Product datasheet

# Anti-Lamin B1/LMNB1 Antibody

**Catalog Number: *PB9611***

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antibody and ELISA experts
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## Basic Information

| | |
|---|---|
| **Product Name** | Anti-Lamin B1/LMNB1 Antibody |
| **Gene Name** | LMNB1 |
| **Source** | Rabbit |
| **Isotype** | IgG |
| **Species Reactivity** | human,mouse,rat |
| **Tested Application** | FCM, WB, IHC, ICC/IF, ICC, IHC-F |
| **Contents** | 500 ug/ml antibody with PBS， 0.02% NaN3 , 1 mg BSA and 50% glycerol. |
| **Immunogen** | 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. |
| **Purification** | Immunogen affinity purified. |
| **Observed MW** | 66-72KD |
| **Dilution Ratios** | Western blot (WB): 1:500-2000<br>Immunohistochemistry(Paraffin-embedded Section): 1:50-400<br>Immunohistochemistry(Frozen Section): 1:50-400<br>Immunocytochemistry/Immunofluorescence(ICC/IF): 1:50-400<br>Flow cytometry (FCM): 1-3 µg/1x$10^6$ cells<br>(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℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

## 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3文献中。

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## Selected Validation Data

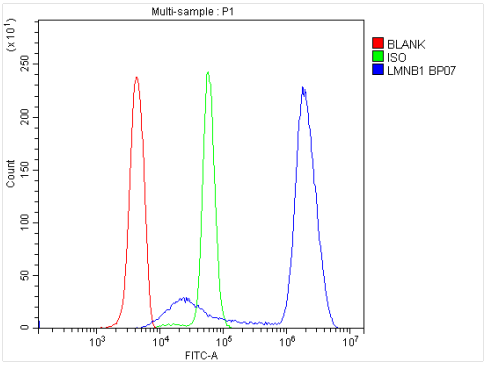


Figure 13.Flow cytometry analysis of U937 cell(1x106) DyLight 488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).

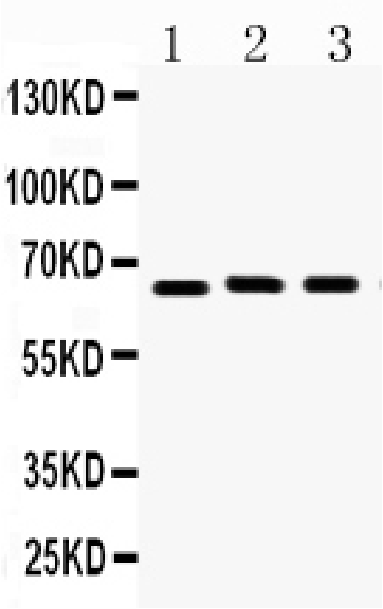


Figure 1. Western blot analysis of Lamin B1 using anti-Lamin B1 antibody (PB9611). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: U87 Whole Cell Lysate,Lane 2: PC-12 Whole Cell Lysate,Lane 3: NIH3T3 Whole Cell Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Lamin B1 antigen affinity purified polyclonal antibody (Catalog # PB9611) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Lamin B1 at approximately 67KD. The expected band size for Lamin B1 is at 67KD.

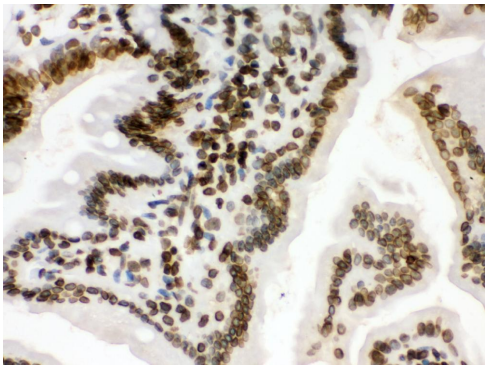

Figure 2. IHC analysis of Lamin B1 using anti-Lamin B1 antibody (PB9611).Lamin B1 was detected in paraffin-embedded section of Mouse Intestine Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Lamin B1 Antibody (PB9611) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-

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Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

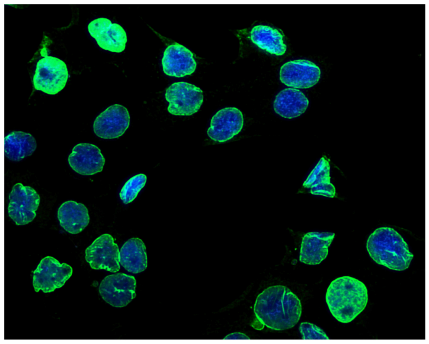

Figure 12.ICC analysis using anti-Lamin B1 antibody (PB9611) was detected in immersion fixed A431 cell line . Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and counterstained with DAPI (blue).

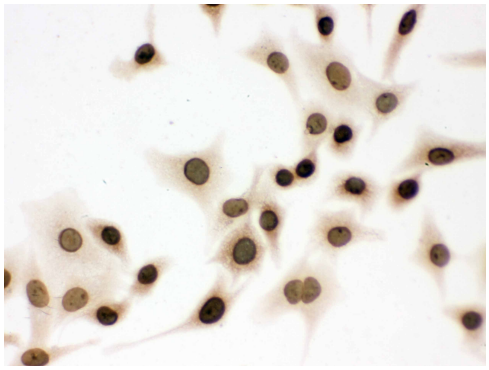

Figure 5. IHC analysis of Lamin B1 using anti-Lamin B1 antibody (PB9611). Lamin B1 was detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 1µg/ml rabbit anti-Lamin B1 Antibody (PB9611) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

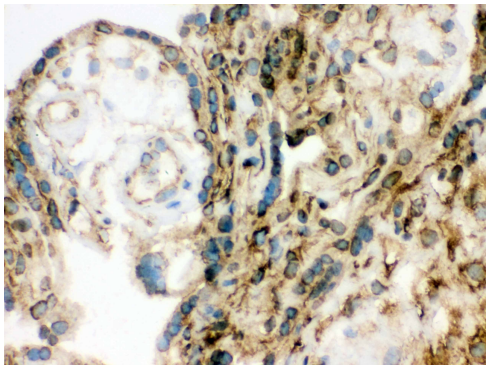

Figure 9. IHC analysis of Lamin B1 using anti-Lamin B1 antibody (PB9611).Lamin B1 was detected in frozen section of human placenta tissue . The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Lamin B1 Antibody (PB9611) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.