Supplementary Figures

Supplementary Figure S1. Renal GSK3 activity is increased with age in PKD mice models. pGSK3β/GSK3β relative band densities of (A) PKD1^{f/f}-PKHD1^{Cre} and (B) Cys1^{cpk} mice kidneys. * p<0.05, ** p<0.01 and *** p<0.001 compared with P10 for PKD1^{f/f}-PKHD1^{Cre} and P7 for Cys1^{cpk}, n=6 mice/group.

Supplementary Figure S2. Treatment of M-1 cells with CREB: CBP interaction inhibitor (CREB In.) decreased the forskolin (5 µM, 16h) induced GSK3β protein levels in a dose dependent manner.
**Supplementary Figure S3.** Water deprivation of normal mice induced change in (A) AQP$_2$ protein levels (GAPDH is similar with Figure 7A, since same samples were used to load on gel) and (B) Urine osmolality. (C) dDAVP (0.5 and 1 µg/Kg BW) treatment increased urine osmolality. (D) AQP$_2$ mRNA levels increased significantly with water deprivation (18 h) or dDAVP (1 µg/Kg BW). (E) GSK3α mRNA levels did not change significantly with water deprivation (18 h) or dDAVP (1 µg/Kg BW). * p<0.05 and ** p<0.01 compared with non-water deprived control mice, n=6 mice/group.