

## Supplementary information, Figure S5

**A** *Crygc*<sup>-/-</sup> -SSCs repaired with Oligo-1

WT <i>Crygc</i>	AGTACCGGCGCTTCCAGGACTGGGGCTCTGTAGATGCTAAGGCCG	
Mutant <i>Crygc</i>	AGTACCGGCCTTCCAGGACTGGGGCTCTGTAGATGCTAAGGCCG	
Biallelic mutation	AGTACCGGCCTTCC-GGACTGGGGCTCTGTAGATGCTAAGGCCG	-1 (×1)
	AGTACCGGCCTTCC--GGACTGGGGCTCTGTAGATGCTAAGGCCG	-2 (×1)
	AGTACCGGCCTTCC-----CTGGGGCTCTGTAGATGCTAAGGCCG	-5 (×1)
	AGTACCGGCCTTCC-----GCTCTGTAGATGCTAAGGCCG	-9 (×1)
	AGTACCGGCCTTCCa AGGACTGGGGCTCTGTAGATGCTAAGGCCG	+1 (×2)
	AGTACCGGCGCTTCCAGGACTGGGGCTCTGTAGATGCTAAGGCCG	HDR (×2)

**B** *Crygc*<sup>-/-</sup> -SSCs repaired with Oligo-2

WT <i>Crygc</i>	GAGGCCTCAAGAGTACCGGCGCTTCCAGGACTGGGGCTCTGTAGA	
Mutant <i>Crygc</i>	GAGGCCTCAAGAGTACCGGCCTTCCAGGACTGGGGCTCTGTAGA	
Biallelic mutation	GAGGCCTCAAGAGTACCGGCCTT---GGACTGGGGCTCTGTAGA	-3 (×1)
	GAGGCCTCAAGAGTACCGGCCTT-----ACTGGGGCTCTGTAGA	-5 (×1)
	GAG <u>ACC</u> CAAGAGTACCGGCGCTTCCAGGACTGGGGCTCTGTAGA	HDR (×1)

**C** *Crygc*<sup>-/-</sup> -SSCs from single cells repaired with Oligo-1

WT <i>Crygc</i>	AGTACCGGCGCTTCCAGGACTGGGGCTCTGTAGATGCTAAGGCCG	
Mutant <i>Crygc</i>	AGTACCGGCCTTCCAGGACTGGGGCTCTGTAGATGCTAAGGCCG	
Biallelic mutation	AGTACCGGCCTTCCa AGGACTGGGGCTCTGTAGATGCTAAGGCCG	+1 (×2)

**Figure S5** The sequences of the *Crygc* gene in SSC lines generated from single SSC colonies derived from electroporation of exogenous Oligo-1 (**A**), Oligo-2 (**B**) into *Crygc*<sup>-/-</sup>-SSCs or single SSCs derived from electroporation of Oligo-1 (**C**) into *Crygc*<sup>-/-</sup>-4W-SSCs. Deletions are indicated with (-), insertions are indicated with (+). Small letter represents the inserted nucleotide. Letters highlighted with red underlines present synonymous mutations.