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## [KO Validated] Lamin A/C Rabbit mAb

Catalog No.: A19524 KO Validated Recombinant 19 Publications

## **Basic Information**

## **Observed MW**

68kDa/72kDa

#### **Calculated MW**

74kDa

## Category

Primary antibody

## **Applications**

WB,IHC-P,IF/ICC,IP,ELISA

### **Cross-Reactivity**

Human, Mouse, Rat

#### CloneNo number

ARC5001-08

## **Background**

The protein encoded by this gene is part of the nuclear lamina, 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. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. Vertebrate lamins consist of two types, A and B. Alternative splicing results in multiple transcript variants. 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.

## **Recommended Dilutions**

**WB** 1:50000 - 1:300000

IHC-P 1:1000 - 1:4000

**IF/ICC** 1:100 - 1:800

**IP** 0.5μg-4μg antibody for

200μg-400μg extracts of

whole cells

**ELISA** Recommended starting

concentration is 1 µg/mL.

Please optimize the
concentration based on
your specific assay
requirements.

## **Contact**

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•		www.abclonal.com.cn

## Immunogen Information

**Gene ID Swiss Prot**4000
P02545

### **Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

## **Synonyms**

FPL; IDC; LFP; CDDC; EMD2; FPLD; HGPS; LDP1; LMN1; LMNC; MADA; PRO1; CDCD1; CMD1A; FPLD2; LMNL1; CMT2B1; LGMD1B; /C

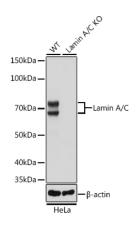
## **Product Information**

SourceIsotypePurificationRabbitIgGAffinity purification

#### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.



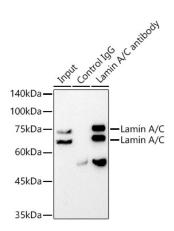
Western blot analysis of lysates from wild type (WT) and Lamin A/C knockout (KO) HeLa cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at 1:50000 dilution incubated overnight at  $4^{\circ}$ C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

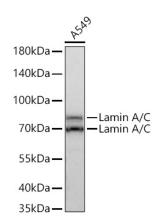
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1s.



Immunoprecipitation analysis of 300  $\mu$ g extracts from PC-12 cells using 3  $\mu$ g [KO Validated] Lamin A/C Rabbit mAb (A19524). Western blot was performed from the immunoprecipitate using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:100000.



Western blot analysis of lysates from A549 cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at 1:240000 dilution incubated overnight at  $4^{\circ}$ C.

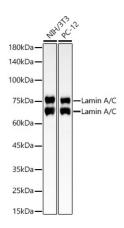
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Western blot analysis of various lysates using [KO Validated] Lamin A/C Rabbit mAb (A19524) at 1:300000 dilution incubated overnight at  $4^{\circ}$ C.

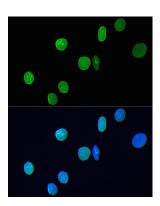
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

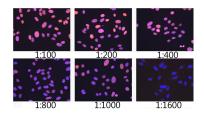
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

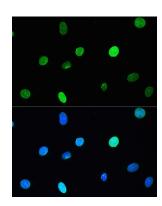
Exposure time: 30s.



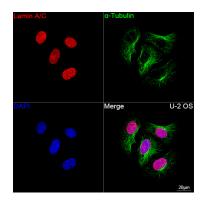
Immunofluorescence analysis of H9C2 cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at dilution of 1:200. Blue: DAPI for nuclear staining.



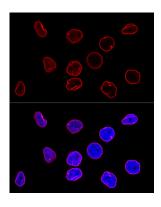
Immunofluorescence analysis of U-2 OS cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at dilution of 1:100 - 1:1600. Blue: DAPI for nuclear staining.



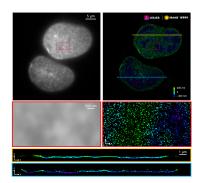
Immunofluorescence analysis of L929 cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at dilution of 1:200. Blue: DAPI for nuclear staining.



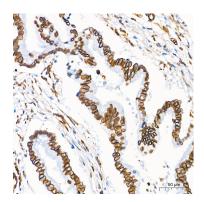
Confocal imaging of U-2 OS cells using [KO Validated] Lamin A/C Rabbit mAb (A19524, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal immunofluorescence analysis of HeLa cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at dilution of 1:100. Blue: DAPI for nuclear staining.



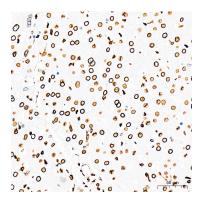
The STORM super-resolution (SR) imaging of U-2 OS cells using [KO Validated] Lamin A/C Rabbit mAb (A19524, ABclonal) at dilution of 1:200 with 3% paraformaldehyde (PFA) +0.1% glutaraldehyde (GA) fixation. The immunostaining was performed by Full Automatic Immunofluorescence Workflow System (Workflow Ultra300, Nano-Micro imaging, China). Image was performed with Single-Molecule Localization Super-Resolution Microscopy (STORM Ultra300, Nano-Micro imaging, China). We acknowledge Nano-Micro imaging Biotechnology Co., Ltd. ([[[[[[]]]]][[[[]]]]) in SR image processing and kindly providing this image.



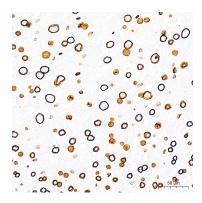
Immunohistochemistry analysis of paraffinembedded Human colon carcinoma tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Mouse liver tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



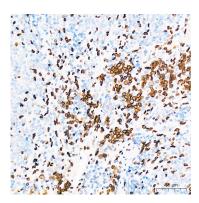
Immunohistochemistry analysis of paraffinembedded Human liver tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Rat liver tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Mouse intestin tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Rat spleen tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.