

Basic Information

Product Name	Anti-Lamin A/C Antibody
Gene Name	LMNA
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, IF, FCM, ICC/IF
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human Lamin A/C recombinant protein (Position: Y481-Y646). Human Lamin A/C shares 90% and 92% amino acid (aa) sequence identity with mouse and rat Lamin A/C, respectively.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	74 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 Immunocytochemistry/Immunofluorescence(ICC/IF): 1:50-400 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

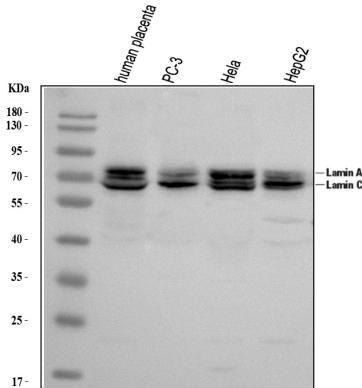
Lamins are structural protein components of the nuclear lamina, a protein network underlying the inner nuclear membrane that determines nuclear shape and size. There are three types of lamins, A,B and C. The lamin A/C (LMNA) gene contains 12 exons. Alternative splicing within exon 10 gives rise to two different mRNAs that code for pre-lamin A and lamin C. Lamin A/C is 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.

Reference

Anti-Lamin A/C Antibody被引用在3文献中。

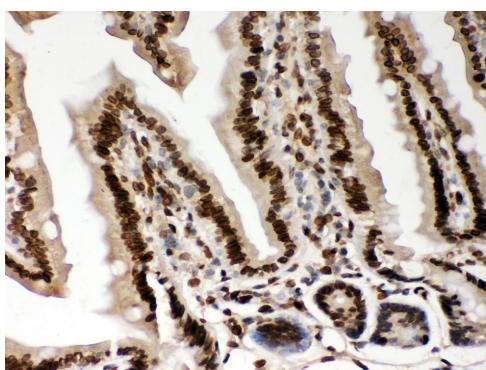
Selected Validation Data



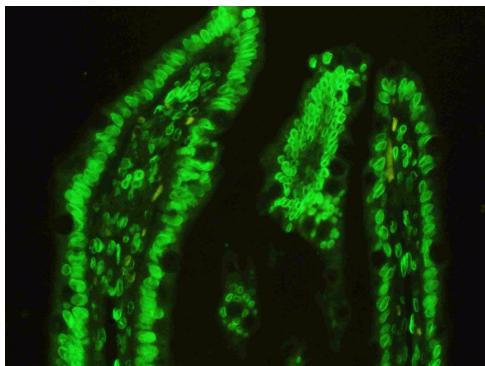
Western blot analysis of anti-Lamin A/C antibody (PB9280). The sample well of each lane was loaded with 30ug of sample under reducing conditions.

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.

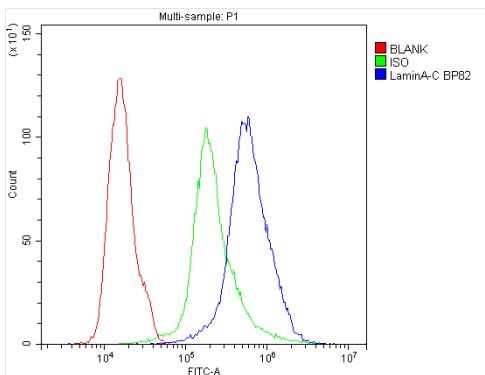
Use rabbit anti-Lamin A/C 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for Lamin A/C at approximately 74KD, 63KD. The expected band size for Lamin A/C is at 74KD.



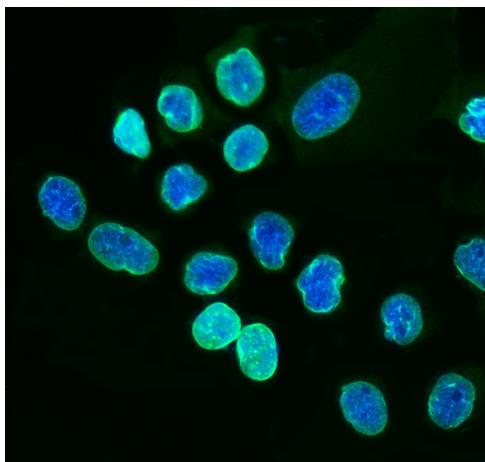
IHC analysis of Lamin A/C using anti-Lamin A/C antibody (PB9280). Lamin A/C was detected in a paraffin-embedded section of mouse intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Lamin A/C Antibody (PB9280) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti- LMNA antibody (PB9280). detected in paraffin-embedded section of rat intestine tissues. The tissue section were stained using the Fluoro488 conjugated Anti-rabbit IgG Secondary Antibody (greeen)(Catalog # BA1127) and counterstained with DAPI (blue).



Flow cytometry analysis of THP-1 cell(1:100) Fluoro488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG Fluoro488. Unlabelled sample (Red line).



ICC/IF analysis of Lamin A/C using anti-Lamin A/C antibody (PB9280). Lamin A/C was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-Lamin A/C Antibody (PB9280) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).