



**SUPPLEMENTARY FIG. S2.** Evaluation of liver transduction efficiency of original and K137R mutants on AAV7-, AAV8-, and AAV9-cmv-*LacZnl*s vectors in BL6 mice. About  $2 \times 10^{11}$  vg of AAV vectors were injected into 3–4-month-old BL6 mice through tail vein delivery, and the mice were euthanized 1 week postinjection ( $n=5$  per group). **(a)** *LacZ* staining of liver tissue (scale bar: 100  $\mu$ m). **(b)** Quantitation of *LacZ* activity of liver from different groups.