

## Basic Information

<b>Product Name</b>	Anti-Lamin B1/LMNB1 Antibody	
<b>Gene Name</b>	LMNB1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, IP, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Lamin B1 recombinant protein (Position: Q266-C583). Human Lamin B1 shares 95.9% and 95% amino acid (aa) sequence identity with mouse and rat Lamin B1, respectively.	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	66-72 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:1000-5000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 ImmunoPrecipitation (IP): 1:250-300 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

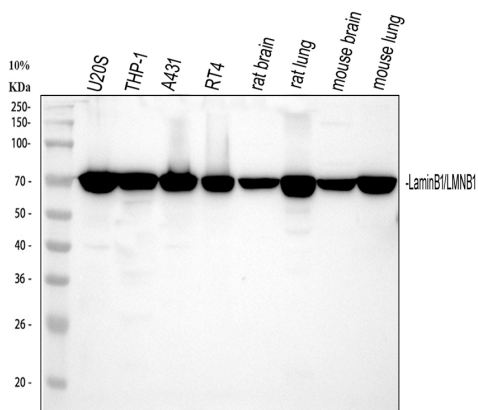
## Background Information

Lamin-B1 is a protein that in humans is encoded by the LMNB1 gene. The nuclear lamina consists of a two-dimensional matrix of proteins located next to the inner nuclear membrane. The lamin family of proteins make up the matrix and are highly conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. Vertebrate lamins consist of two types, A and B. This gene encodes one of the two B type proteins, B1.

## Reference

Anti-Lamin B1/LMNB1 Antibody被引用在52文献中。

## Selected Validation Data



Western blot analysis of Lamin B1/LMNB1 using anti-Lamin B1/LMNB1 antibody (PB9611). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human U2OS whole cell lysates,

Lane 2: human THP-1 whole cell lysates,

Lane 3: human A431 whole cell lysates,

Lane 4: human RT4 whole cell lysates,

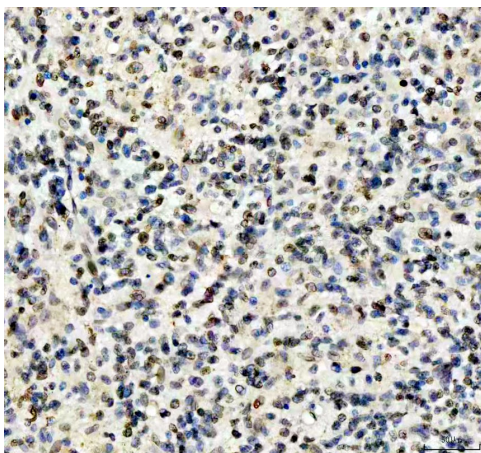
Lane 5: rat brain tissue lysates,

Lane 6: rat lung tissue lysates,

Lane 7: mouse brain lysates,

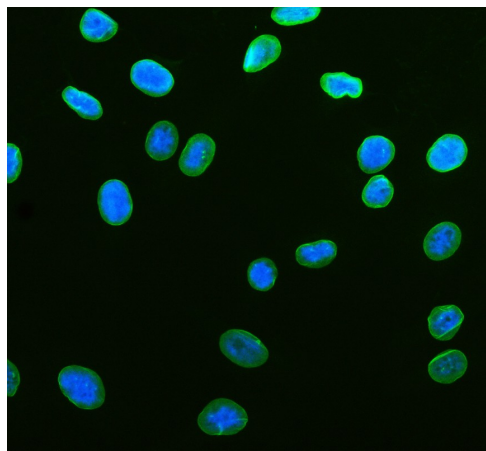
Lane 8: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Lamin B1/LMNB1 antigen affinity purified polyclonal antibody (PB9611) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Lamin B1/LMNB1 at approximately 72 kDa. The expected band size for Lamin B1/LMNB1 is at 66 kDa.



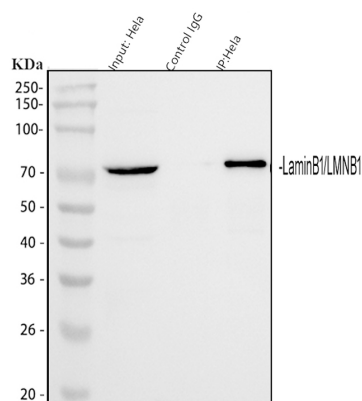
IHC analysis of Lamin B1/LMNB1 using anti-Lamin B1/LMNB1 antibody (PB9611).

Lamin B1/LMNB1 was detected in a paraffin-embedded section of human glioblastoma tissue. The tissue section was incubated with rabbit anti-Lamin B1/LMNB1 Antibody (PB9611) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of Lamin B1/LMNB1 using anti-Lamin B1/LMNB1 antibody (PB9611).

Lamin B1/LMNB1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-Lamin B1/LMNB1 Antibody (PB9611) at a dilution of 1:100. DyLight 488 Conjugated AffiniPure Donkey Anti-rabbit IgG (H+L) (Green) (Catalog # BA1146) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IP analysis of Lamin B1/LMNB1 using anti-Lamin B1/LMNB1 antibody (PB9611) in HeLa whole cell lysate.

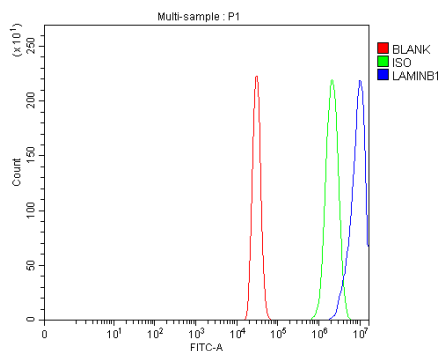
Western blot analysis of Lamin B1/LMNB1 using anti- Lamin B1/LMNB1 antibody (PB9611).

Lane 1: HeLa whole cell lysates(30ug),

Lane 2: Rabbit control IgG instead of anti- Lamin B1/LMNB1 antibody in HeLa whole cell lysate,

Lane 3: anti- Lamin B1/LMNB1 antibody (2μg) + HeLa whole cell lysate (500μg).

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti- Lamin B1/LMNB1 antigen affinity purified polyclonal antibody (PB9611) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Lamin B1/LMNB1 at approximately 72 kDa. The expected band size for Lamin B1/LMNB1 is at 66 kDa.



Flow Cytometry analysis of A431 cells using anti-Lamin B1/LMNB1 antibody (PB9611).

Overlay histogram showing A431 cells stained with PB9611 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Lamin B1/LMNB1 Antibody (PB9611) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as

secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.