Fig. S14: DAJIN application to *Ddx4* knock-out design by using Cas9 and Cas12a.

**a** Genome editing design for *Ddx4* knock-out by using Cas9 and Cas12a. The black boxes represent exon-coding sequences numbered 11–15. The scissors and dotted lines represent Cas-cutting sites. The arrows represent PCR primers. The boxed allele type represents the target allele. The inversion allele represents a possible byproduct. **b** DAJIN’s report of the allele percentage. The barcode numbers on x-axis represent mouse IDs. The BC27–BC31 and BC32–BC47 are treated by Cas12a and Cas9, respectively. BC48 is a WT control. The
y-axis represents the percentage of DAJIN-reported alleles. The colours of the bar represent DAJIN-reported allele types. The horizontal lines in a bar represent the DAJIN-reported alleles. **c** PCR design to validate a target deletion allele. The arrows represent PCR primers for the digested DNA fragments, including the size of PCR products. **d** PCR results for the detection of the target deletion allele. The number on the panel means barcode IDs. The boxed number represents the samples with deletion alleles. ‘Cas9’ and ‘Cas12a’ represent expected positions of deletion bands by Cas9 and Cas12a cutting.