

Table SI. Sequences of the primers used for the construction of the recombinant BVs.

Primer ID (restriction digest enzyme)	Primer sequence, 5'-3' ^a
CMV-EF-1 α _F (XhoI)	<u>CCCTCGAGACGTTACATAACTTACGG</u>
CMV-EF-1 α _R (NotI)	TAAGAAT <u>GCGGCCGCTT</u> GCTTTGAATTAGCGG TGGC
WPRE-pA_F (EcoRI)	CGGAATTCCAATCAACCTCTGGATT
WPRE-pA_R (BamHI)	CGGGATCCCAAGGACAGGGAAGGG
Sa-dCas9-VPR_F (PacI)	CCTTAATTAAGAGACCGGTTCTAGAGCGC
Sa-dCas9-VPR_F (EcoRI)	GGAATTCATAAACAGAGATGTGTCGAAGATG G
sgRNA_F (NheI)	CTAGCTAGCTATCCGAGGGCCTATTTCCCATG
sgRNA_R (NheI)	TAGCTAGCTAAAAGCACCGACTCGGTGCCA

^aEnzyme sites are underlined. sgRNA, single guide RNA; F, forward; R, reverse

Table SII. Primer sequences used for quantitative PCR.

Gene	Forward, 5'-3'	Reverse, 5'-3'
Aggrecan	GAGCTACAGAGGGGACCTGT	TTGGTTTGGACGCCACTTCT
Sox9	CCTGCAGAGAGACATCGGAC	GTGGGGCGAACAACAAGAC
Col2a1	ATGTATGGAAGCCCTCGTCCT	TTTCTGCCCTTTGGCCCTA
RUNX2	CGCCTCACAAACAACCACAG	TCACTGCACTGAAGAGGCTG
ALP	TCCTTAGGGCCACCGCT	TGCCGATGGCCAGTACTAAA
COL1	GTACATCAGCCCAAACCCCA	ACAAGCGTGCTGTAGGTGAA
UCHL1	CTGTGCACTCCGCAAAGATG	GAAGTTTTTCATGCTGGGCCG
GAPDH	CAATCCTGGGCGGTACAAC	TACGGCCAAATCCGTTTACA

ALP, alkaline phosphatase; UCHL1, ubiquitin C-terminal hydrolase-L1.