

Table S1: Primers and Oligonucleotides used in this work	
Name	Sequence (5' - 3')
TLRvenus-1	ATCCTTAATTAAGCCGCCACCATGGTGAGCAAGGGCGAGGAGCTG
TLR6-1	CCATCTTCTAGAAAGACTGGAGTCTGGACGTAGCCTTCGGGCATG
TLR6-2	GACTCCAGTCTTTCTAGAAGATGGATCTTCTTCAAGGACGACGGC
TagRFP-2	ATTTACGCGTGCGATCGCTCAATTAAGTTTGTGCCCCAGTTTG
TLRtv-1	GTGAGCAAGGGCGAGGAGCTG
TLRtv2	GGTGGCGGCTTAATCAAGCTTATC
sgRosa-A	CACCGACTCCAGTCTTTCTAGAAGA
sgRosa-B	AAACTCTTCTAGAAAGACTGGAGTC
UAS-for	TCGACCGCAAGCTTGCATGCCTGCAGGT
UAS-rev	TCGACATGCGCTAGCGCTAGAGTCTCCG
Gal4-for	TCCTTAATTAATAATAACGACTCACTATAGGGGCCACCATGAAGCTACTGTC TTCTATCGAAC
Gal4-rev	ACGACGATCGGCTACCTCCTCCTCCGCTTCCTCCTCCTCCGCTTCCACCTCCT CCGTGCACCTTCCTCTTTTCTTAGGCGATACAGTCAACTGTCTTTGACC
Rad18-for	TCCTTAATTAATAACGACTCACTATAGGGGCCACCATGGACTACAAGGATG ACGACGATAAAACCTCGACATCCACTTTGAAACAAG
Rad18-rev	CATTTACGCGTCTACCTTTTGTGAACAGAACTTCTGAGG
Rad18-for2	TCCTTAATTAATAACGACTCACTATAGGGGCCACCATGGACTCCCTGGCCG AGTCT
Rad18-rev2	CATTTACGCGTTTAATTCCTATTACGCTTGTTTCTTGGT
RNF169-for2	TCCTTAATTAATAACGACTCACTATAGGGGCCACCATGGACTACAAGGATG ACGACGATAAAAAGCTTCAGCAAGAGGAAGAAGACC
RNF169-rev	CATTTACGCGTCTACTTGCCCCGGCCATGTTG
RNF169-for	TCCTTAATTAATAACGACTCACTATAGGGGCCACCATGGCGGCTGCAGGTC CGAGTA
BRCA1-for	TCCTTAATTAATAACGACTCACTATAGGGGCCACCATGGATTTATCTGCTCT TCGCGTTG
BRCA1-rev	CATTTACGCGTTCAGTAGTGGCTGTGGGGGATCT
BRCA1-rev2	ATCGCGATCGGCTACCTCCTCCTCCGCTTCCTCCTCCTCCGCTTCCACCTCCT CCGTAGTGGCTGTGGGGGATCTGG
I53-for	TCCTTAATTAATAACGACTCACTATAGGGGCCACCATGTTGATTTTCGTGAA AACCTTAC
I53-rev	CATTTACGCGTTCAACGAAGTCTCAACAGAGGATG
TetRsc4-for	ATCGATTAATTAATAATAACGACTCACTATAGGGGCC
TetRsc4-rev	tacgaCGatcgGCTACCTCCTCCTCCGCTTCCTCCTCCTCCGCTTCCACCTCCTCC GTGCACCTTCCTCTTTTCTTAGGAGAG
TetR-for	ATTAATAACGACTCACTATAGGGGCCACCATGTCCAGACTGGACA
TetR-rev	TCATTTACGCGTTCACACGTGCTTTCTCTTTTGGG
scTetR-for2	CTGAAATGTGAGTCTGGCTCTCACGTGGGAGGAGGTG
scTetR-rev2	CTGCAATCATTTACGCGTTCACACGTGCACCTTCCTCTTTTC
5HA HR Rev	CGGGATTCTCCTCCACGTCACCGCA
hAAVS1 For	TCCAGGGGTCCGAGAGCTCAGCTAG
ST_puro_gt_fw	TCCCTCTTCCGATGTTGAG
ST_puro_gt_rv	GCGGTCCGGATCGACG
ST_neo_gt_fw	CTTACCATCCCTCCCTCGACT
ST_neo_gt_rv	GAACCTGCGTGCAATCCA
Venus TLR fw	CACCATGGTGAGCAAGGGCGAG
TagRFP1rev	GGTACAGCATCTCGGTGTTGG
Primer CAG2	TTCGGCTTCTGGCGTGTGACC
Primer Venus-rev	CGTTCTTCTGCTTGTGCGCGG
Primer Venus-for- <i>illumina adapter</i>	<u>ACACTCTTTCCCTACACGACGCTCTTCCGATCT</u> CAAGTCCGCCATGCCCGAA G
Primer Venus-rev- <i>illumina</i>	<u>GACTGGAGTTCAGACGTGTGCTCTTCCGATCT</u> CGTTCTTCTGCTTGTGCGCGG
Primer LMNA 5' outer fw	CACTCCTGGCACACTGAGATG

Primer LMNA 3' outer rev	GGTGCCCAGAGTTCTTCGAG
Primer LMNA 3' inner fw <u>illumina</u>	<u>ACACTCTTTCCCTACACGACGCTCTTCCGATCT</u> ACTCCGAGCAGTCTCTGTCC
Primer LMNA 3' inner rev <u>illumina</u>	<u>GACTGGAGTTCAGACGTGTGCTCTTCCGATCT</u> ACCGCCAAGCGATCATTGAG
sgLMNA-A	CACCGTGGGACGGGGTCTCCATGGC
FunsgLMNA-B	AAACGCCATGGAGACCCCGTCCAC
Primer hGABPA 5HA intern-F	CTCTTATTGGATACAGTGCAGC
Primer hGABPA 3' HR rev	AGCTATCTGCCAGTCTCATG
Primer hGABPA_intFw <u>illumina</u>	<u>ACACTCTTTCCCTACACGACGCTCTTCCGATCT</u> AATTGCCCAGCCAGTCACAG
Primer hGABPA_intRev <u>illumina</u>	<u>GACTGGAGTTCAGACGTGTGCTCTTCCGATCT</u> ATGAACCTGCCTTCACACTGC
Primer hCREB1 5' HDR-F	TGCCAAATCCAATGTCAGAGAG
Primer hCREB1-3HA intern-R	CAGGTGTTGGAACATTCACAG
Primer hCreb_intFw <u>illumina</u>	<u>ACACTCTTTCCCTACACGACGCTCTTCCGATCT</u> GCTTGTAGGGAAGCAGCTCG
Primer hCreb_intRev <u>illumina</u>	<u>GACTGGAGTTCAGACGTGTGCTCTTCCGATCT</u> CAGGTGTTGGAACATTCACAG
Primer HR AAVS1-F	CTGCCGTCTCTCTCCTGA GT
Primer AAVS1-R	CCAGCTCCCCTGCTTCTTGCCAC
Primer AAVS1 inner fw <u>illumina</u>	<u>ACACTCTTTCCCTACACGACGCTCTTCCGATCT</u> CGGTTAATGTGGCTCTGGTT CTG
Primer AAVS1 inner rev <u>illumina</u>	<u>GACTGGAGTTCAGACGTGTGCTCTTCCGATCT</u> CAATATCAGGAGACTAGGAAG GAGG
sgAAVS1-A	CACCGGGGGCCACTAGGGACAGGAT
sgAAVS1-B	AAACATCCTGTCCCTAGTGGCCCCCG
sgLMNB1-A	CACCGGGGGTTCGAGTCGCCATGGC
sgLMNB1-B	AAACGCCATGGCGACTGCGACCCCC