



SUPPLEMENTARY FIG. S7. Donor plasmid analysis with gRNAs for large targeted integrations. **(A)** DNA mismatch assay with Cel-I enzyme from genomic DNA extracts from Mouse Neuro-2A cells (#1) nucleofected with the 14 kb large targeting donor plasmid (#2), plus Cas9 gRNA (#3), or MAD7 gRNA (#4). MAD7 RNP (#5) used as a positive control. E14 embryos from micro-injections of the donor plasmid and MAD7 gRNA (#1–28) **(B)** and Cas9 gRNA (#1–28) **(C)**. The arrow right of each gel represents the expected size of the PCR amplification product (302 bp), and the asterisk marks the predicted fragments for Cas9 gRNA (#3 in A and for the gel in C; 172 bp, 130 bp) and MAD7 gRNA (#4 and 5 in A and for the gel in B; 197 bp, 105 bp). The numbers to the left **(A)** represent the location of the DNA size markers in base pairs.