

## Supplemental information, Table S1

**Table S1** Summary of testis transplantation experiments

SSCs	Experiment	Number of recipient mice	Genetic background of recipient mice	Percentage of haploid cells from donor SSCs
<i>RFP</i> -SSCs carrying mutant <i>EGFP</i> *	1 <sup>st</sup>	4	B6D2F1	20.7%
	2 <sup>nd</sup>	4	B6D2F1	42.7%
<i>EGFP</i> -m <i>Crygc</i> -SSCs*	1 <sup>st</sup>	2	B6D2F1	32.4%
	2 <sup>nd</sup>	1	B6D2F1	16.8%
	3 <sup>rd</sup>	3	B6D2F1	19.7%
	4 <sup>th</sup>	5	B6D2F1	20.3%
	5 <sup>th</sup>	4	B6D2F1	23.3%
Line-NHEJ-4**	1 <sup>st</sup>	2	C57BL/6 (EGFP homo)	27.6%
Line-NHEJ-9***	1 <sup>st</sup>	3	C57BL/6 (EGFP homo)	18.8%
	2 <sup>nd</sup>	3	C57BL/6 (EGFP homo)	25.4%
Line-HDR1-8****	1 <sup>st</sup>	2	C57BL/6 (EGFP homo)	3.6%
	2 <sup>nd</sup>	2	C57BL/6 (EGFP homo)	3.8%
	3 <sup>rd</sup>	4	C57BL/6 (EGFP homo)	37.1%
	4 <sup>th</sup>	1	C57BL/6 (EGFP homo)	33.6%
Line-HDR1-11****	1st	1	C57BL/6 (EGFP homo)	29.7%

\*: SSCs carrying different sequences of target genes.

\*\* : SSCs carrying modified but not repaired *Crygc*.

\*\*\*: SSCs carrying corrected *Crygc* gene via CRISPR-Cas9-mediated NHEJ repair.

\*\*\*\*: SSCs carrying corrected *Crygc* gene via CRISPR-Cas9-mediated HDR repair.