For Research Use Only

Lamin B1 Recombinant antibody

Catalog Number:80906-1-RR Featured Product 1 Publications

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Basic Information

Catalog Number:
80906-1-RR

Size:
100ul , Concentration: 1000 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:
Protein A purification

CloneNo.:
5H10

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:1000-1:4000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human

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, HEK-293 cells, Jurkat cells, K-562 cells, NIH/3T3 cells, 4T1 cells, HSC-T6 cells

IHC : human breast cancer tissue, human colon cancer tissue, human colon tissue

IF/ICC : HepG2 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
Haohao Song	38157218	ACS Nano	WB

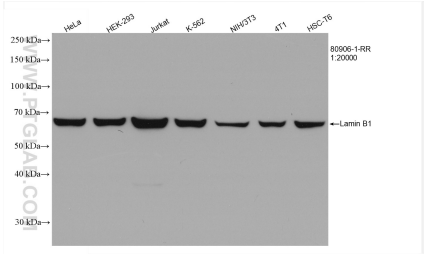
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol
Aliquoting is unnecessary for -20°C storage

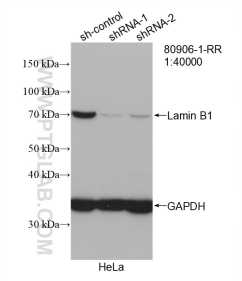
*** 20ul sizes contain 0.1% BSA

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

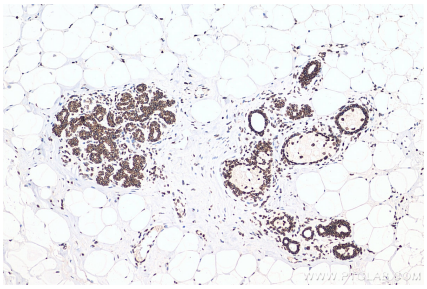
Selected Validation Data



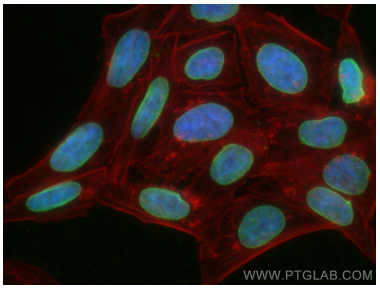
Various lysates were subjected to SDS PAGE followed by western blot with 80906-1-RR (Lamin B1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



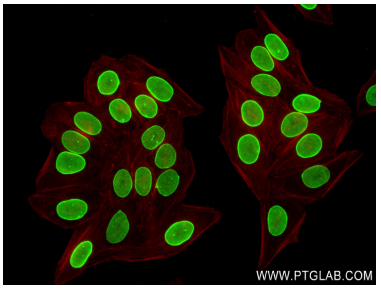
WB result of Lamin B1 antibody (80906-1-RR; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Lamin B1 transfected HeLa cells.



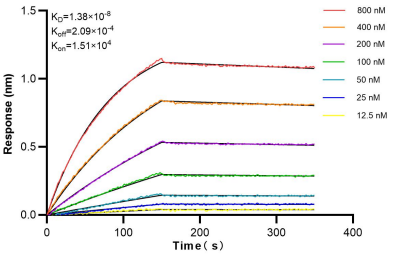
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 80906-1-RR (Lamin B1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Lamin B1 antibody (80906-1-RR, Clone: 5H10) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Lamin B1 antibody (80906-1-RR, Clone: 5H10) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 80906-1-RR against Human Lamin B1 were performed. The affinity constant is 13.8 nM.