Appendix A

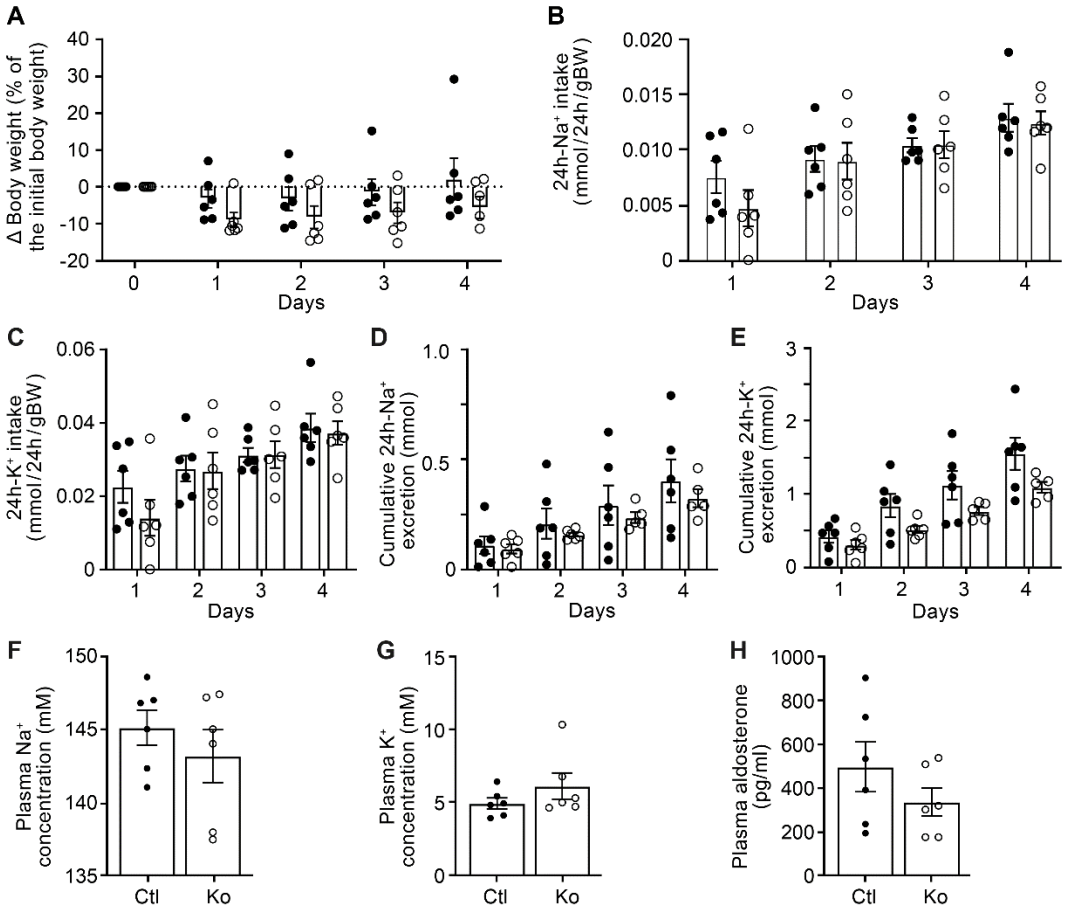

Figure S1: CAP3 knockout mice displayed normal Na^+ and K^+ handling under standard Na^+ diet**. (A)** Body weight changes (expressed as percent of initial body weight). **(B)** 24h Na^+ and **(C)** K^+ intake (mmol/24h/gBW) **(D)** 24h cumulative Na^+ and **(E)** K^+ excretion (mmol). **(F**) Plasma Na^+, **(G)** K^+ (mM) and **(H**) aldosterone concentration (pg/ml) in control (Ctl, black circles, n=6) and CAP3 knockout (Ko, white circles, n=6). Results are presented as mean ± SEM. **(A-E)** were analyzed by a two-way ANOVA with post hoc Šìdák multiple comparison test. **(F-H)** were analyzed by an unpaired two-tailed Welch's t-test.

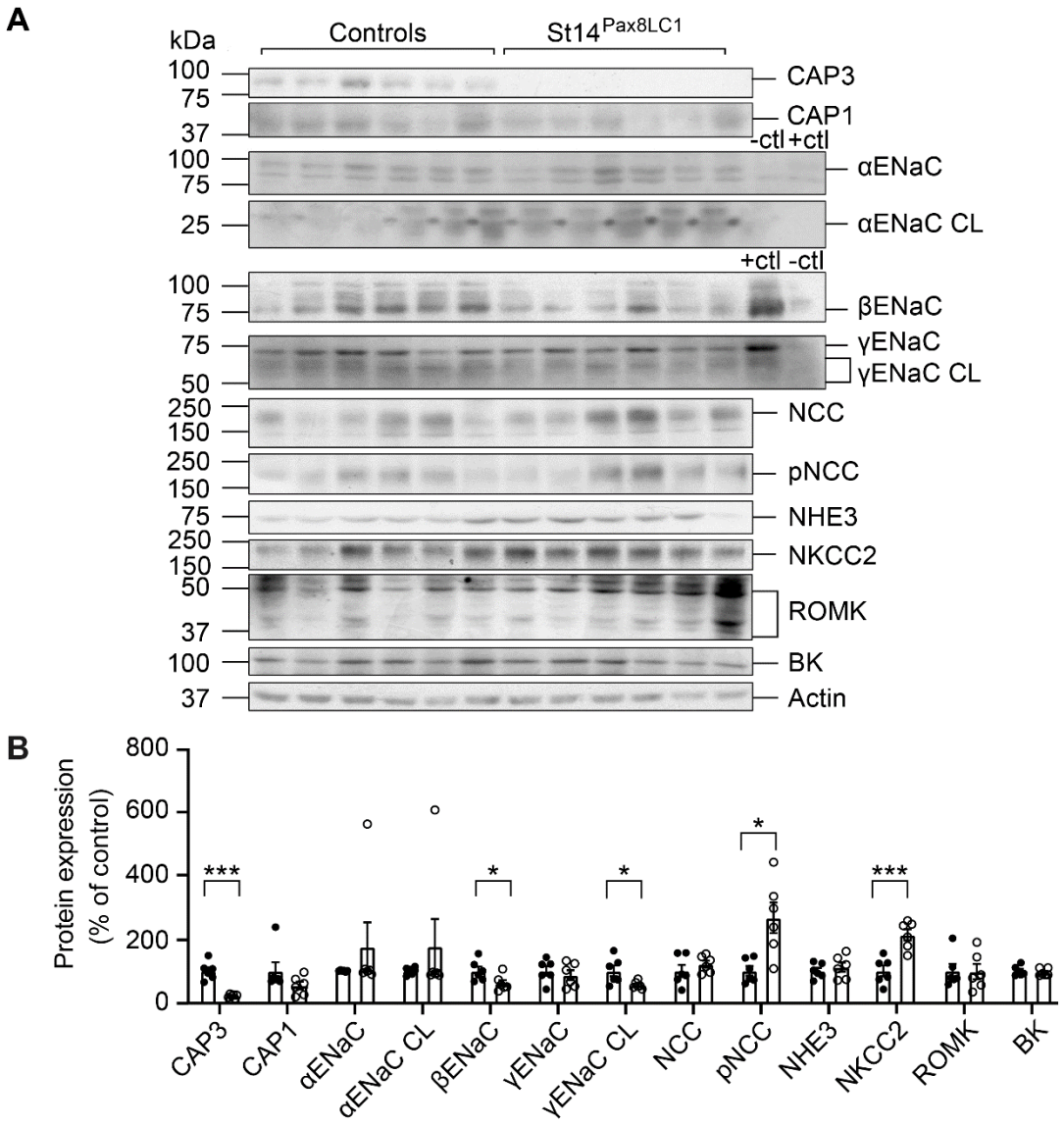

Figure S2: Protein expression of β- and γENaC cleaved form were decreased in CAP3 knockout mice, whereas pNCC and NKCC2 were increased under standard diet. (**A**) Representative Western blot analysis of CAP3, CAP1, αENaC, αENaC CL (cleaved), βENaC, γENaC, γENaC CL (cleaved), NCC, pNCC, NHE3, NKCC2, ROMK and BK on kidney lysates from controls (black circles, n=6) and CAP3 knockout (St14Pax8LC1, white circles, n=6) mice. Kidney lysates of control and renal tubular-specific knockouts of αENaC28, βENaC29, and γENaC30 served as positive (+ctl) and negative (-ctl) controls. (**B**) Quantification of the data. Results are presented as mean ± SEM. Data were analyzed using an unpaired two-tailed Welch's t-test.

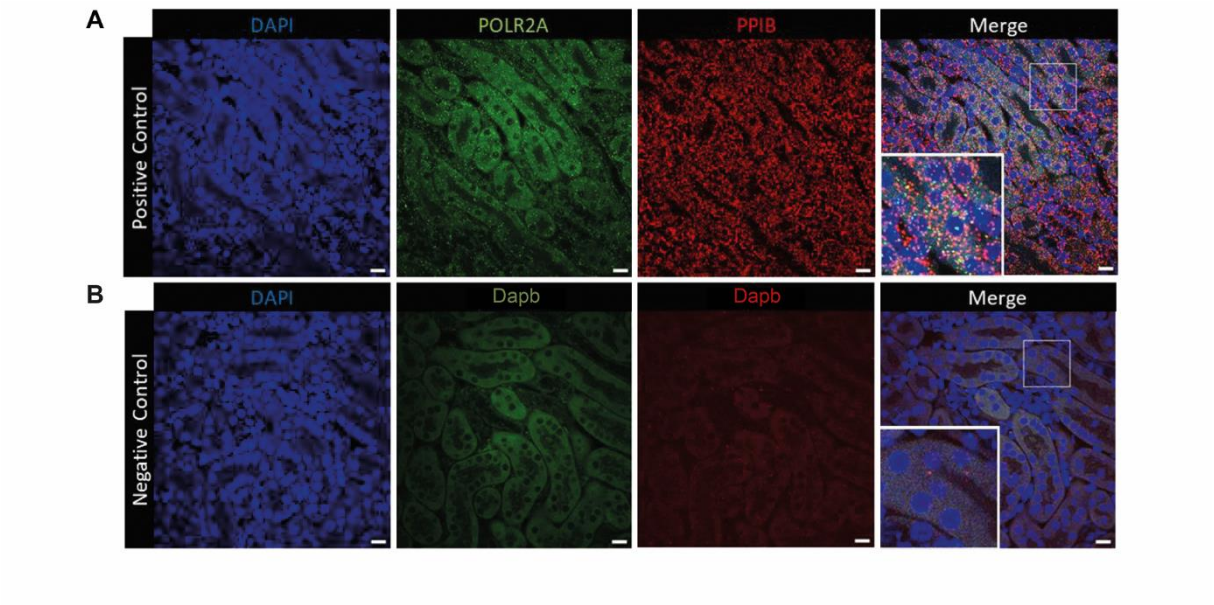

Figure S3: Positive and negative controls for CAP3, αENaC and CAP1 and fluorescent channel detection in kidney cortex from wildtype mice under standard diet. (**A**) Visualization of nuclei (DAPI staining, left) and expression of positive controls POLR2A (green middle left) and PPIB (red middle right), and merged picture (right). (**B**) Visualization of nuclei (DAPI staining, left) and expression of negative controls Dapb for green (middle left) and red (middle right) channels, and merged pictures (right). Magnification 40x, Scale bar represents 20µm.

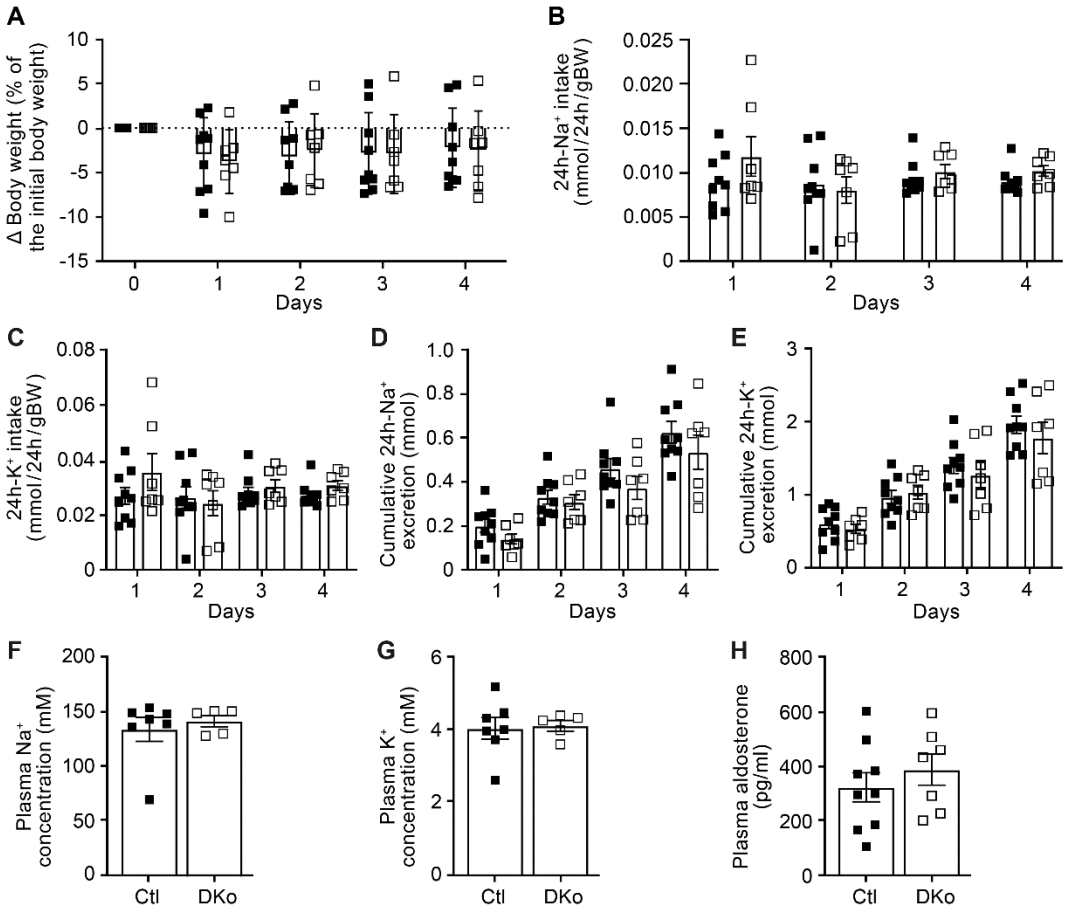

Figure S4: CAP1/CAP3 double knockout mice display normal Na^+ and K^+ handling under standard Na^+ diet. **(A)** Body weight changes (expressed as percent of initial body weight**) (B)** 24h Na^+ and **(C)** K^+ intake (mmol/24h/gBW**). (D)** 24h cumulative Na^+ and **(E)** K^+ excretion (mmol). **(F)** Plasma Na^+, **(G)** K^+ (expressed in mM) and **(H)** aldosterone concentration (pg/ml) in control (Ctl, black squares, n=7-9) and CAP1/CAP3 double knockout (DKo, white squares, n=5-7). Results are presented as mean ± SEM**. (A-E)** were analyzed by a two-way ANOVA with post hoc Šidák multiple comparison test**. (F-H)** were analyzed by an unpaired two-tailed Welch's t-test.

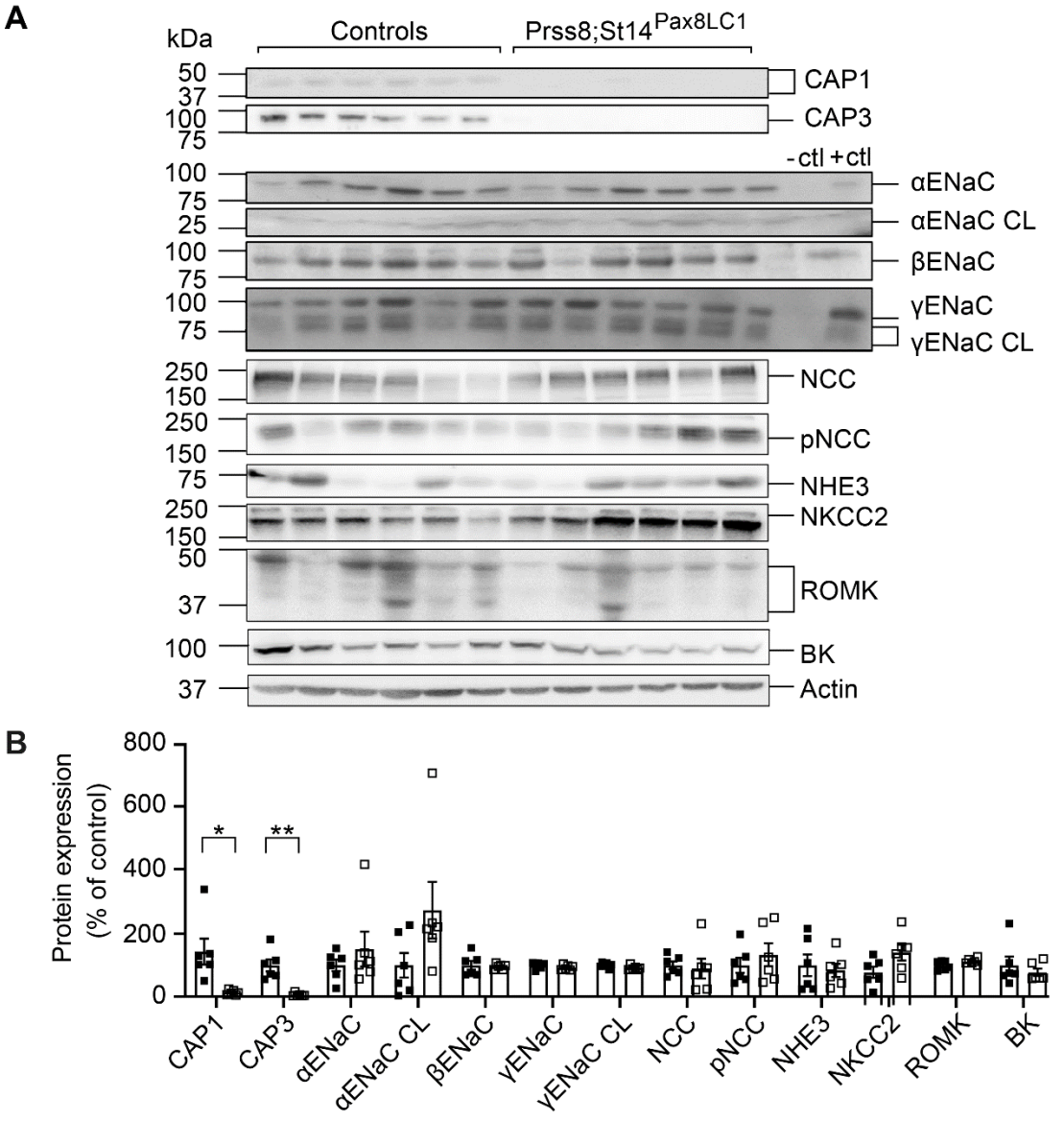

Figure S5: Normal abundance of Na^+ and K^+ transporting proteins in CAP1/CAP3 double knockout mice on standard diet. **(A)** Representative Western blot analysis of CAP1, CAP3, αENaC, αENaC CL (cleaved), βENaC, γENaC, γENaC CL (cleaved), NCC, pNCC, NHE3, NKCC2, ROMK and BK on kidney lysates from control (black squares, n=6) and CAP1/CAP3 double knockout (Prss8;St14^{Pax8LC1}, white spares, n=6) mice. Kidney lysates of control and renal tubular-specific knockouts of αENaC[28], βENaC[29], and γENaC[30] served as positive (+ctl) and negative (-ctl) controls, respectively. **(B)** Quantification of the data. Results are presented as mean ± SEM. Data were analyzed by using an unpaired two-tailed Welch's t-test. P values <0.05 were considered statistically significant; *p<0.05, **p<0.01