

mArl13b gDNA

R79

Exon 3

gRNA

Donor oligo

[illegible]

Figure S2: *Arl13b*^{R79Q} CRISPR design. (A) Diagram showing the mouse *Arl13b* genomic DNA surrounding exon 3, with locations of the primers used for genotyping and sequencing (black arrows), guide RNA (gRNA, blue) and donor oligo (green) indicated. (B) Schematic of the 22-nucleotide CRISPR gRNA with the PAM sequence underlined, aligned with the *Arl13b* target sequence (wildtype). The 180bp donor oligo, containing regions of homology flanking each side of the target site, was used as a template for homology directed repair. This oligo contains the R-to-Q mutation (red) and two silent base changes (green) to add a *NdeI* restriction site (italicized).