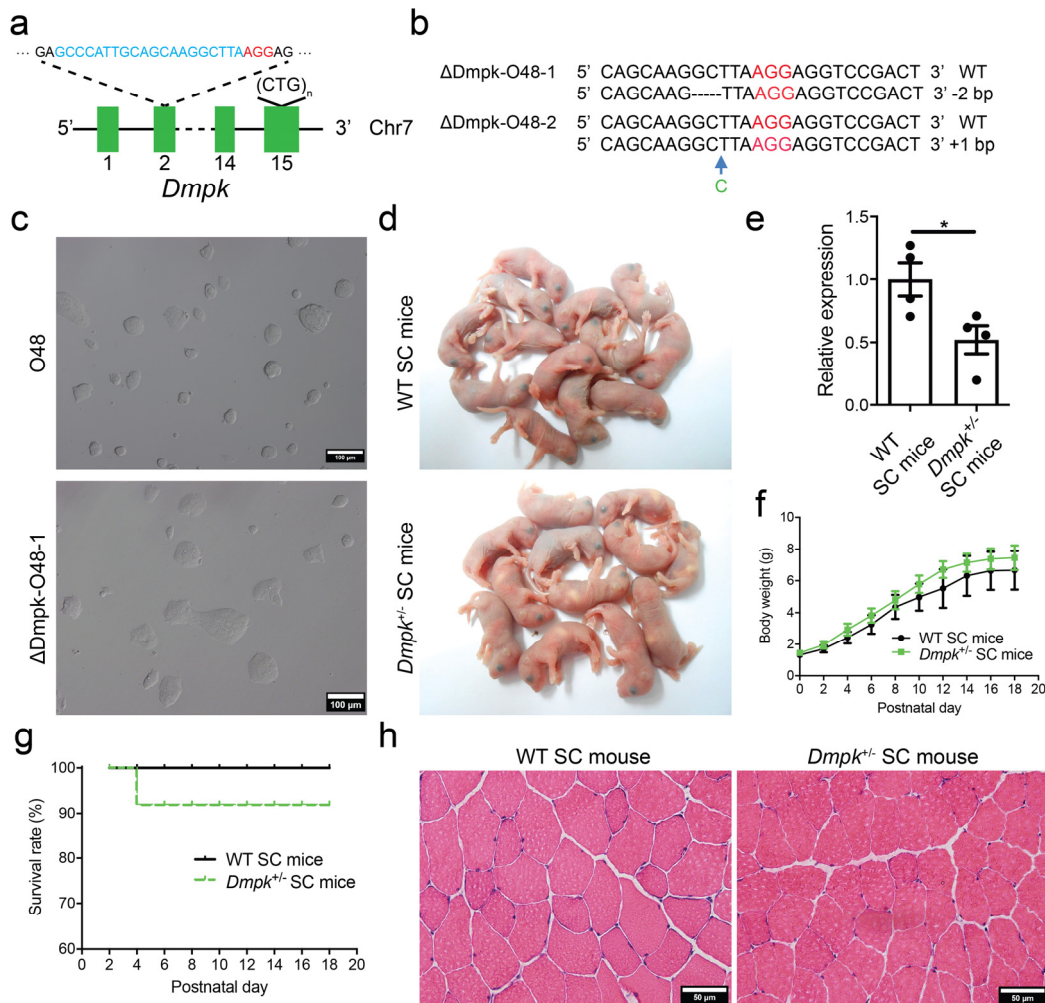


## Supplementary information, Figure S1



**Fig. S1** Generation of  $Dmpk^{+/-}$  SC mice through ICAHCI of haploid cells carrying mutant  $Dmpk$ . **a** Schematic of the sgRNA targeting  $Dmpk$ . **b** Sequences of the  $Dmpk$  gene in two cell lines ( $\Delta Dmpk$ -O48-1 and  $\Delta Dmpk$ -O48-2). **c** WT and mutant haploid cells. Scale bars, 100  $\mu$ m. **d** Newborn SC pups from  $\Delta Dmpk$ -O48-1 cells (lower panel) and O48 cells (upper panel). **e** Transcription analysis of  $Dmpk$  in  $Dmpk^{+/-}$  and WT mice ( $n = 4$  per group). Unpaired Student's  $t$ -test,  $*P < 0.05$ . **f** Body weight analysis of  $Dmpk^{+/-}$  and WT SC mice ( $n > 10$  per group, means  $\pm$  SD). **g** Survival curves of  $Dmpk^{+/-}$  and WT SC mice ( $n > 10$  per group). **h** Representative images of TA muscle sections from  $Dmpk^{+/-}$  and WT SC mice. Scale bars, 50  $\mu$ m.