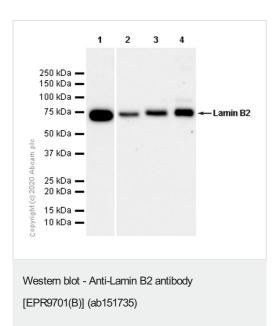
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lamin B2 antibody
[EPR9701(B)] (ab151735)

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 paraffinembedded sections) - Anti-Lamin B2 antibody
[EPR9701(B)] (ab151735)

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



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

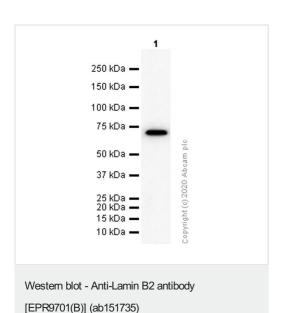
Lysates/proteins at 20 µg per lane.

Secondary

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

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

Blocking Buffer and concentration: 5% NFDM/TBST



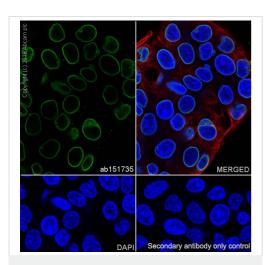
Anti-Lamin B2 antibody [EPR9701(B)] (ab151735) at 1/2000 dilution (Purified) + HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate at 15 μ g

Secondary

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

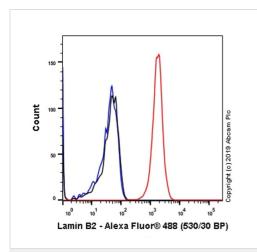
Predicted band size: 68 kDa **Observed band size:** 68 kDa

Blocking Buffer and concentration: 5% NFDM/TBST



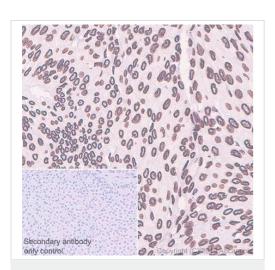
Immunocytochemistry/ Immunofluorescence - Anti-Lamin B2 antibody [EPR9701(B)] (ab151735)

Immunocytochemistry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Lamin B2 with Purified ab151735 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 μ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 μ g/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



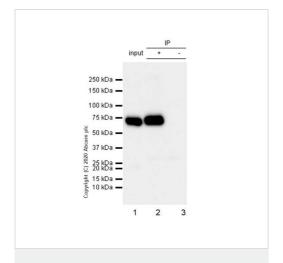
Flow Cytometry (Intracellular) - Anti-Lamin B2 antibody [EPR9701(B)] (ab151735)

Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Lamin B2 with Purified ab151735 at 1/20 dilution (10 µg/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 paraffinembedded sections) - Anti-Lamin B2 antibody
[EPR9701(B)] (ab151735)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human bladder cancer tissue sections labeling Lamin B2 with Purified ab151735 at 1:100 dilution (1.09 μ g/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)] (ab151735)

Purified ab151735 at 1/20 dilution $(0.5\mu g)$ 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 (<u>ab172730</u>) instead of ab151735 in HepG2 whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (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



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