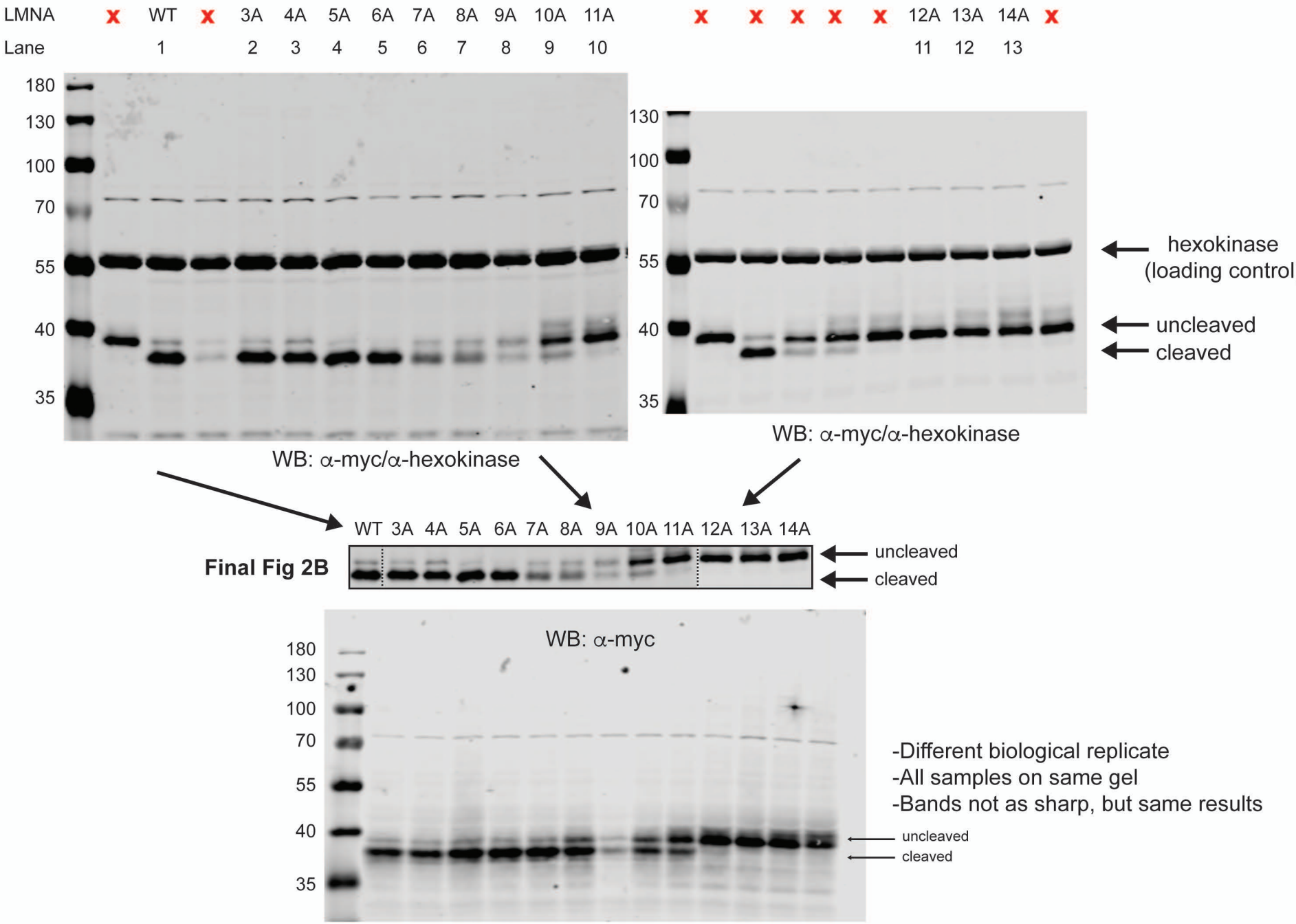
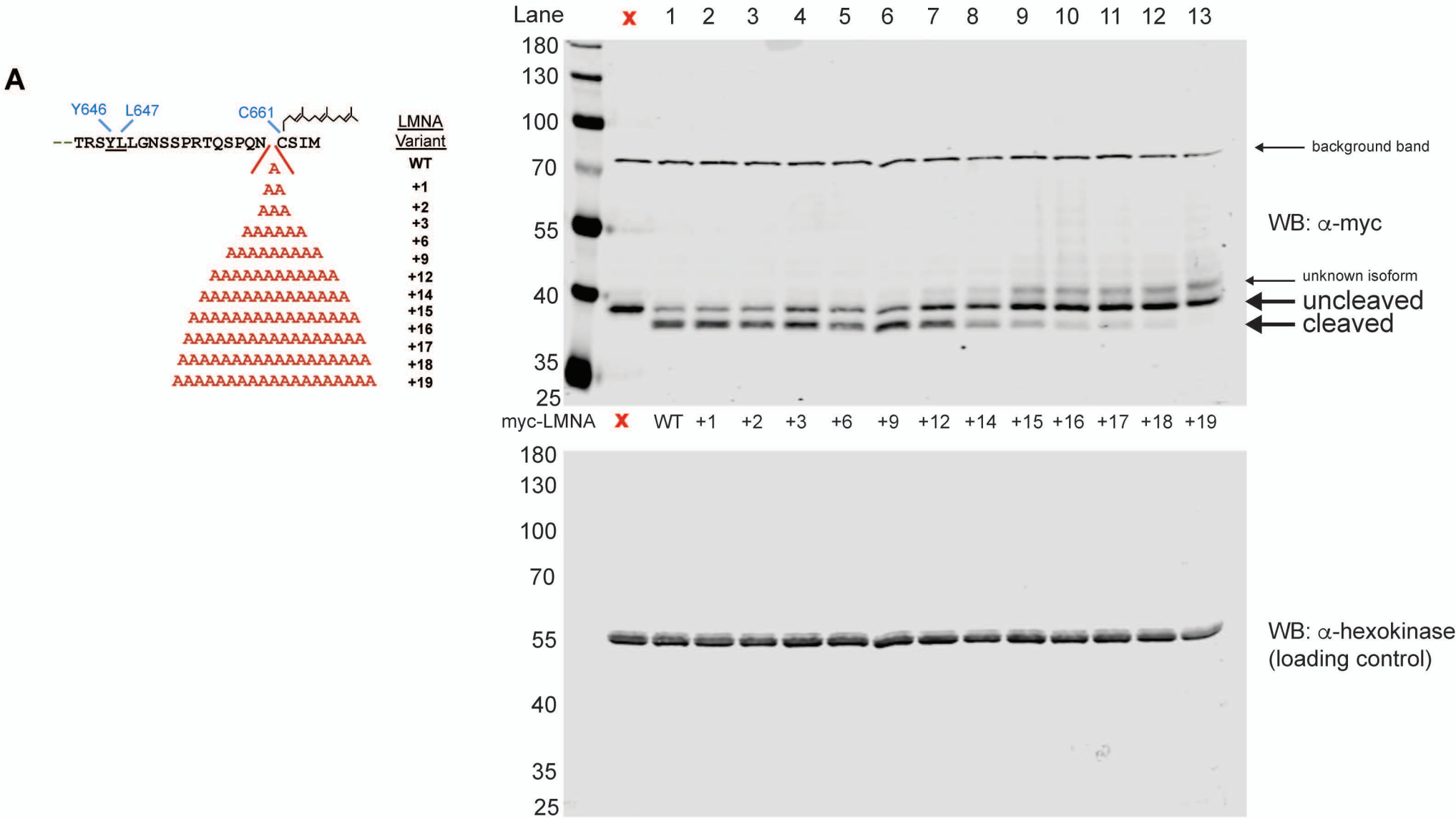
Fig. 2B



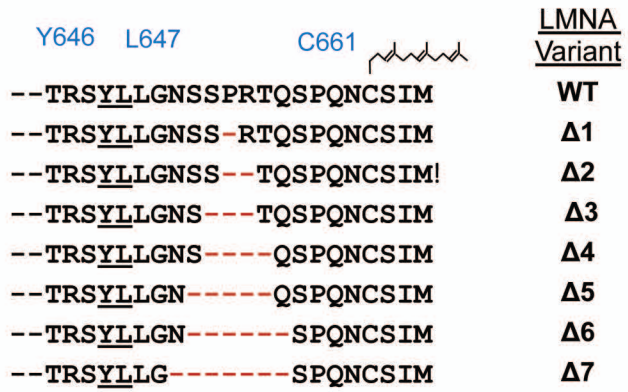
- SDS detergent lysates from strain SM6303 (*ste24Δ HA-ZMPSTE24*) transformed with myc-prelamin A plasmids were resolved by 10% SDS-PAGE, transferred to nitrocellulose (Biorad TransBlot Turbo), and proteins were detected using anti-myc monoclonal antibody and rabbit anti-hexokinase polyclonal antibody (described in M&Ms). Proteins were detected using Licor secondary antibodies and visualized using the Odyssey imaging platform (Licor). Some LMNA mutants show lower steady-state levels (lanes 6-8). This has also been observed for other LMNA mutants.

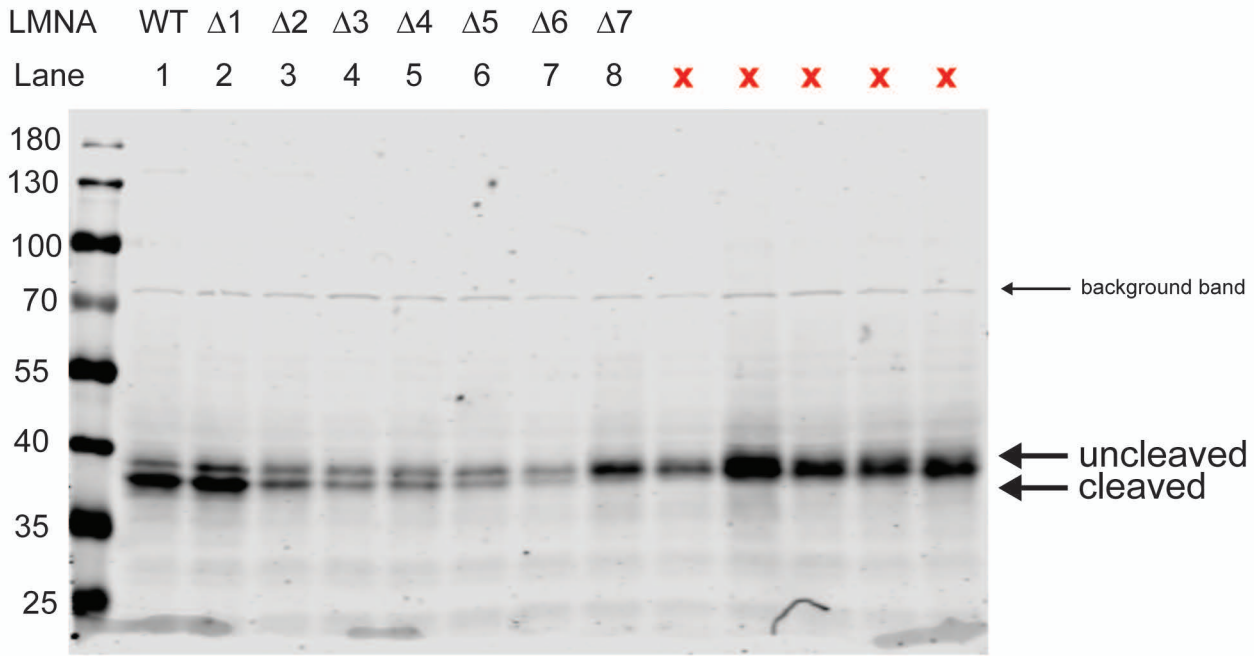
Fig. 3B



- SDS detergent lysates from strain SM6303 (*ste24Δ HA-ZMPSTE24*) transformed with myc-prelamin A plasmids were resolved by 10% SDS-PAGE, transferred to nitrocellulose (Biorad TransBlot Turbo), and proteins were detected using anti-myc monoclonal antibody and anti-hexokinase polyclonal antibody (described in M&Ms). Proteins were detected using Licor anti-mouse and anti-rabbit secondary antibodies and visualized using the Odyssey imaging platform (Licor). The longer alanine extensions (+14-+19) show a slower migrating species of unknown origin.

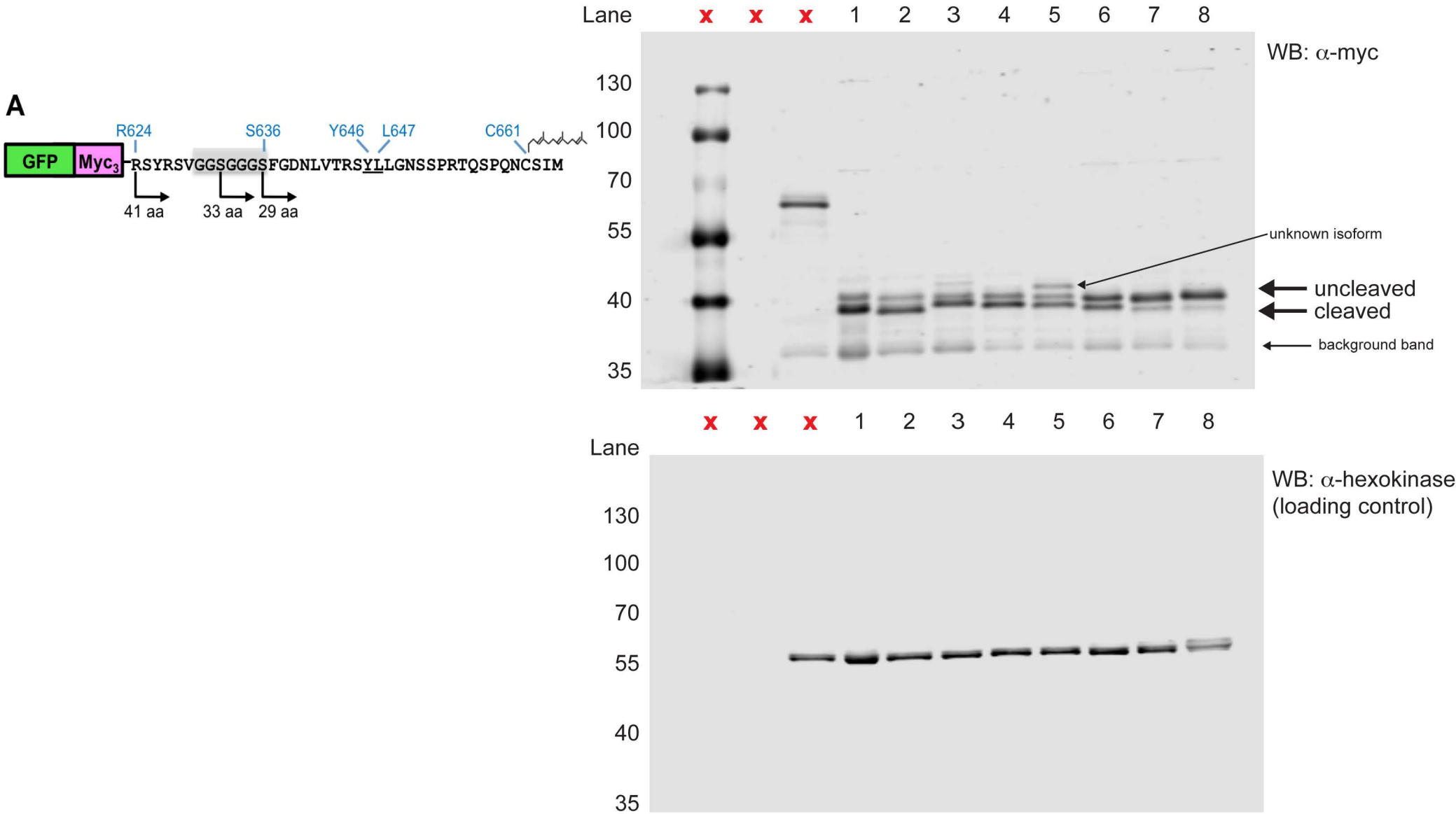
Fig. 4B





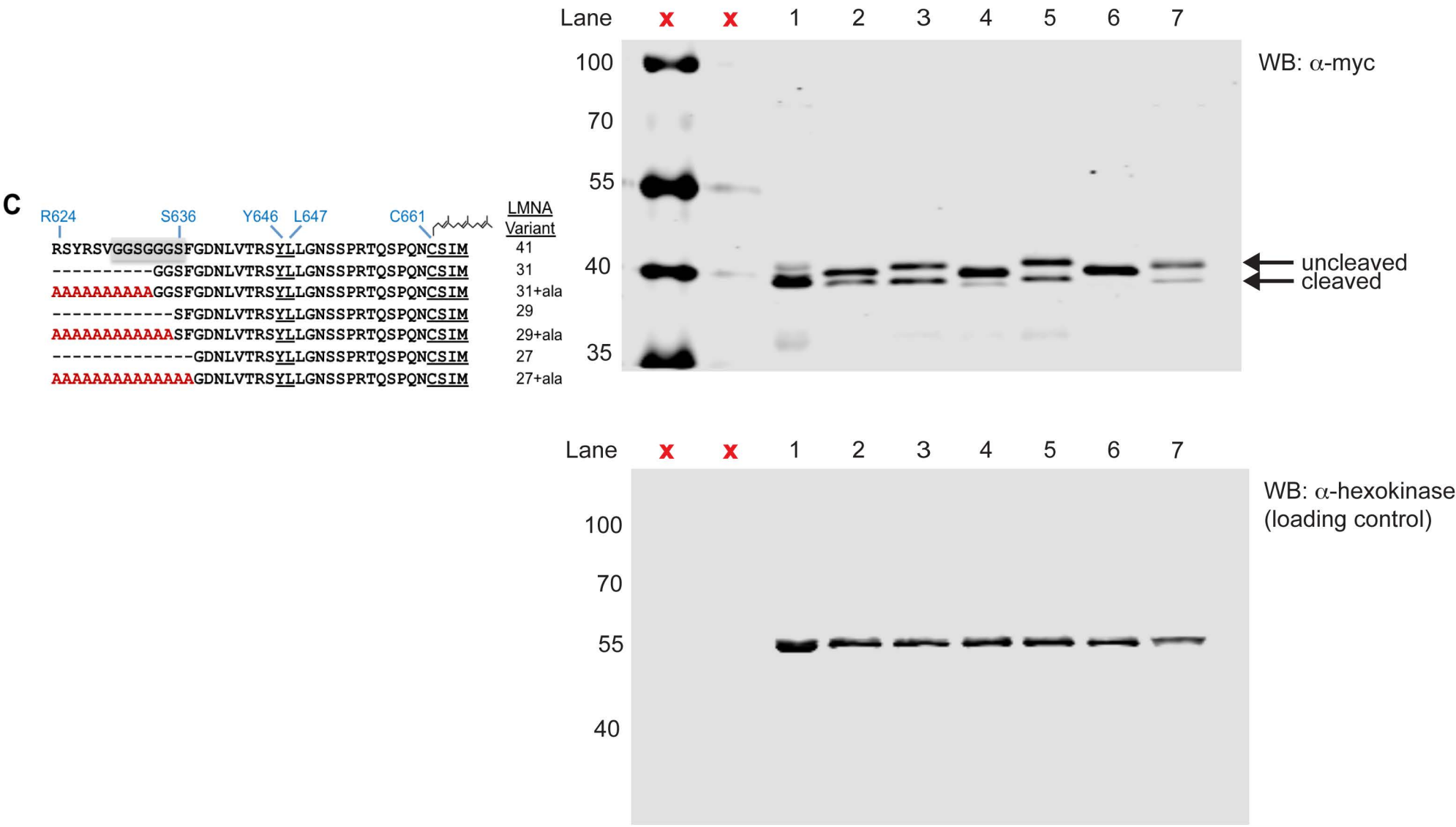
- SDS detergent lysates from strain SM6303 (*ste24Δ HA-ZMPSTE24*) transformed with myc-prelamin A plasmids were resolved by 10% SDS-PAGE, transferred to nitrocellulose (Biorad TransBlot Turbo), and proteins were detected using anti-myc monoclonal antibody (described in M&Ms). Proteins were detected using Licor anti-mouse secondary antibodies and visualized using the Odyssey imaging platform (Licor). Some LMNA mutants show lower steady-state levels (lanes 3-7). This has also been observed in Figure 6B.

Fig. 5B



- SDS detergent lysates from strain SM6303 (*ste24Δ HA-ZMPSTE24*) transformed with myc-prelamin A plasmids were resolved by 10% SDS-PAGE, transferred to nitrocellulose (Biorad TransBlot Turbo), and proteins were detected using anti-myc monoclonal antibody and anti-hexokinase polyclonal antibody (described in M&Ms). Proteins were detected using Licor anti-mouse and anti-rabbit secondary antibodies and visualized using the Odyssey imaging platform (Licor). The longer alanine extensions (+14-+19) show a slower migrating species of unknown origin.

Fig. 5D



- SDS detergent lysates from strain SM6303 (*ste24Δ HA-ZMPSTE24*) transformed with myc-prelamin A plasmids were resolved by 10% SDS-PAGE, transferred to nitrocellulose (Biorad TransBlot Turbo), and proteins were detected using anti-myc monoclonal antibody and anti-hexokinase polyclonal antibody (described in M&Ms). Proteins were detected using Licor anti-mouse and anti-rabbit secondary antibodies and visualized using the Odyssey imaging platform (Licor). The longer alanine extensions (+14-+19) show a slower migrating species of unknown origin.

Fig. 6B

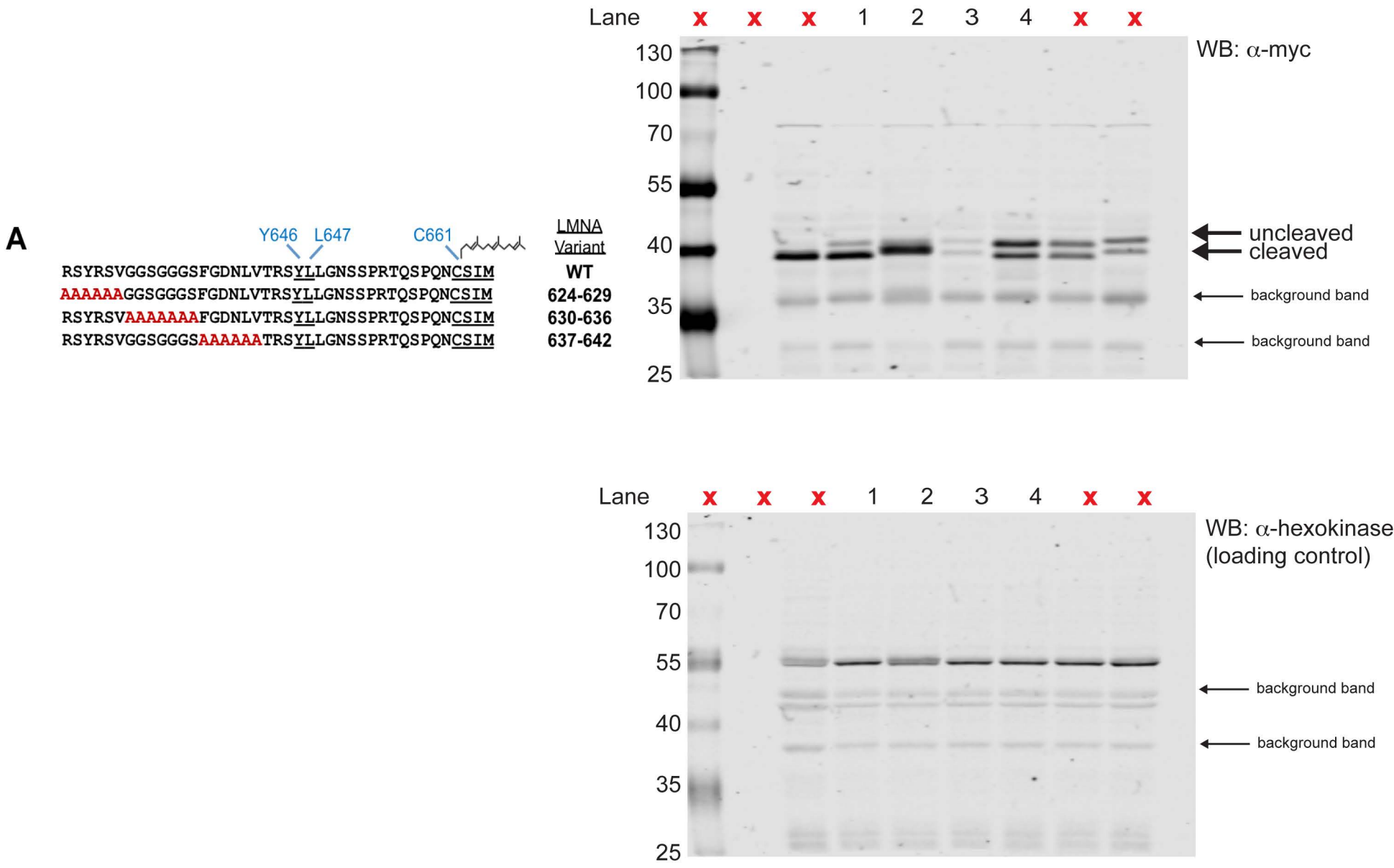
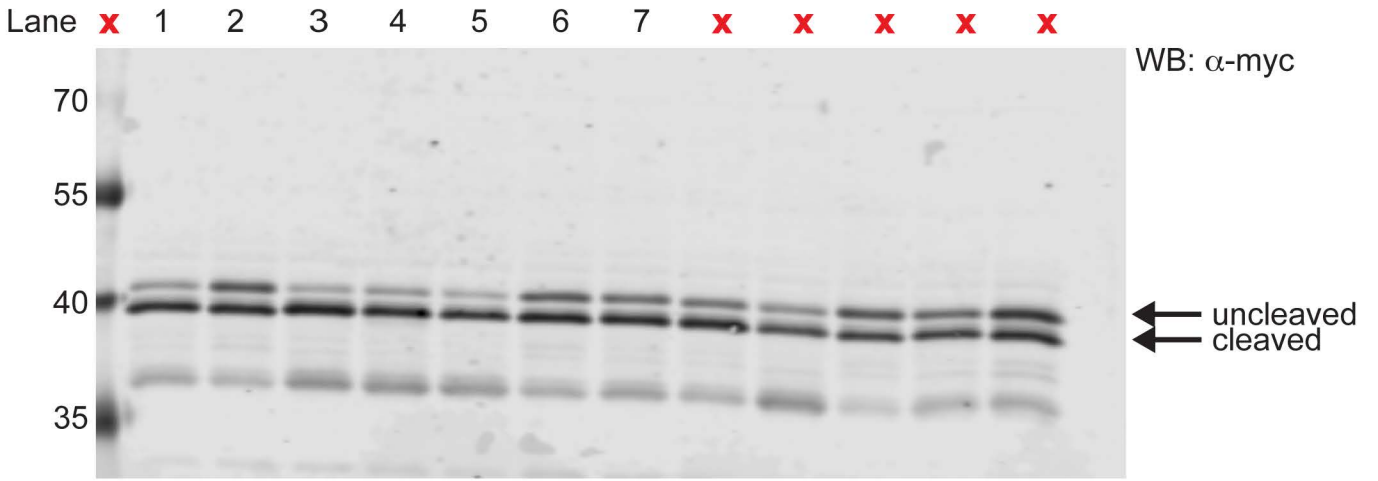
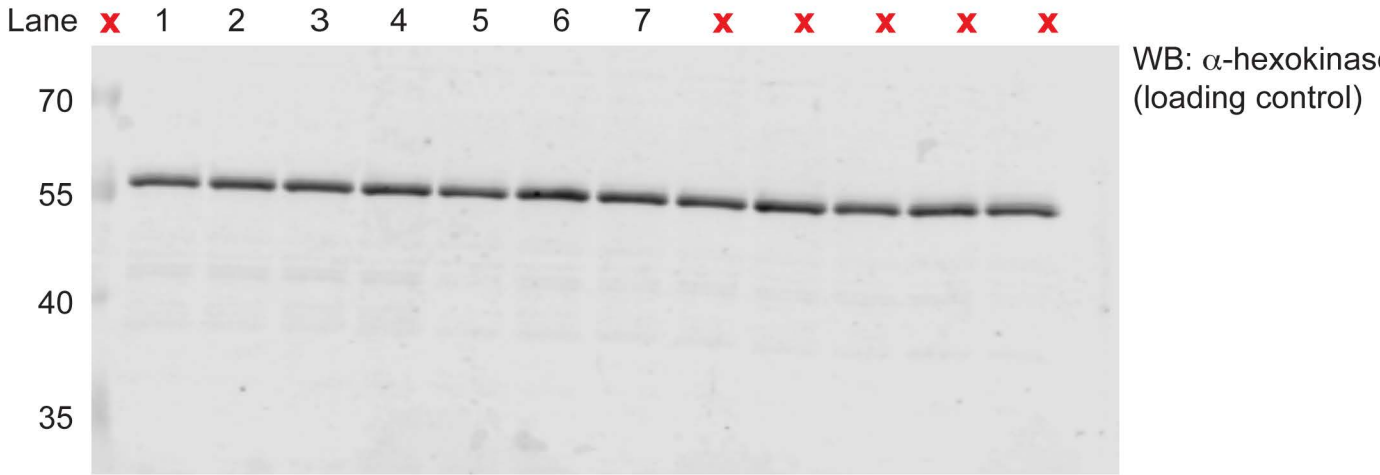

A
Y646
L647
C661
LMNA Variant
RSYRSVGGSGGGSFGDNLVTRSYLLGNSSPRTQSPQNCSIM
WT
AAAAAAGGSGGGSFGDNLVTRSYLLGNSSPRTQSPQNCSIM
624-629
RSYRSVAAAAAAAFGDNLVTRSYLLGNSSPRTQSPQNCSIM
630-636
RSYRSVGGSGGGSAAAAAATRSYLLGNSSPRTQSPQNCSIM
637-642
Lane
x x x 1 2 3 4 x x
130
100
70
55
40
35
25
WB: α-myc
uncleaved
cleaved
background band
background band
Lane
x x x 1 2 3 4 x x
130
100
70
55
40
35
25
WB: α-hexokinase
(loading control)
background band
background band

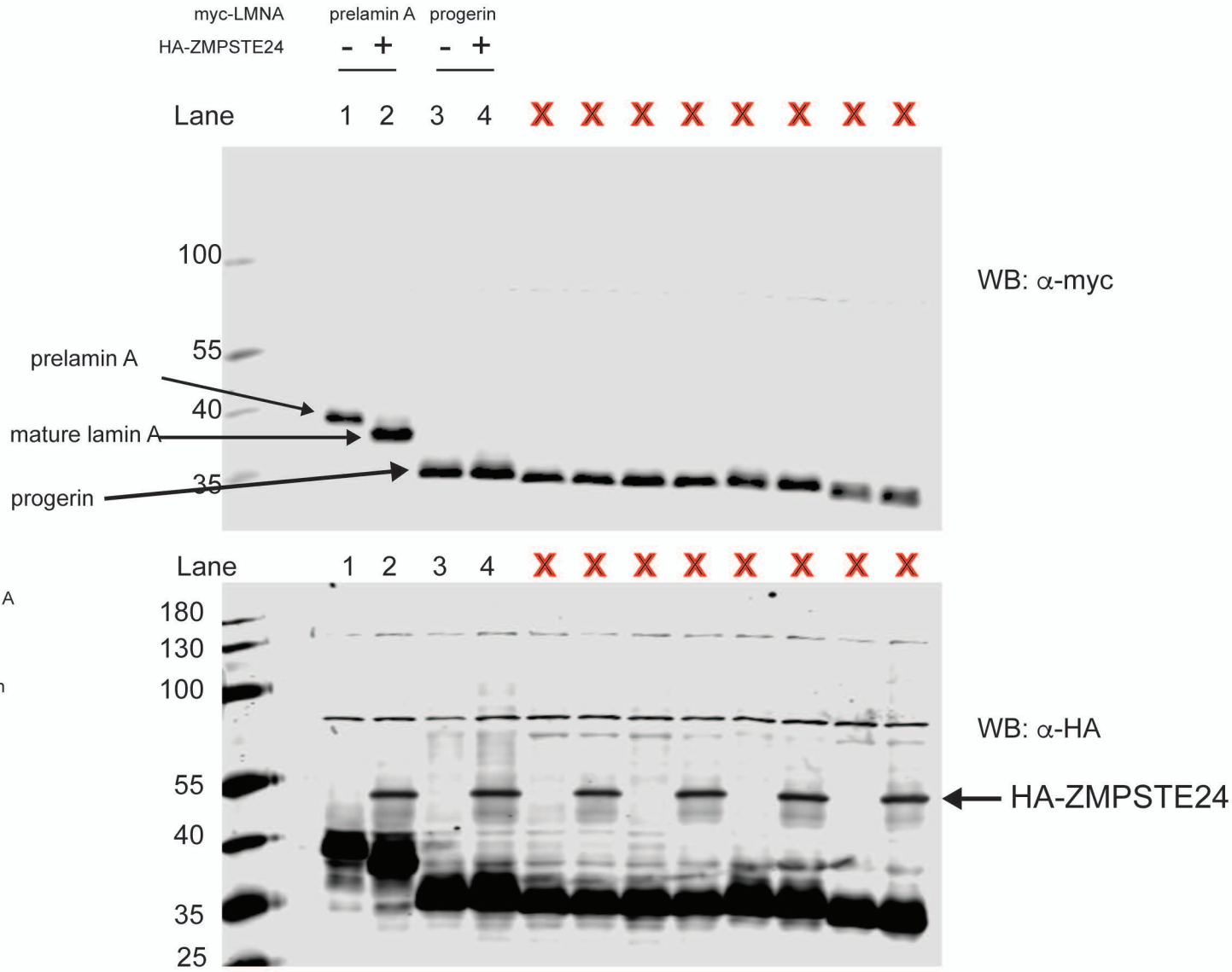
Fig. 6D


C
F637
Y646
L647
C661
LMNA Variant
RSYRSVGGSGGGSFGDNLVTRSYLLGNSSPRTQSPQNCSIM WT
RSYRSVGGSGGGSAGDNLVTRSYLLGNSSPRTQSPQNCSIM F637A
RSYRSVGGSGGGSFADNLVTRSYLLGNSSPRTQSPQNCSIM G638A
RSYRSVGGSGGGSFGANLVTRSYLLGNSSPRTQSPQNCSIM D639A
RSYRSVGGSGGGSFGDALVTRSYLLGNSSPRTQSPQNCSIM N640A
RSYRSVGGSGGGSFGDNAVTRSYLLGNSSPRTQSPQNCSIM L641A
RSYRSVGGSGGGSFGDNLATRSYLLGNSSPRTQSPQNCSIM V642A


Lane x 1 2 3 4 5 6 7 x x x x x
70
55
40
35
WB: α-myc
uncleaved
cleaved


Lane x 1 2 3 4 5 6 7 x x x x x
70
55
40
35
WB: α-hexokinase
(loading control)

Supplemental Fig.S1



Lane

1 *ste24Δ* myc-prelamin A

2 *ste24Δ HA-ZMPSTE24* myc-prelamin A

3 *ste24Δ* myc-progerin

4 *ste24Δ HA-ZMPSTE24* myc-progerin

- SDS detergent lysates from strains SM4826 (*ste24Δ*) and SM6303 (*ste24Δ HA-ZMPSTE24*) transformed with myc-prelamin A (pSM3371) or myc-progerin (pSM3638) were resolved by 10% SDS-PAGE, transferred to nitrocellulose (Biorad TransBlot Turbo), and proteins were detected using anti-myc and anti-HA monoclonal antibodies (described in M&Ms). The myc blot was first developed using Licor anti-mouse secondary antibodies and visualized using the Odyssey imaging platform (Licor). After the myc blot was scanned, anti-HA rat monoclonal antibodies were used to detect HA-ZMPSTE24 (arrow).