

Supplemental Table 1. Real-time PCR primers

	Forward (F), reverse (R), and probe sequence (Taqman set)
Real-time PCR primers for KASH/SUN domain nuclear envelope proteins	
Mouse <i>Syne1</i> (pKASH primers)	F: CTGCTGCTTATTGGACTCACCT R: GAGGAGGACCGTTGGTATATCTG
Mouse <i>Syne2</i>	F: CTTCTCTCAAGGGTGATCAGG R: AGCTGTAGTCATCTTCAGAGGCAG
Mouse <i>Syne3</i>	F: GCTGTTGCTCCTGCTCTTTCT R: ACCGAAGCATGAGCGCA
Mouse <i>Sun1</i>	F: CAGCATCCTAAGCACTCGGT R: TAGATGTCGGGCTGGATCAC
Mouse <i>Sun2</i>	F: TCTTTGGCTTCGATGAAGACC R: GGAAATAGAAGGTCTGGATGGG
Mouse <i>Sun3</i>	F: TCTGTCATTGAAGCTGGGACC R: TGCCATGCCAGTACAGTTTTG
Real-time PCR primers to differentiate expression level of mouse <i>Syne1</i> splicing isoforms	
AK036828/BC041779 (P5 primers)	F: CTGTTGGCTTGTCTAGATGTAGTCA R: ACGTATTTCTGATTGCATTTTCTGT
AF281870/ NM_001079686 (P3 primers)	F: AACTCAAGAAGGATTATCAAGAGGAAA R: GCTCTCGTGGCTGGCTTTA
NM_022027/BC110428/AF281869/BC054456 + AK036828/BC041779 (P4 primers)	F: ACAGACAGACAACCAGCACCA R: AGAGAGTCTCTCCCCTTATCTAGGC
calponin domain 1 (NM_153399) (P1 primers)	F: CGTATTCATGCTGTGGCTAACA R: TTGACTAATTTAATCGGTGATCCTCT
Calponin domain 2 (NM_153399) (p2 primers)	F: CACACAGCAGGCAAGCAGA R: GGATAGCGTGGATGACTGAATG
Other nuclear envelope proteins	
Lmna A/C	probe: CTCCAAAAGCAGTTGGCAGCCAAGG
Lmna (A specific)	F: TCCGTCTCCTCTGGCTCTTAT R: AGTTGCCCAGGAGGTAGGAG
LmnB1	probe: GCTGCTGCTCAATTATGCCAAGAAG
Lamin B2	probe: GCCAGGAAGAGTGCCAAGAAGCGGG
Lamin B receptor	probe: AGGAGTACCTGGTGCGGTCTCATC
LAP1	probe: GAGTCAAGAGAATCGGCTATCCATC
LAP2	probe: CCATTGTGGGAACAACCAGGAAGCT
Man1 (LEMD3)	probe: ATGTTGGAATAAGGTGTGTTGGTTA
Lemd2	probe: TCCAGGCAGGTAATTTTGAATGTGG
LEM3	F: CTACGCCCTTACTGTCTCCTGTG R: TGTTTGCTCGTTCTTTGTTTACTG
HP1b (Cbx1)	probe: CTCAAAAGTGCTGCCACAGCTTCA
HP1a (Cbx5)	probe: AAAAAAAGAGAGAGCAAAGCAATG
HP1gg (Cbx3)	F: AGCAAATCGAAGAAGAAGAGAGATG R: ACATTAACCTCCGCTGCTGTC
Nurim	probe: CGGTCCCGATGCCCGCCACGGGTGG
Banf1	F: GAGCCTGGCCGGGATT R: AAAGTGGCCAAGGACCACATA Probe: TGACGTCCTGAGCAAGAGGCTGGAG
Emerin	F: TCTCGTACTCGAAGATTTTCTTTTC R: GCCAGTACAACATCCCTCATG probe: AGAGCTTGCGAGTGGAAACCCACAAT