

## Anti-Lamin B2/LMNB2 Antibody Picoband®

Catalog Number: PA1636

### About LMNB2

Lamin B2, also called LMNB2, is a protein associated with laminopathies. The LMNB2 gene is mapped to the G-negative subtelomeric band p13.3 of chromosome 19 by in situ hybridization. The LMNB2 gene contains 12 exons. [Common model organisms](#) have been used in the study of Lamin B2 function. A conditional knockout mouse line, called *Lmnb2*, is generated as part of the International Knockout Mouse Consortium program—a high-throughput mutagenesis project to generate and distribute animal models of disease to interested scientists. A highly sensitive procedure about mapping the start site of DNA replication in a 13.7-kb region of human chromosome 19 coding for lamin B2 is developed for the identification of the origin of bidirectional DNA synthesis in single-copy replicons of mammalian cells.

### Overview

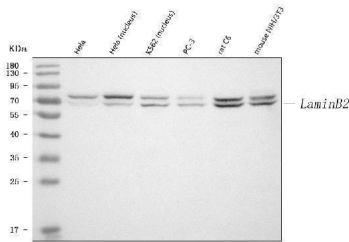
Product Name	Anti-Lamin B2/LMNB2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Lamin B2/LMNB2 Antibody catalog # PA1636. Tested in IHC, IHC-F, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, IHC-F, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.01mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q03252

### Technical Details

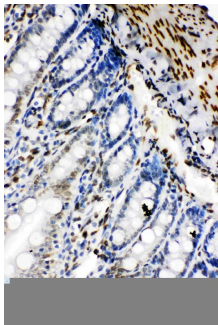
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Lamin B2, identical to the related rat and mouse sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and IHC(F).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Rat

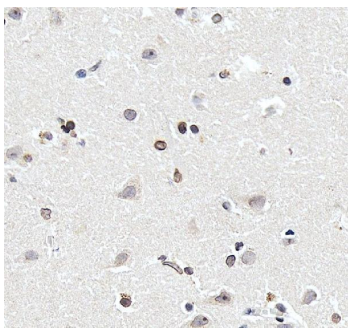
## Anti-Lamin B2/LMNB2 Antibody Picoband® (PA1636) Images



Western blot analysis of Lamin B2 using anti-Lamin B2 antibody (PA1636). 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 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human Hela (nucleus) lysates, Lane 3: human K562 (nucleus) lysates, Lane 4: human PC-3 whole cell lysates, Lane 5: rat C6 whole cell lysates, Lane 6: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 B2 antigen affinity purified polyclonal antibody (Catalog # PA1636) at 0.5 ug/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 1:5000 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 B2 at approximately 70 kDa. The expected band size for Lamin B2 is at 68 kDa.

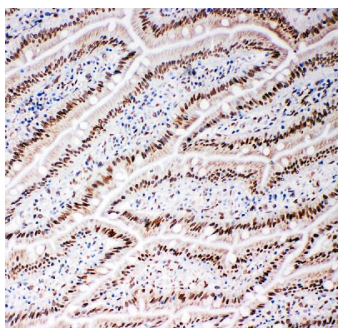


IHC analysis of Lamin B2 using anti-Lamin B2 antibody (PA1636). Lamin B2 was detected in a paraffin-embedded section of Rat Intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Lamin B2 Antibody (PA1636) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of Lamin B2/LMNB2 using anti-Lamin B2/LMNB2 antibody (PA1636). Lamin B2/LMNB2 was detected in a paraffin-embedded section of human brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Lamin B2/LMNB2 Antibody (PA1636) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IHC analysis of Lamin B2 using anti-Lamin B2 antibody (PA1636). Lamin B2 was detected in frozen section of rat intestine tissues. The tissue section was blocked with 10%



goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Lamin B2 Antibody (PA1636) 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 Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

## 1 Publications Citing This Product

1. PubMed ID: 27774770, Protection of Nrf2 against arsenite-induced oxidative damage is regulated by the cyclic guanosine monophosphate-protein kinase G signaling pathway

Visit [bosterbio.com/anti-lamin-b2-antibody-pa1636-boster.html](https://bosterbio.com/anti-lamin-b2-antibody-pa1636-boster.html) to see all 1 publications.

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Anti-Lamin B2/LMN2 Antibody

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