

For Research Use Only

Lamin A/C Recombinant antibody

Catalog Number: 81042-1-RR

Featured Product

1 Publications



Basic Information

Catalog Number: 81042-1-RR	GenBank Accession Number: BC003162	Purification Method: Protein A purification
Size: 1000 ug/ml	GeneID (NCBI): 4000	CloneNo.: 5I16
Source: Rabbit	ENSEMBL Gene ID: ENSG00000160789	Recommended Dilutions: WB 1:20000-1:100000 IHC 1:3000-1:12000 IF/ICC 1:500-1:2000
Isotype: IgG	UNIPROT ID: P02545	
Immunogen Catalog Number: AG0408	Full Name: lamin A/C	
	Calculated MW: 65 kDa	
	Observed MW: 65-70 kDa	

Applications

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

Species Specificity:
human, mouse, rat

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 : HepG2 cells, RAW 264.7 cells, HeLa cells, HUVEC cells, A431 cells, SKOV-3 cells, HSC-T6 cells, NIH/3T3 cells, C6 cells

IHC : mouse heart tissue, human colon tissue

IF/ICC : HepG2 cells,

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.

Notable Publications

Author	Pubmed ID	Journal	Application
Peter Krüger	39273272	Int J Mol Sci	

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

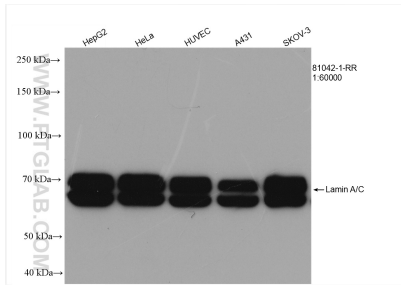
T: 4006900926

E: Proteintech-CN@ptglab.com

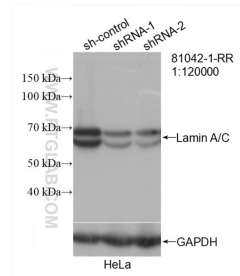
W: ptgcn.com

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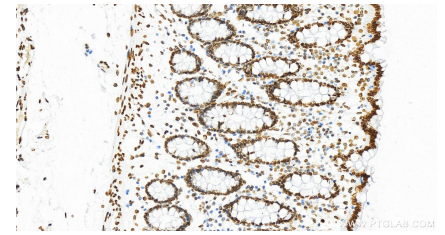
Selected Validation Data



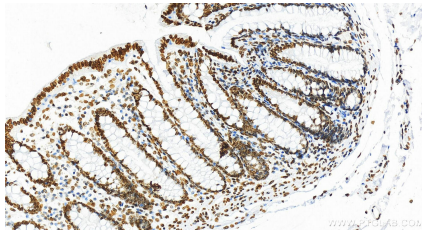
Various lysates were subjected to SDS PAGE followed by western blot with 81042-1-RR (Lamin A/C antibody) at dilution of 1:160000 incubated at room temperature for 1.5 hours.



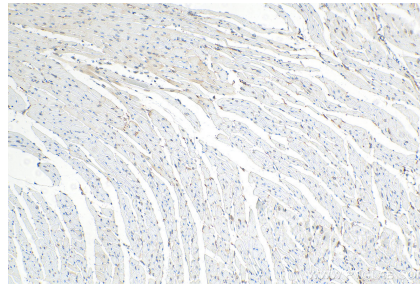
WB result of Lamin A/C antibody (81042-1-RR; 1:120000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Lamin A/C transfected HeLa cells.



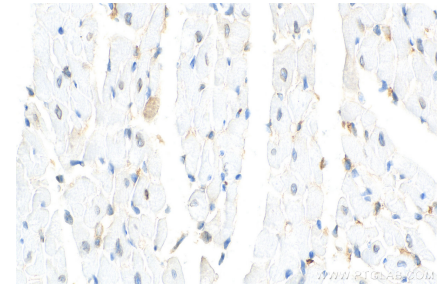
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:120000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



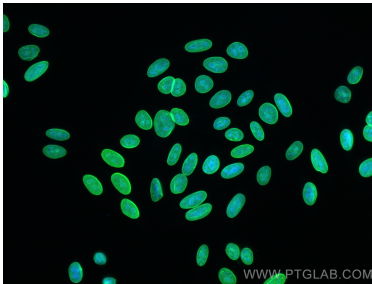
Immunohistochemical analysis of paraffin-embedded human normal colon slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:12000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



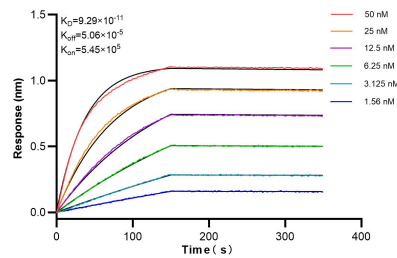
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:6000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using Lamin A/C antibody (81042-1-RR, Clone: 5116) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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