Supplementary Figure S1. Regulation of sodium and potassium homeostasis in 9-month-old Fgf23<sup>−/−</sup>/VDR<sup>Δ/Δ</sup> and Kl<sup>−/−</sup>/VDR<sup>Δ/Δ</sup> compound mutants. (A) Western blotting quantification of renal membrane expression of the full length β and γ subunits of ENaC in 9-month-old male wild-type (WT), VDR<sup>Δ/Δ</sup>, Fgf23<sup>−/−</sup>/VDR<sup>Δ/Δ</sup> and Kl<sup>−/−</sup>/VDR<sup>Δ/Δ</sup> double mutant mice on the rescue diet (n=8-10, 1-way ANOVA followed by SNK test, *p < 0.05 vs. WT). (B) Serum Na<sup>+</sup> concentration, serum potassium (K<sup>+</sup>) concentration, urinary potassium excretion corrected by urinary creatinine (Crea), urinary pH and urinary volume over a 12-
hour sampling period in 9-month-old male wild-type (WT), VDR\(^{\Delta/\Delta}\), Fgf23\(^{+/+}\)/VDR\(^{\Delta/\Delta}\), or \(Kt^{+/+}\)/VDR\(^{\Delta/\Delta}\) compound mutant mice (n=8-12, 1-way ANOVA followed by SNK test, * \(p < 0.05\) vs. WT). (C) Mean food consumption of 9-month-old male wild-type, VDR\(^{\Delta/\Delta}\), Fgf23\(^{+/+}\)/VDR\(^{\Delta/\Delta}\), and \(Kt^{+/+}\)/VDR\(^{\Delta/\Delta}\) compound mutant mice measured over a period of 7 days (n=6-8). (D) Western blotting quantification of NCC phosphorylation at Ser71, Ser91 and Thr55 (pNCC S71, S91 and T55) in renal cortical total membrane fractions (n=6-8) and (E) plasma renin activity assay in 9-month-old male wild-type, VDR\(^{\Delta/\Delta}\), Fgf23\(^{+/+}\)/VDR\(^{\Delta/\Delta}\), and \(Kt^{+/+}\)/VDR\(^{\Delta/\Delta}\) compound mutant mice (n=7-8, 1-way ANOVA followed by SNK test, * \(p < 0.005\) vs. WT). Data represent mean ± s.e.m