

For Research Use Only

# Lamin B1 Polyclonal antibody

Catalog Number:12987-1-AP

Featured Product

1227 Publications



## Basic Information

### Catalog Number:

12987-1-AP

### Size:

150ul , Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3631

### GenBank Accession Number:

BC012295

### GeneID (NCBI):

4001

### ENSEMBL Gene ID:

ENSG00000113368

### UNIPROT ID:

P20700

### Full Name:

lamin B1

### Calculated MW:

66 kDa

### Observed MW:

66-70 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:1000-1:4000

IF-P 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, canine, monkey, chicken, bovine, hamster, bombyx mori

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB** : HeLa cells, U-937 cells, mouse spleen tissue, K-562 cells, Y79 cells, mouse pancreas tissue, SH-SY5Y cells, mouse kidney tissue, mouse lung tissue, mouse eye tissue, HepG2 cells, Jurkat cells, MCF-7 cells, NIH/3T3 cells, RAW 264.7 cells

**IP** : HeLa cells,

**IHC** : mouse heart tissue, human kidney tissue, human liver cancer tissue, human colon tissue, mouse kidney tissue, human colon cancer tissue

**IF-P** : human skin cancer tissue,

**IF/ICC** : HepG2 cells, human skin cancer tissue, NIH/3T3 cells

## Background Information

Lamins are components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane, which is thought to provide a framework for the nuclear envelope and may also interact with chromatin. The nuclear lamina consists of a two-dimensional matrix of proteins located next to the inner nuclear membrane. 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. Vertebrate lamins consist of two types, A and B. This gene encodes one of the two B type proteins, B1. Expression of uncleavable mutant lamin A or B caused significant delays in the onset of chromatin condensation and nuclear shrinkage during apoptosis (PMID:11953316). This protein is not suitable for samples where the nuclear envelope has been removed.

## Notable Publications

Author	Pubmed ID	Journal	Application
Liqun Xu	34638868	Int J Mol Sci	WB
Kaili Liu	33007707	Transl Oncol	WB
Praveen K Dubey	34581943	Mol Cell Biochem	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

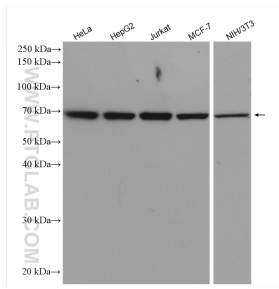
For technical support and original validation data for this product please contact:

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

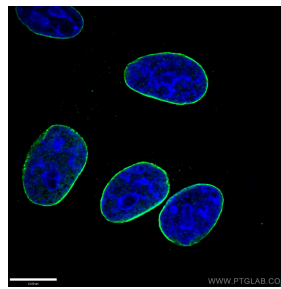
E: proteintech@ptglab.com  
W: ptglab.com

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

## Selected Validation Data



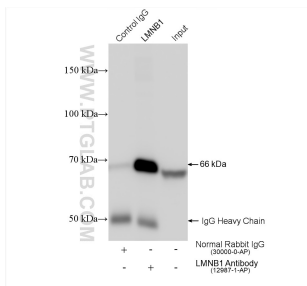
Various lysates were subjected to SDS PAGE followed by western blot with 12987-1-AP (Lamin B1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



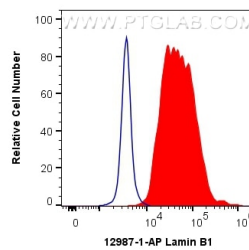
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 12987-1-AP (Lamin B1 antibody) at dilution of 1:200 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



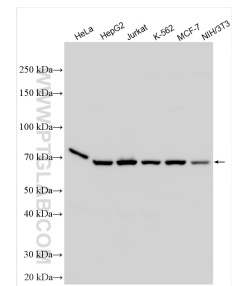
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12987-1-AP (Lamin B1 antibody) at dilution of 1:100 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



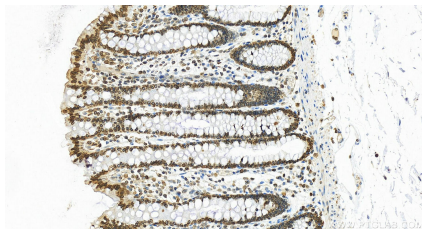
IP result of anti-Lamin B1 (IP:12987-1-AP, 4ug; Detection:12987-1-AP 1:20000) with HeLa cells lysate 1560 ug.



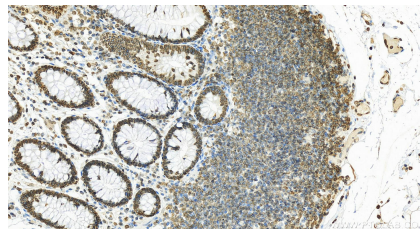
1X10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human Lamin B1 (12987-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



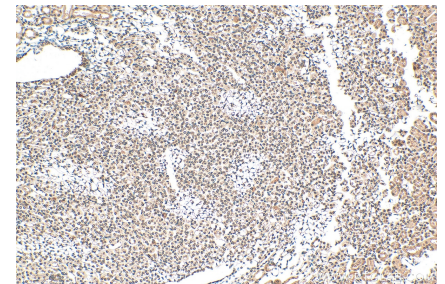
Various lysates were subjected to SDS PAGE followed by western blot with 12987-1-AP (Lamin B1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



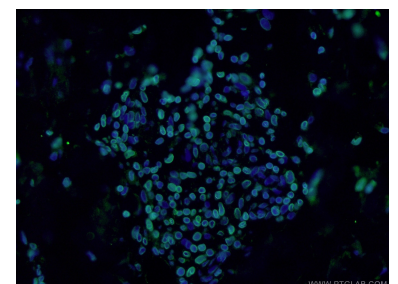
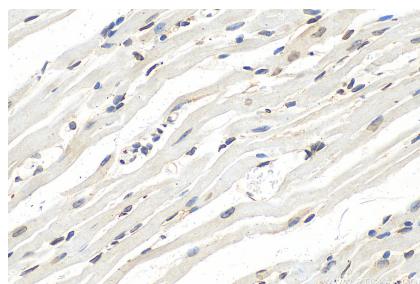
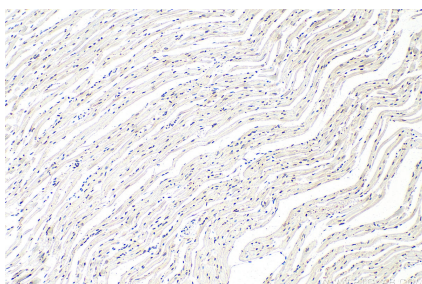
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 12987-1-AP (Lamin B1 antibody) at dilution of 1:4000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



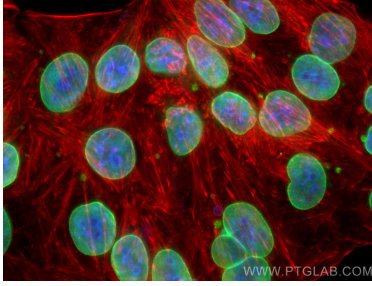
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 12987-1-AP (Lamin B1 antibody) at dilution of 1:4000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 12987-1-AP (Lamin B1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 12987-1-AP (Lamin B1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Lamin B1 antibody (12987-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).

Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 12987-1-AP (Lamin B1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunofluorescent analysis of (4% PFA) fixed human skin cancer tissue using 12987-1-AP (Lamin B1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).