

**Product Name: KD-Validated Lamin A/C Recombinant Rabbit Monoclonal Antibody**  
**Catalog #: KVA01438**

For research use only.

## Summary

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,FCM,ICC,IHC-P                                                            |
| <b>Reactivity</b>   | Human                                                                       |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

## Application

|                         |                                                                             |
|-------------------------|-----------------------------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:2,000-1:10,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200 |
| <b>Molecular Weight</b> | Calculated MW: 74.1kDa                                                      |

## Antigen Information

|                          |                                                                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | LMNA<br>LMNA; Lamin A/C; HGPS; MADA; LMN1; Mandibuloacral Dysplasia Type A; Lamin A/C-Like 1; Prelamin-A/C; Progerin; LGMD1B; CMD1A; LMNL1; PRO1; Limb Girdle Muscular Dystrophy 1B (Autosomal Dominant) 2                                                            |
| <b>Alternative Names</b> | Cardiomyopathy, Dilated 1A (Autosomal Dominant); Epididymis Secretory Sperm Binding Protein; Progeria 1 (Hutchinson-Gilford Type); Renal Carcinoma Antigen NY-REN-32; 70 KDa Lamin; Lamin C; CMT2B1; CDCC1; FPLD2; Lamin; CDDC; EMD2; FPLD; LDP1; LMNC; FPL; IDC; LFP |
| <b>Gene ID</b>           | 4000.0                                                                                                                                                                                                                                                                |
| <b>SwissProt ID</b>      | P02545                                                                                                                                                                                                                                                                |
| <b>Immunogen</b>         | A synthesized peptide derived from human Lamin A/C                                                                                                                                                                                                                    |

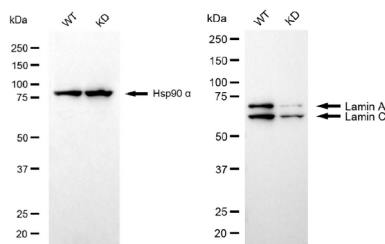
## Background

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. [provided by RefSeq, May 2022]

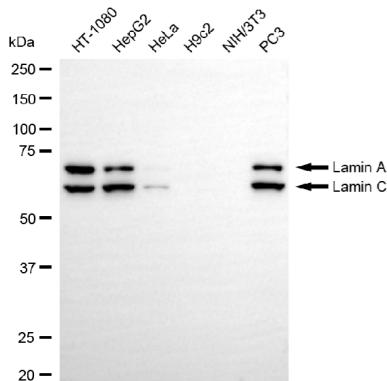
## Research Area

Tags & Cell Markers, Signal Transduction

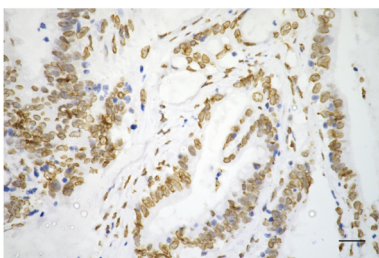
## Image Data



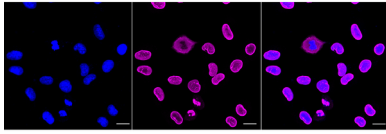
Western blotting analysis using Lamin A/C antibody (KVA01438). Lamin A/C expression in wild type (WT) and LMNA knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Lamin A/C antibody (KVA01438, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



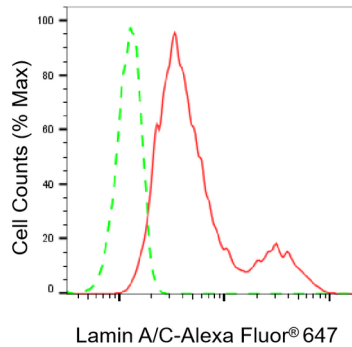
Western blotting analysis using Lamin A/C antibody (KVA01438). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Lamin A/C antibody (KVA01438, 1:10,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using lamin A/C antibody (KVA01438, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HT-1080 cells with Lamin A/C antibody (KVA01438, 1:1,000). Nuclei were stained blue with DAPI; Lamin A/C was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.



Flow cytometric analysis of Lamin A/C expression in HT-1080 cells using Lamin A/C antibody (KVA01438, 1:2,000). Green, isotype control; red, Lamin A/C.