

Anti-Lamin A + C/LMNA Antibody

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

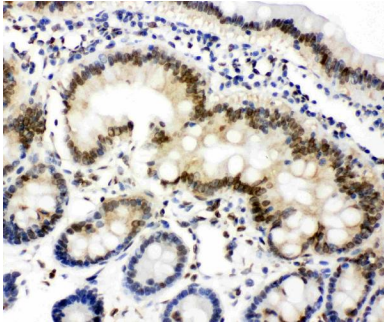
Product Name	Anti-Lamin A + C/LMNA Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Lamin A + C/LMNA Antibody catalog # PA1103. Tested in IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
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.
Predicted Reactive Species	Hamster
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	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunocytochemistry , 0.5-1ug/ml, Human, Mouse, Rat</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat</p> <p>Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat</p>

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



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

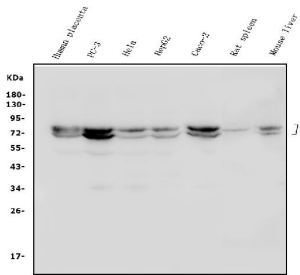
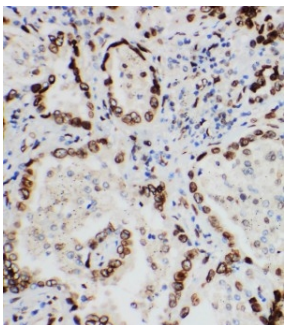


Figure 1. Western blot analysis of Lamin A/C using anti-Lamin A/C antibody (PA1103). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

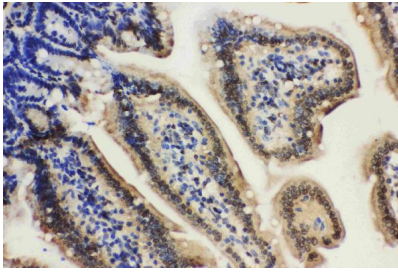
Lane 1: human placenta tissue lysates,
Lane 2: human PC-3 whole cell lysates,
Lane 3: human Hela whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: human CACO-2 whole cell lysates,
Lane 6: rat spleen tissue lysates,
Lane 7: mouse liver tissue lysates.

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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