

Anti-Lamin A + C/LMNA Antibody Picoband®

Catalog Number: PA1103

About LMNA

Lamins are structural protein components of the nuclear lamina, a protein network underlying the inner nuclear membrane that determines nuclear shape and size. There are three types of lamins, A, B and C. The lamin A/C (LMNA) gene contains 12 exons. Alternative splicing within exon 10 gives rise to two different mRNAs that code for pre-lamin A and lamin C. Lamin A/C mapped to 1q21.2-q21.3 and mutations in this gene cause a variety of human diseases including Emery-Dreifuss muscular dystrophy, dilated cardiomyopathy, and Hutchinson-Gilford progeria syndrome. Lamin A/C deficiency is thus associated with both defective nuclear mechanics and impaired mechanically activated gene transcription.

Overview

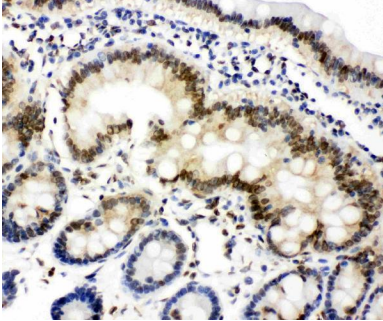
Product Name	Anti-Lamin A + C/LMNA Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Lamin A + C/LMNA Antibody catalog # PA1103. Tested in IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that 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, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ . *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	P02545

Technical Details

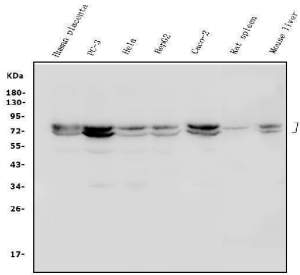
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Lamin A/C, identical to the related rat and mouse sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
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	Immunocytochemistry , 0.5-1ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

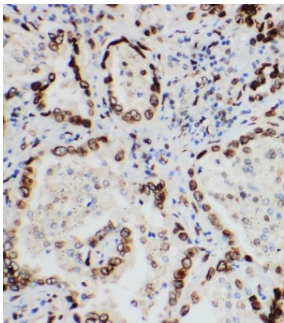
Anti-Lamin A + C/LMNA Antibody Picoband® (PA1103) Images



Anti-Lamin A+C antibody, PA1103, IHC(P)IHC(P): Rat Intestine Tissue

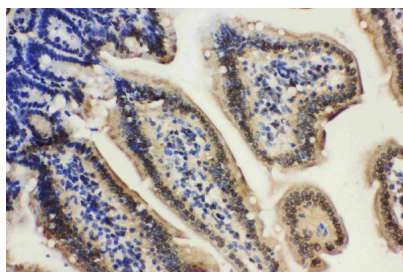


Western blot analysis of Lamin A/C using anti-Lamin A/C antibody (PA1103). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: human PC-3 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human HepG2 whole cell lysates, Lane 5: human CACO-2 whole cell lysates, Lane 6: rat spleen tissue lysates, Lane 7: mouse liver tissue lysates. 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 A/C antigen affinity purified polyclonal antibody (Catalog # PA1103) 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 A/C at approximately 70-74KD. The expected band size for Lamin A/C is at 74KD.



Anti-Lamin A+C antibody, PA1103, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-Lamin A+C antibody, PA1103, IHC(P)IHC(P): Mouse Intestine Tissue



4 Publications Citing This Product

1. PubMed ID: 33859765, Li D, Liu J, Yang C, Tian Y, Yin C, Hu L, Chen Z, Zhao F, Zhang R, Lu A, Zhang G, Qian A. Targeting long noncoding RNA PMIF facilitates osteoprogenitor cells migrating to bone formation surface to promote bone formation during aging. *Theranostics*. 2021 Mar 20;11(11):5585-5604. doi:10.7150/thno.54477. PMID:33859765; PMCID:PMC8039942.

2. PubMed ID: 25240403, Liu J, Ma J, Wu Z, Li W, Zhang D, Han L, Wang F, Reindl Km, Wu E, Ma Q. *Bmc Cancer*. 2014 Sep 20;14:686. Doi: 10.1186/1471-2407-14-686. Arginine Deiminase Augments The Chemosensitivity Of Argininosuccinate Synthetase-Deficient Pancreatic Cancer Cel...

3. PubMed ID: 26429910, 714: Concentration-dependent Effects of Nuclear Lamins on Nuclear Size in Xenopus and Mammalian Cells

Visit bosterbio.com/anti-lamin-a-c-antibody-pa1103-boster.html to see all 4 publications.

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