

Table S1 HBR by CRISPR-Cas nuclease and ssODN in mammalian zygotes

Donor DNA	5' homology arm (nt)	3' homology arm (nt)	Insertion (nt)	Species	Target gene	Efficiency in embryo (Edited/total embryos)	Efficiency in pups (Edited/total pups)	Reference
ssODN	62	62	2-nt mutation	Mouse	<i>Tet1</i>	28.5% (4/14)	70% (7/10)	(Wang et al., 2013)
ssODN	62	62	2-nt mutation	Mouse	<i>Tet2</i>	50% (7/14)	80% (8/10)	(Wang et al., 2013)
ssODN	43	23	1-nt insertion and 2-nt mutations	Mouse	<i>Crygc</i>	-	11.1% (3/27)	(Wu et al., 2013)
ssODN	67	44	1-nt mutation	Mouse	<i>Sf-1</i>	-	17.6% (9/51)	(Inui et al., 2014)
ssODN	77	32	1-nt mutation	Mouse	<i>Sf-1</i>	-	29.6% (16/54)	(Inui et al., 2014)
ssODN	51	66	2-nt mutation	Mouse	<i>Tex15</i>	-	56.2% (9/16)	(Singh and Schimenti, 2015)
ssODN	65	59	2-nt mutation	Mouse	<i>Mlh1</i>	-	29.1% (7/24)	(Singh and Schimenti, 2015)
ssODN	59	63	3-nt mutation	Mouse	<i>Cdk2</i>	-	44.4% (10/27)	(Singh and Schimenti, 2015)
ssODN	~60	~60	1-nt mutation	Mouse	<i>Syne1-E646</i>	-	53.3% (8/15)	(Ma et al., 2017a)
ssODN	~60	~60	1-nt mutation	Mouse	<i>Nexn-R274</i>	-	53.3% (8/15)	(Ma et al., 2017a)
ssODN	~60	~60	1-nt mutation	Mouse	<i>Tax1bp3</i>	-	50% (7/14)	(Ma et al., 2017a)

ssODN	~60	~60	1-nt mutation	Mouse	<i>Flnc</i>	-	60% (3/5)	(Ma et al., 2017a)
ssODN	~60	~60	2-nt mutation	Mouse	<i>Tln</i>	-	66.7% (2/3)	(Ma et al., 2017a)
ssODN	~60	~60	2-nt mutation	Mouse	<i>Syne1-R257</i>	-	35.2% (6/17)	(Ma et al., 2017a)
ssODN	~60	~60	3-nt mutation	Mouse	<i>Syne1-W463</i>	-	33.3% (3/9)	(Ma et al., 2017a)
ssODN	97	100	1-nt mut ation	Mouse	<i>Fgfr3G1120A</i>	-	25.7% (9/35)	(Miao et al., 2019)
ssODN	48	50	1-nt mut ation	Mouse	<i>Fgfr3G1120A</i>	-	22% (9/41)	(Miao et al., 2019)
ssODN	~60	~60	5-nt mut ation	Mouse	<i>Cnn1</i>	-	16.6% (3/18)	(Han et al., 2015)
ssODN	80	87	5-nt mut ation	Mouse	<i>Dmd</i>	-	8.7% (2/23)	(Long et al., 2014)
ssODN	60	57	3-nt mut ation	Mouse	<i>Spp1</i>	-	25% (2/8)	(Nakagawa et al., 2016)
ssODN	~50	~50	12	Mouse	<i>Fah</i>	-	55.6% (5/9)	(Li et al., 2014)
ssODN	60	60	30	Mouse	<i>Nle</i>	39.6% (21/53)	-	(Raveux et al., 2017)
ssODN	60	60	40	Mouse	<i>Tet1</i>	40% (6/15)	-	(Yang et al., 2013)
ssODN	60	60	40	Mouse	<i>Tet2</i>	53.3% (8/15)	-	(Yang et al., 2013)
ssODN	60	60	42	Mouse	<i>Sox2</i>	43.8% (7/16)	34.3% (12/35)	(Yang et al., 2013)
ssODN	60	60	40	Mouse	<i>Mecp2 (L2)</i>	-	45.9% (45/98)	(Yang et al., 2013)
ssODN	60	60	40	Mouse	<i>Mecp2 (R1)</i>	-	25.5% (25/98)	(Yang et al., 2013)
ssODN	50	50	40	Mouse	<i>Rosa26</i>	9.5% (2/21)	-	(Renaud et al., 2016)

PS-modified ssODN	50	50	40	Mouse	<i>Rosa26</i>	62.5% (5/8)	-	(Renaud et al., 2016)
ssODN	30	30	70	Mouse	<i>H1c</i>	16.7% (2/12)	-	(Zhang et al., 2016)
ssODN	30	30	70	Mouse	<i>H1c</i>	16.7% (2/12)	-	(Zhang et al., 2016)
ssODN	60	60	78	Mouse	<i>Rosa26-cr2</i>	-	33.3% (11/33)	(Quadros et al., 2015)
ssODN	60	60	78	Mouse	<i>Rosa26-cr4</i>	-	36.4% (8/22)	(Quadros et al., 2015)
ssODN	39	56	87	Mouse	<i>Sidt2</i>	-	23.1% (3/13)	(Ge and Hunter, 2019)
ssODN (Two-ssODN floxing method)	60	60	40 (LoxP+ RE site)	Mouse	<i>Mecp2</i>	-	16.3% (16/98)	(Yang et al., 2013)
ssODN (Two-ssODN floxing method)	60	60	40 (LoxP+ RE site)	Mouse	<i>Mecp2</i>	0% (0/149)	-	(Gurumurthy et al., 2019)
ssODN (Two-ssODN floxing method)	61	61	34 (LoxP)	Mouse	<i>Cluster A</i>	-	5.5% (3/55)	(Pritchard et al., 2017)
ssODN (Two-ssODN floxing method)	61	61	34 (LoxP)	Mouse	<i>Gene B</i>	-	2.9% (1/35)	(Pritchard et al., 2017)
ssODN (Two-ssODN floxing method)	61	61	34 (LoxP)	Mouse	<i>Gene C</i>	-	18.2% (2/11)	(Pritchard et al., 2017)
ssODN	61	61	34	Mouse	<i>Gene D</i>	-	5% (1/20)	(Pritchard et al.,

(Two-ssODN floxing method) ssODN			(LoxP)						(2017)
(Two-ssODN floxing method) ssODN	61	61	34 (LoxP)	Mouse	<i>Cluster E</i>	-	0% (0/35)		(Pritchard et al., 2017)
(Two-ssODN floxing method) ssODN	61	61	34 (LoxP)	Mouse	<i>Gene F</i>	-	0% (0/36)		(Pritchard et al., 2017)
ssODN	39	40	1-nt mutation	Rat	<i>Thy1</i>	-	41.9% (13/31)		(Yoshimi et al., 2016)
ssODN	38	40	1-nt mutation	Rat	<i>Tyr</i>	36.8% (14/38)	-		(Yoshimi et al., 2014)
ssODN	45	45	1-nt mutation	Rat	<i>Cfir</i>	-	24.6% (16/65)		(Renaud et al., 2016)
PS-modified ssDON	45	45	1-nt mutation	Rat	<i>Cfir</i>	-	31.7% (13/41)		(Renaud et al., 2016)
ssODN	~50	~50	3-nt mutation	Rat	<i>Ephx2</i>	-	24.6% (16/65)		(Remy et al., 2017)
ssODN	44	43	6-nt mut ation	Rat	<i>Anks3</i>	-	18.2% (4/22)		(Menoret et al., 2015)
ssODN	~50	~50	5-nt mutation	Rat	<i>FlnA</i>	-	24.6% (16/65)		(Remy et al., 2017)
ssODN	29	30	40	Rat	<i>Tgr5</i>	-	16.7% (2/12)		(Shao et al., 2014)
ssODN	~40	~40	3-nt mutation	Rabbit	<i>Tyr</i>	-	29.4% (5/17)		(Song et al., 2018)
ssODN	54	50	3-nt mutation	Pig	<i>Sox10</i>	-	80% (4/5)		(Zhou et al., 2016)
ssODN	75	75	40	Pig	<i>Zbed6</i>	20% (2/10)	-		(Park et al., 2017)

ssODN	50	50	100	Pig	<i>Colla</i>	100% (5/5)	58.3% (7/12)	(Park et al., 2017)
ssODN	51	51	6-nt mutation	Sheep	<i>Otof</i>	-	61.5% (8/13)	(Menchaca et al., 2020)
ssODN	50	50	3-nt mutation	Bovine	<i>Dnmt3a</i>	22.2% (10/45)	-	(Lamas-Toranzo et al., 2020)
ssODN	49	60	6-nt mutation	Human	<i>HBB</i>	9.7% (3/31)	-	(Liang et al., 2015)
ssODN	44	45	32-nt deletion	Human	<i>CCR5</i>	5% (1/20)	-	(Kang et al., 2016)
ssODN	44	40	6-nt mutation	Human	<i>G6PD site 1</i>	20% (2/10)	-	(Tang et al., 2017)
ssODN	34	43	6-nt mutation	Human	<i>G6PD site 3</i>	100% (2/2)	-	(Tang et al., 2017)
ssODN	92	66	3-nt deletion	Human	<i>HBB site 1</i>	10% (1/10)	-	(Tang et al., 2017)
ssODN	45	42	3-nt mutation	Human	<i>HBB site 2</i>	25% (1/4)	-	(Tang et al., 2017)

RE, Restriction enzyme recognition site.

Table S2 HBR by CRISPR-Cas nuclease and lssDNA in mammalian zygotes

5' homolog y arm (nt)	3' homolog y arm (nt)	Insertion (nt)	Species	Target gene	Efficiency in embryo (Edited/total embryos)	Efficiency in pups (Edited/total pups)	Reference
100	100	5-nt mutation	Mouse	<i>Gckr</i>	-	36.4% (8/22)	(Codner et al., 2018)
100	100	5-nt mutation	Mouse	<i>Rims1</i>	-	10.3% (4/39)	(Codner et al., 2018)
77	80	96	Mouse	<i>Sidtl</i>	-	100% (32/32)	(Ge and Hunter, 2019)

80	80	87	Mouse	<i>Sidt2</i>	-	37.5% (12/32)	(Ge and Hunter, 2019)
					10% (1/10)		(Miura et al., 2015)
55	55	186	Mouse	<i>eEF2-TS2</i>	- 66.7% (4/6)	-	(Miura et al., 2015)
55	55	324	Mouse	<i>eEF2-TS1</i>	50% (3/6)	-	(Miura et al., 2015)
55	55	324	Mouse	<i>eEF2-TS2</i>	83.3% (5/6)	-	(Miura et al., 2015)
					44.4% (4/9)		(Miura et al., 2015)
55	55	404	Mouse	<i>eEF2-TS2</i>	- 66.7% (4/6)	-	(Miura et al., 2015)
60	60	779	Mouse	<i>Mmp13</i>	-	40% (4/10)	(Quadros et al., 2017)
60	60	782	Mouse	<i>Mmp9</i>	-	66.7% (8/12)	(Quadros et al., 2017)
96	98	1220	Mouse	<i>Otoa</i>	-	50% (1/2)	(Quadros et al., 2017)
105	98	1368	Mouse	<i>Fgf8</i>	-	25% (1/4)	(Quadros et al., 2017)
99	72	1368	Mouse	<i>Slc26a5</i>	-	33.3% (1/3)	(Quadros et al., 2017)
85	96	1368	Mouse	<i>Mafb</i>	-	25% (2/8)	(Quadros et al., 2017)
203	202	~384-nt Conditiona l allele	Mouse	<i>Nomo1</i>	-	30% (3/10)	(Garcia-Tuno n et al., 2020)
55	55	527-nt Conditiona l allele	Mouse	<i>Col12a1</i>	-	100% (3/3)	(Quadros et al., 2017)
78	86	535-nt Conditiona l allele	Mouse	<i>Ubr5</i>	-	100% (2/2)	(Quadros et al., 2017)

		535-nt						
75	75	Conditiona 1 allele	Mouse	<i>Syt1</i>	-	12.5% (1/8)	(Quadros et al., 2017)	
		535-nt						
87	68	Conditiona 1 allele	Mouse	<i>Syt9</i>	-	8.3% (1/12)	(Quadros et al., 2017)	
		535-nt						
95	84	Conditiona 1 allele	Mouse	<i>Ppp2r2a</i>	-	100% (3/3)	(Quadros et al., 2017)	
		589-nt						
96	103	Conditiona 1 allele	Mouse	<i>Ambra1</i>	-	75% (6/8)	(Quadros et al., 2017)	
		862-nt				12.5% (1/8)		
93	91	Conditiona 1 allele	Mouse	<i>Pitx1</i>	-	- 40% (4/10)	(Quadros et al., 2017)	
		677-nt						
109	113	Conditiona 1 allele	Mouse	<i>Rapgef5</i>	-	3.3% (1/30)	(Codner et al., 2018)	
		698-nt						
108	108	Conditiona 1 allele	Mouse	<i>Usp45</i>	-	4% (1/25)	(Codner et al., 2018)	
		778-nt						
128	129	Conditiona 1 allele	Mouse	<i>Cx3cl1</i>	-	15.8% (3/19)	(Codner et al., 2018)	
		863-nt						
136	108	Conditiona 1 allele	Mouse	<i>Lkzf2</i>	-	4.3% (1/23)	(Codner et al., 2018)	
		942-nt						
119	128	Conditiona 1 allele	Mouse	<i>6430573F11Ri</i> <i>k</i>	-	3.2% (2/63)	(Codner et al., 2018)	
		949-nt						
100	100	Conditiona 1 allele	Mouse	<i>Syt7</i>	-	11.8% (2/17)	(Codner et al., 2018)	

		1137-nt						
128	129	Conditiona 1 allele	Mouse	<i>Inpp5k</i>	-	8% (2/25)	(Codner et al., 2018)	
		1351-nt						
108	108	Conditiona 1 allele	Mouse	<i>Syt4</i>	-	1.6% (1/66)	(Codner et al., 2018)	
		1632-nt						
128	129	Conditiona 1 allele	Mouse	<i>Acvr2b</i>	-	0% (0/11)	(Codner et al., 2018)	
		310-nt						
300	60	Conditiona 1 allele	Mouse	<i>Serpina3n</i>	-	50% (3/6)	(Miyasaka et al., 2018)	
		348-nt						
300	60	Conditiona 1 allele	Mouse	<i>Serpina3n</i>	-	16.1% (9/56)	(Miyasaka et al., 2018)	
		532-nt						
300	60	Conditiona 1 allele	Mouse	<i>Tyr</i>	-	17.6% (3/17)	(Miyasaka et al., 2018)	
		1069-nt						
300	60	Conditiona 1 allele	Mouse	<i>Kiaa1322</i>	-	80% (4/5)	(Miyasaka et al., 2018)	
		480-nt						
78	77	Conditiona 1 allele	Mouse	<i>Vezfl</i>	-	8.3% (1/12)	(Gurumurthy et al., 2019)	
		482-nt						
307	60	Conditiona 1 allele	Mouse	<i>Mettl14</i>	-	12.3% (8/65)	(Gurumurthy et al., 2019)	
		506-nt						
329	89	Conditiona 1 allele	Mouse	<i>Mettl3</i>	-	9.8% (6/61)	(Gurumurthy et al., 2019)	
		599-nt						
307	56	Conditiona 1 allele	Mouse	<i>Tmem163</i>	-	2.7% (1/37)	(Gurumurthy et al., 2019)	

328	77	617-nt Conditiona l allele	Mouse	<i>Trmt6</i>	-	20% (8/40)	(Gurumurthy et al., 2019)
83	70	629-nt Conditiona l allele	Mouse	<i>Gene B</i>	-	10.5% (2/19)	(Gurumurthy et al., 2019)
75	98	642-nt Conditiona l allele	Mouse	<i>Bin1</i>	-	18.2% (2/11)	(Gurumurthy et al., 2019)
314	79	809-nt Conditiona l allele	Mouse	<i>Wtap</i>	-	43.75% (7/16)	(Gurumurthy et al., 2019)
86	88	957-nt Conditiona l allele	Mouse	<i>Taok3</i>	-	13.2% (5/38)	(Gurumurthy et al., 2019)
60	60	717	Rat	<i>Thy1</i>	-	0% (0/48)	(Yoshimi et al., 2016)
300	60	834	Rat	<i>Thy1</i>	-	11.1% (4/36)	(Yoshimi et al., 2016)

Conditional allele, allele floxed by two LoxP sites.

Table S3 HBR by CRISPR-Cas nuclease and AAV donor in mammalian zygotes

Donor DNA	5' homology arm (nt)	3' homology arm (nt)	Insertion (nt)	Species	Target gene	Efficiency in embryo (Edited/total embryos)	Efficiency in pups (Edited/total pups)	Reference
AAV6	~800	~800	1-nt point mutation	Mouse	<i>Tyr</i>	40% (6/15)	5% (1/20)	(Yoon et al., 2018)
AAV6	~800	~800	771	Mouse	<i>Tyr</i>	57.1% (4/7)	8.3% (2/24)	(Yoon et al., 2018)
AAV1	480	480	6	Mouse	<i>Tyr</i>	77%	-	(Chen et

						(10/13)		al., 2019)
AAV1	477	475	774	Mouse	<i>Sox2</i>	33% (6/18)	18% (2/11)	(Chen et al., 2019)
AAV1	477	475	2112	Mouse	<i>Sox2</i>	69% (22/32)	40% (2/5)	(Chen et al., 2019)
AAV1	529	500	3300	Mouse	<i>Rosa26</i>	34% (9/26)	27% (3/11)	(Chen et al., 2019)

AAV6, AAV serotype 6. AAV1, AAV serotype 1.

Table S4 HBR by CRISPR-Cas nuclease and dsDNA donor in mammalian zygotes

Donor DNA	5' homology arm (bp)	3' homology arm (bp)	Insertion (bp)	Cell type	Target gene	Efficiency in embryo (Edited/total embryos)	Efficiency in pups (Edited/total pups)	Reference
Supercoiled plasmid ^a	60	60	945	Mouse	<i>Nle</i>	0% (0/47)	-	(Raveux et al., 2017)
Supercoiled plasmid ^a	250	250	945	Mouse	<i>Nle</i>	0% (0/65)	-	(Raveux et al., 2017)
Supercoiled plasmid ^a	500	500	945	Mouse	<i>Nle</i>	11.5% (6/52)	-	(Raveux et al., 2017)
Supercoiled plasmid ^a	800	800	~800	Mouse	<i>Actb</i>	3.3% (8/239)	-	(Yao et al., 2017)
Supercoiled plasmid ^a	800	800	~800	Mouse	<i>Dbh</i>	-	2.27% (1/44)	(Yao et al., 2017)
Supercoiled plasmid ^a	800	800	~800	Mouse	<i>Sox2</i>	-	3.33% (1/30)	(Yao et al., 2017)
Supercoiled plasmid ^a	800	800	800	Mouse	<i>Actb</i>	0% (0/73)	-	(Yao et al., 2018b)
Supercoiled plasmid ^a	500	500	~2000	Mouse	<i>Pax9</i>	-	4.2% (1/24)	(Feng et al., 2016)
Supercoiled	4500	2000	3000	Mouse	<i>Oct4</i>	18.5%	30% (3/10)	(Yang et al.,

plasmid ^a						(47/254)		2013)
Supercoiled plasmid ^a	2043	3919	3929	Mouse	<i>Trp53</i>	-	40% (2/5)	(Gurumurthy et al., 2019)
Supercoiled plasmid ^a	1800	3100	3000	Mouse	<i>Rosa26-T8</i>	-	4.5% (1/22)	(Nakao et al., 2016)
Supercoiled plasmid ^a	8000	3600	3100	Mouse	<i>Rosa26-T4</i>	-	2.6% (1/39)	(Nakao et al., 2016)
Supercoiled plasmid ^a	8000	3600	6600	Mouse	<i>Rosa26-T8</i>	-	4.8% (1/21)	(Nakao et al., 2016)
Supercoiled plasmid ^a	8100	3600	7100	Mouse	<i>Rosa26-T2</i>	-	3.1% (3/97)	(Nakao et al., 2016)
Linear plasmid ^a	1034	4288	7100	Mouse	<i>Rosa26</i>	16.7% (1/6)	-	(Menoret et al., 2015)
Linear plasmid ^a	1900	1900	608-bp conditional allele	Mouse	<i>lspd</i>	-	7.7% (1/13)	(Lee and Lloyd, 2014)
Supercoiled plasmid ^b	800	800	~800	Mouse	<i>Actb</i>	22.7% (75/331)	-	(Yao et al., 2017)
Supercoiled plasmid ^b	800	800	~700	Mouse	<i>Dbh</i>	-	12.1% (4/33)	(Yao et al., 2017)
Supercoiled plasmid ^b	800	800	~800	Mouse	<i>Sox2</i>	-	26.9% (7/26)	(Yao et al., 2017)
Supercoiled plasmid ^b	800	800	800	Mouse	<i>Cdx2</i>	-	7/43 (16.3%)	(Yao et al., 2018b)
Supercoiled plasmid ^b	800	800	800	Mouse	<i>Actb</i>	20.5% (25/122)	-	(Yao et al., 2018b)
Supercoiled plasmid ^b	800	800	~800	Mouse	<i>Sp8</i>	-	12.1% (4/33)	(Yao et al., 2018b)
Linear dsDNA ^c	800	800	800	Mouse	<i>Actb</i>	33.2% (73/220)	-	(Yao et al., 2018b)
Linear dsDNA ^c	800	800	800	Mouse	<i>Cdx2</i>	-	54.4% (31/57)	(Yao et al., 2018b)
Linear dsDNA ^c	800	800	1000	Mouse	<i>Lhx6</i>	-	33.3% (4/12)	(Yao et al., 2018b)

Linear dsDNA ^c	800	800	1400	Mouse	<i>Dbh</i>	-	20.7% (6/29)	(Yao et al., 2018b)
Linear dsDNA ^c	800	800	2300	Mouse	<i>Sp8</i>	-	28.6% (10/35)	(Yao et al., 2018b)
Linear dsDNA ^c	800	800	6000	Mouse	<i>Rosa26</i>	-	6.9% (2/29)	(Yao et al., 2018b)
Supercoiled plasmid ^d	20	20	~800	Mouse	<i>Actb</i>	11.9% (40/337)	-	(Yao et al., 2017)
Supercoiled plasmid ^d	20	20	~800	Mouse	<i>Dbh</i>	-	3.28% (2/61)	(Yao et al., 2017)
Supercoiled plasmid ^d	20	20	~800	Mouse	<i>Sox2</i>	-	7.9% (3/38)	(Yao et al., 2017)
Supercoiled plasmid ^d	40	40	5000	Mouse	<i>Actb</i>	-	12% (3/25)	(Aida et al., 2016)
Supercoiled plasmid ^{d,*}	40	40	5000	Mouse	<i>Actb</i>	-	35.7% (5/14)	(Aida et al., 2016)
Supercoiled plasmid ^{d,*}	40	40	520-bp conditional allele	Mouse	<i>Coll2a1</i>	-	33.3% (3/9)	(Aida et al., 2016)
Supercoiled plasmid ^a	2143	2143	~700	Rat	<i>Trdmt1</i>	-	23.1% (9/39)	(Ma et al., 2014a)
Supercoiled plasmid ^a	1645	1584	~1000	Rat	<i>Cck</i>	-	54% (6/11)	(Ma et al., 2014a)
Supercoiled plasmid ^a	1485	1520	~1000	Rat	<i>Nestin</i>	-	35% (14/40)	(Ma et al., 2014a)
Supercoiled plasmid ^a	515	645	4800	Rat	<i>Rosa26</i>	-	0% (0/25)	(Yoshimi et al., 2016)
Supercoiled plasmid ^a	1000	1000	5300	Rat	<i>Rosa26</i>	-	42.9% (15/35)	(Ma et al., 2017b)
Linear plasmid ^a	1000	1000	783	Rat	<i>FoxP3</i>	3.5% (1/29)	-	(Menoret et al., 2015)
Linear plasmid ^a	800	800	3142	Rat	<i>Rosa 26</i>	3.5% (2/57)	-	(Menoret et al., 2015)
Linear plasmid ^a	813	783	3108	Rat	<i>Rosa26</i>	-	3.5% (2/57)	(Remy et al., 2015)

plasmid ^a									2017)
Supercoiled plasmid ^a	800	800	~346-bp conditional allele	Rat	<i>Dnmt1</i>	-	16.7% (2/12)		(Ma et al., 2014b)
Supercoiled plasmid ^a	783	794	~631-bp conditional allele	Rat	<i>Dnmt3a</i>	-	30% (6/20)		(Ma et al., 2014b)
Supercoiled plasmid ^a	800	800	~349-bp conditional allele	Rat	<i>Dnmt3b</i>	-	30% (9/30)		(Ma et al., 2014b)
Supercoiled plasmid ^a	2400	1600	~500	Rabbit	<i>Cftr</i>	12.5% (5/40)	-		(Song et al., 2016)
Supercoiled plasmid ^a	500	700	~2000	Rabbit	<i>Rll</i>	7.1% (2/28)	6.9% (3/43)		(Song et al., 2016)
Supercoiled plasmid ^a	1025	1037	1293	Rabbit	<i>Csn2</i>	-	1/15 (6.7%)		(Li et al., 2019)
Supercoiled plasmid ^a	1000	1000	2368	Pig	<i>Alb</i>	-	100% (16/16)		(Peng et al., 2015)
Supercoiled plasmid ^a	700	500	520-bp cond itional allele	Pig	<i>Prnp</i>	-	25% (1/4)		(Park et al., 2017)
Supercoiled plasmid ^b	800	800	~1000	Monkey	<i>Actb</i>	66.7% (24/36)	-		(Yao et al., 2017)
Supercoiled plasmid ^b	800	800	~1500	Monkey	<i>Actb</i>	83.3% (5/6)	100% (5/5)		(Yao et al., 2018a)
Supercoiled plasmid ^a	497	498	32-nt deletio n	Human	<i>CCR5</i>	6.7% (1/15)	-		(Kang et al., 2016)
Supercoiled plasmid ^a	800	800	~1500	Human	<i>OCT4</i>	11.1% (1/9)	-		(Yao et al., 2018b)
Linear dsDNA ^c	800	800	~1500	Human	<i>OCT4</i>	71.4% (10/14)	-		(Yao et al., 2018b)

a, HR. b, HMEJ. c, Tild. d, PITCh. *, Coinjected with Exo1 mRNA.

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