ABclonal www.abclonal.com

[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

SMab Recombinant Monoclonal 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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Immunogen Information

 Gene ID
 Swiss Prot

 4000
 P02545

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 403-572 of human Lamin A/C (NP_733821.1).

Svnonvms

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

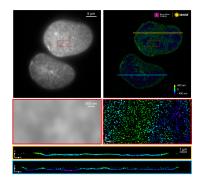
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

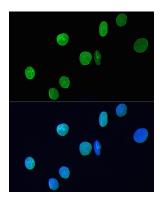
Storage

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

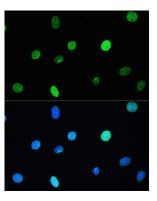
Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.



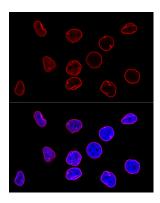
The STORM super-resolution (SR) imaging of U-2 OS cells using [KO Validated] Lamin A/C Rabbit mAb (A19524, ABclonal) at dilution of 1:200 with 3% paraformaldehyde (PFA) +0.1% glutaraldehyde (GA) fixation. The immunostaining was performed by Full Automatic Immunofluorescence Workflow System (Workflow 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.



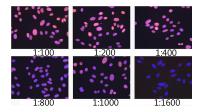
Immunofluorescence analysis of H9C2 cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at dilution of 1:200. Blue: DAPI for nuclear staining.



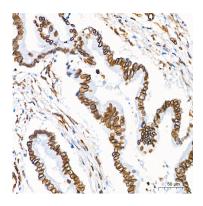
Immunofluorescence analysis of L929 cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at dilution of 1:200. Blue: DAPI for nuclear staining.



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.

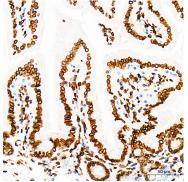


Immunofluorescence analysis of U-2 OS cells using [KO Validated] Lamin A/C Rabbit mAb (A19524) at dilution of 1:100 - 1:1600. Blue: DAPI for nuclear staining.

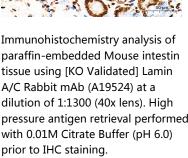


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.

Validation Data

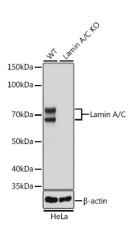


Immunohistochemistry analysis of paraffin-embedded Mouse intestin tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0)



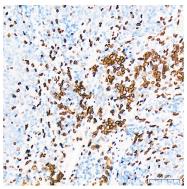


Immunohistochemistry analysis of paraffin-embedded Rat liver tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.

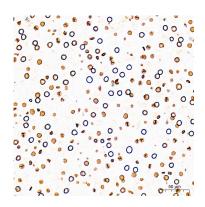




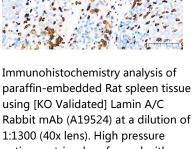
Immunohistochemistry analysis of paraffin-embedded Human liver tissue using [KO Validated] Lamin A/C Rabbit mAb (A19524) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of using [KO Validated] Lamin A/C 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded 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.



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°C.

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

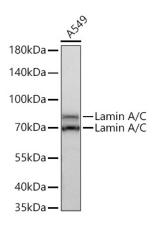
Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1s.

Validation Data



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° C.

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

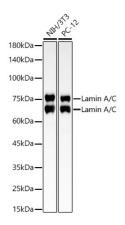
dilution.

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°C.

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

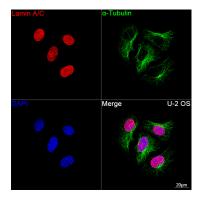
dilution.

Lysates/proteins: 25µg per lane.

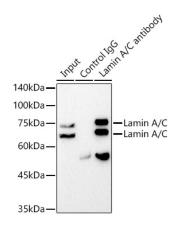
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



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 α -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



Immunoprecipitation analysis of 300 μ g extracts from PC-12 cells using 3 μ 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.