

For Research Use Only

# Lamin A/C Recombinant antibody, PBS Only

Catalog Number: 81042-1-PBS

Featured Product



## Basic Information

### Catalog Number:

81042-1-PBS

### Size:

100ug, Concentration: 1mg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0408

### GenBank Accession Number:

BC003162

### GeneID (NCBI):

4000

### ENSEMBL Gene ID:

ENSG00000160789

### UNIPROT ID:

P02545

### Full Name:

lamin A/C

### Calculated MW:

65 kDa

### Observed MW:

65-70 kDa

### Purification Method:

Protein A purification

### CloneNo.:

5I16

## Applications

### Tested Applications:

WB, IHC, IF/ICC, Indirect ELISA

### Species Specificity:

human, mouse, rat

## Background Information

Lamin A/C is also named as LMNA, or LMN1. 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. The lack of lamin A/C can be as a novel marker for undifferentiated embryonic stem cells and lamin A/C expression is as an early indicator of differentiation (PMID: 16179429). Mutations in this gene lead to several diseases: Emery-Dreifuss muscular dystrophy, familial partial lipodystrophy, limb girdle muscular dystrophy, dilated cardiomyopathy, Charcot-Marie-Tooth disease, and Hutchinson-Gilford progeria syndrome. This protein has 4 isoforms produced by alternative splicing with the molecular weight of 74 kDa, 65 kDa, 70 kDa and 64 kDa. This antibody can recognize 4 isoforms of Lamin A/C.

## Storage

### Storage:

Store at -80°C.

### Storage Buffer:

PBS Only

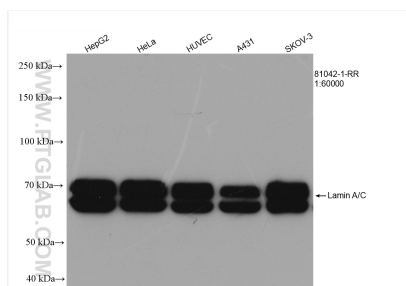
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

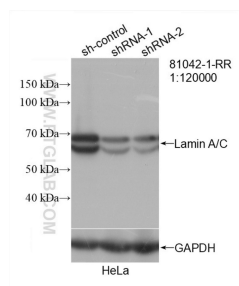
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

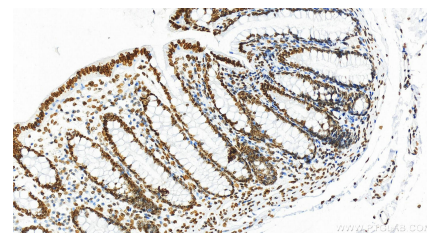
## Selected Validation Data



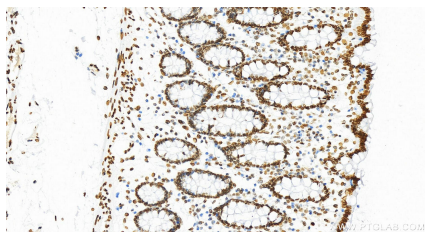
Various lysates were subjected to SDS PAGE followed by western blot with 81042-1-RR (Lamin A/C antibody) at dilution of 1:60000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



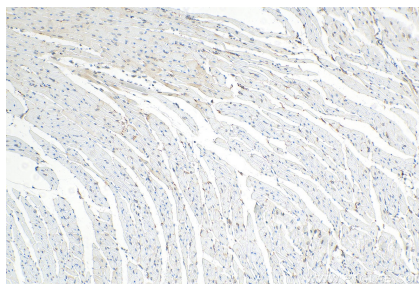
WB result of Lamin A/C antibody (81042-1-RR; 1:120000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Lamin A/C transfected HeLa cells. This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



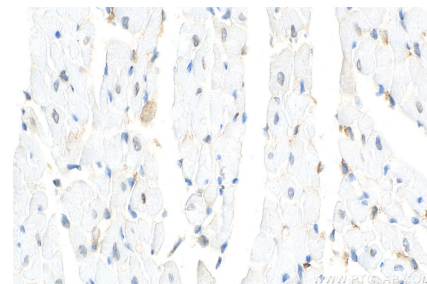
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:12000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



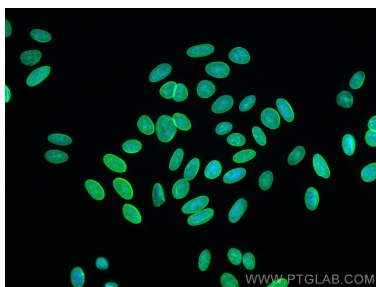
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:12000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



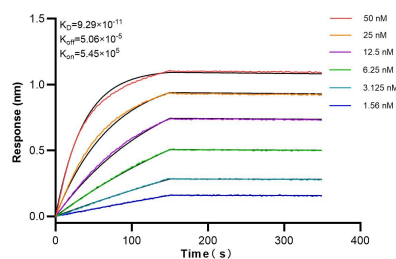
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:6000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:6000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using Lamin A/C antibody (81042-1-RR, Clone: 5I16) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81042-1-RR against Human Lamin A/C were performed. The affinity constant is 92.9 pM.