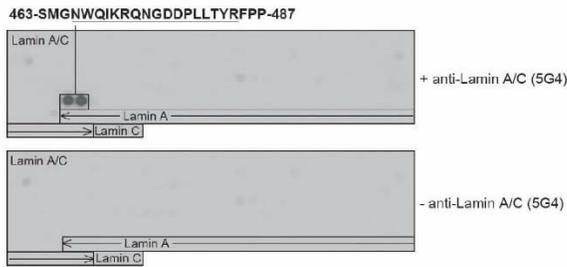


SUPPLEMENTARY FIGURE 1. Peptide mapping of the lamin A/C epitopes recognized by antibody 5G4 and antibody L1293. The epitopes for lamin antibodies 5G4 and L1293 were identified by probing immobilized human prelamin A and lamin C synthetic 20-mer peptides, arrayed with 3-residue offsets (n=2; two independent peptide syntheses). **(A)** Arrays probed with lamin A/C antibody 5G4 (upper panel; +5G4 Ab), or as negative control, no primary antibody (lower panel; no 5G4). The first 566 amino acids of lamin A and C are identical, as shown in **(B)**. Peptides representing the unique C-termini of lamin A and C are boxed. Amino acids relevant to antibody binding are bold; underlined residues represent the core epitope. **(C)** Aligned amino acid sequences showing that the human 5G4 epitope is conserved in mouse and rat. Identical residues are shaded black (DNASar, Lasergene, Madison, Wisconsin). **(D)** Human lamin A/C arrays probed with antibody L1293 (upper panel; +L1293 Ab), or no primary antibody as control (lower panel; no L1293). **(E-G)** Corresponding peptides from mouse lamin A **(E)** and rat lamin A **(F)**, probed with or without L1293 (left and right, respectively). Aligned amino acid sequences show the L1293 epitope is conserved in rodents **(G)**. The core epitope for antibody L1293 was identified as residues 592-623, which overlap the synthetic peptide (amino acids 598-611) used as antigen by the manufacturer (Sigma-Aldrich).

A Human Lamin A/C



B

anti-Lamin A/C (5G4) epitope

Human Lamin A (458-495): **SNEDCSMGNWQIKRQNGDDPLLTYRFPPKFTLKAQCVM**

Human Lamin C (458-495): **SNEDCSMGNWQIKRQNGDDPLLTYRFPPKFTLKAQCVM**

C

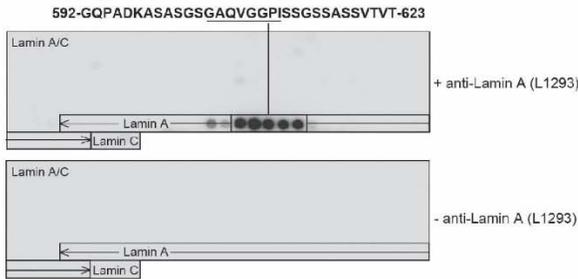
Anti-Lamin A/C (5G4) epitope

Mouse Lamin A (458-495): **SNEDCSMGNWQIKRQNGDDPLLTYRFPPKFTLKAQCVM**

Rat Lamin A (458-495): **SNEDCSMGNWQIKRQNGDDPLLTYRFPPKFTLKAQCVM**

Human Lamin A (458-495): **SNEDCSMGNWQIKRQNGDDPLLTYRFPPKFTLKAQCVM**

D Human Lamin A/C



E Mouse Lamin A



F Rat Lamin A



G

anti-Lamin A (L1293) epitope

Mouse Lamin A (588-633): **VLCGTCGQPADKAAG-EGAGAQVGGSSISGSSASSVTTRSF-RSVGG**

Rat Lamin A (588-633): **VLCGTCGQPADKAAS-ESGAGAQVGGSSISGSSASSVTTRSF-RSVGG**

Human Lamin A (586-632): **VLCGTCGQPADKASAS-ESGAGAQVGGPISSGSSASSVTTRSF-RSVGG**

Supplementary Figure 1