

Supplementary Figure S1. AC6^{loxloxCre} mice have higher water intake and lower urine osmolality on standard diet than AC6^{loxlox} mice. Following an initial baseline period on standard rodent chow, mice with deletion of adenylyl cyclase 6 (AC6) in aquaporin 2 (AQP2)-expressing cells (AC6^{loxloxCre}) and AC6^{loxlox} control mice were kept on a standard diet for 15 days while mice presented in Figure 3 were shifted to a Li⁺ diet. Physiological parameters were measured daily. (A) Urine osmolality (osm), (B) water intake (BW = body weight), (C) urine osmolality relative to baseline condition (% of baseline) and (D) water intake relative to baseline condition (% of baseline). Baseline values are averages of the last 1-2 days before mice in figure 3 were switched from standard to Li⁺ diet. Water intake and urine osmolality data on day 15 are equivalent to data presented in Figure 4. Values indicate mean ± SE. Sample size for urine osmolality: AC6^{loxloxCre}, n = 4; AC6^{loxlox}, n = 6-8. Sample size for water intake: AC6^{loxloxCre}, n = 3; AC6^{loxlox}, n = 3-4. All statistical comparisons were performed using two-way repeated measurements ANOVA followed by Holm-Sidaks post hoc tests. *AC6^{loxloxCre} vs. AC6^{loxlox} (P < 0.05).