

**Table S2.** Statistical confirmation of Cas9 cut position for all EP-K ST101 80 kb plasmids.

Patient No	Cut Position (kbp)	No. of cuts at specific position	No. of cuts at random position	Maximum No. of cuts at specific position in a random case
P1K0	57.5	19	1	$3.3 \pm 0.7$
P1K12	57.6	13	3	$2.7 \pm 0.65$
P2K0	56.5	07	0	$1.8 \pm 0.56$
P3K0	56	18	0	$3.1 \pm 0.7$
P3K23	56	18	0	$3.1 \pm 0.68$
P4K0	57	21	0	$3.5 \pm 0.7$
P4K14	55.2	4	1	$1.5 \pm 0.55$
P5K0	56.1	25	0	$3.7 \pm 0.7$
P6K0	56.9	22	0	$3.5 \pm 0.72$
P6K21	56.8	21	0	$3.4 \pm 0.71$
P7K0	56.4	12	0	$2.5 \pm 0.6$
P8K0	58.3	19	1	$3.3 \pm 0.68$
P8K6	56.1	15	0	$2.5 \pm 0.62$
P9K0	56.9	08	1	$2.2 \pm 0.54$
P10K0	57	20	0	$3.4 \pm 0.72$
P11K0	57.2	19	0	$3.2 \pm 0.68$
P11K22	56.1	19	2	$3.3 \pm 0.69$
P12K0	57.4	21	0	$3.5 \pm 0.73$
P13K0	56.4	11	1	$2.5 \pm 0.6$
P13K9	No Cas9 cut detected			
P14K0	56.6	9	1	$2.3 \pm 0.5$
P15K0	56.5	20	0	$3.3 \pm 0.7$
P16K0	56.7	08	4	$2.6 \pm 0.64$