

Anti-Lamin B2 antibody [LN43] ab8983

★★★★☆ [6 Abreviews](#) [42 References](#) [6 Images](#)

Overview

Product name	Anti-Lamin B2 antibody [LN43]
Description	Mouse monoclonal [LN43] to Lamin B2
Host species	Mouse
Specificity	This antibody reacts with an epitope located in the C-terminal part of lamin B2. Lamins do not appear to be universally distributed among different cell and tissue types. Please see the listed positive controls for this antibody. Other cell/tissue types have not been tested.
Tested applications	Suitable for: Flow Cyt, IHC-Fr, WB, IP
Species reactivity	Reacts with: Human, Zebrafish
Immunogen	Tissue, cells or virus corresponding to Lamin B2. Detergent insoluble fraction of potoroo cell line PtK1. Database link: Q03252
Epitope	Epitope located in the C-terminal part of lamin B2.
Positive control	IHC-Fr: testicular germ cell tumour sections (see Machiels et al 1997), parabasal cells of skin epidermis (see Broers et al). WB: NCI-H125 nuclear cell lysate Jurkat cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: 99% PBS
Purity	Protein G purified
Clonality	Monoclonal

Clone number	LN43
Isotype	IgG1

Applications

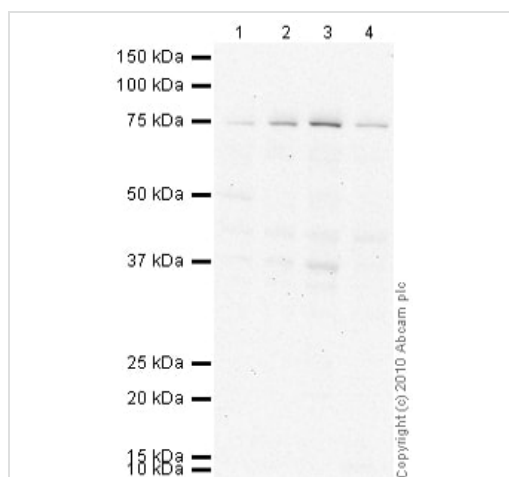
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab8983 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 1 µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-Fr		1/1. (when used with an avidin-biotinylated HRP complex as detection agent).
WB	★★★★★ (2)	1/100 - 1/1000. Detects a band of approximately 65-67 kDa.
IP		Use at an assay dependent concentration.

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



Western blot - Anti-Lamin B2 antibody [LN43]
(ab8983)

All lanes : Anti-Lamin B2 antibody [LN43] (ab8983) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 3 : U2OS (Human osteosarcoma cell line) Whole Cell Lysate

Lane 4 : HL60 (Human promyelocytic leukemia cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/5000 dilution

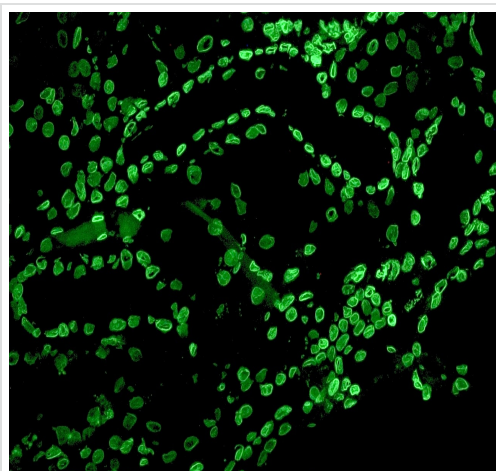
Developed using the ECL technique.

Performed under reducing conditions.

Observed band size: 75 kDa

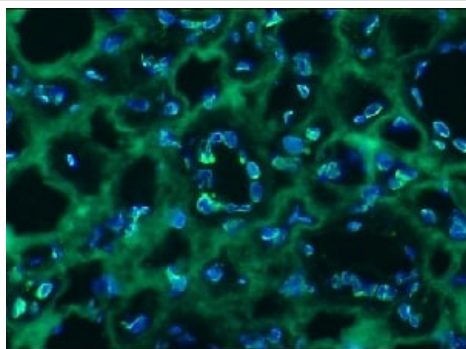
Additional bands at: 37 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes



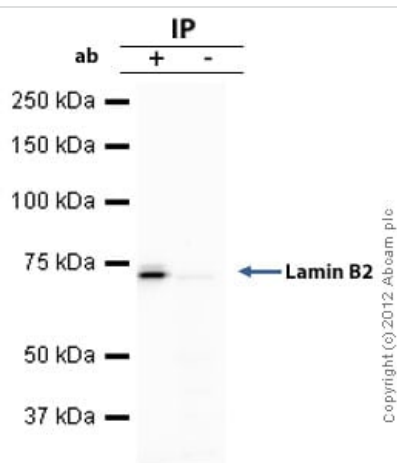
Immunohistochemistry (Frozen sections) - Anti-Lamin B2 antibody [LN43] (ab8983)

ab8983 immunohistochemistry on a frozen section of human kidney showing nuclear lamina staining in the ductal epithelium.



Immunohistochemistry (Frozen sections) - Anti-Lamin B2 antibody [LN43] (ab8983)

IHC-Fr of human kidney showing nuclear lamina staining in the ductal epithelium.



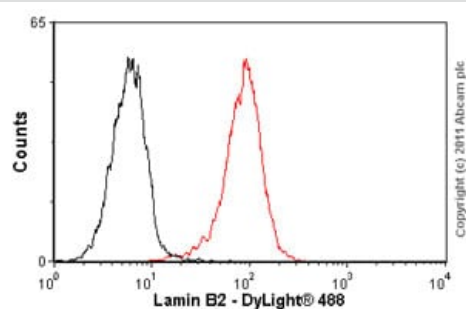
Immunoprecipitation - Anti-Lamin B2 antibody [LN43] (ab8983)

Lamin B2 - Nuclear Envelope Marker was immunoprecipitated using 0.5mg Hela whole cell extract, 5µg of Mouse monoclonal to Lamin B2 - Nuclear Envelope Marker (ab8983) and 50µl of protein G magnetic beads (+). No antibody was added to the control (-). The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab8983.

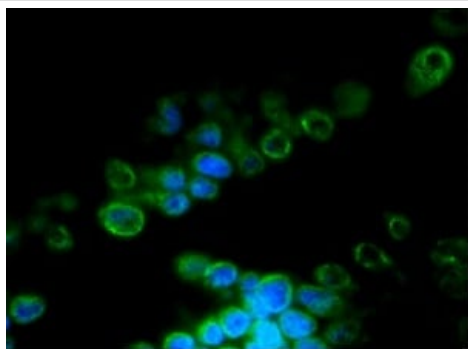
Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.

Band: 73kDa: Lamin B2



Flow Cytometry - Anti-Lamin B2 antibody [LN43] (ab8983)

Overlay histogram showing HeLA cells stained with ab8983 (red line). The cells were fixed with 100% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum (**ab7481**) / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab8983, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was Mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.



IF staining of a 9 days old zebrafish embryo.

Immunohistochemistry (Frozen sections) - Anti-Lamin B2 antibody [LN43] (ab8983)

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