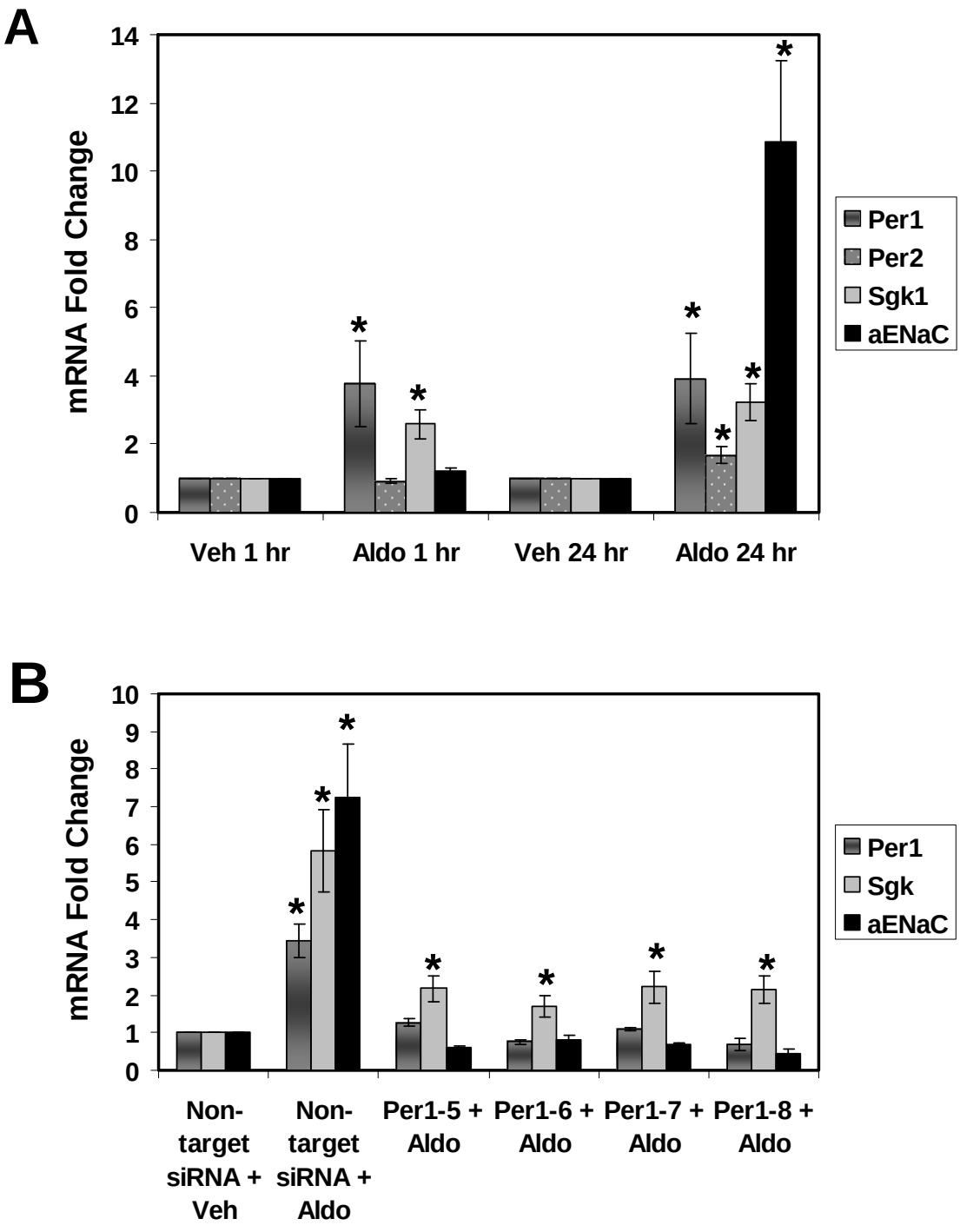
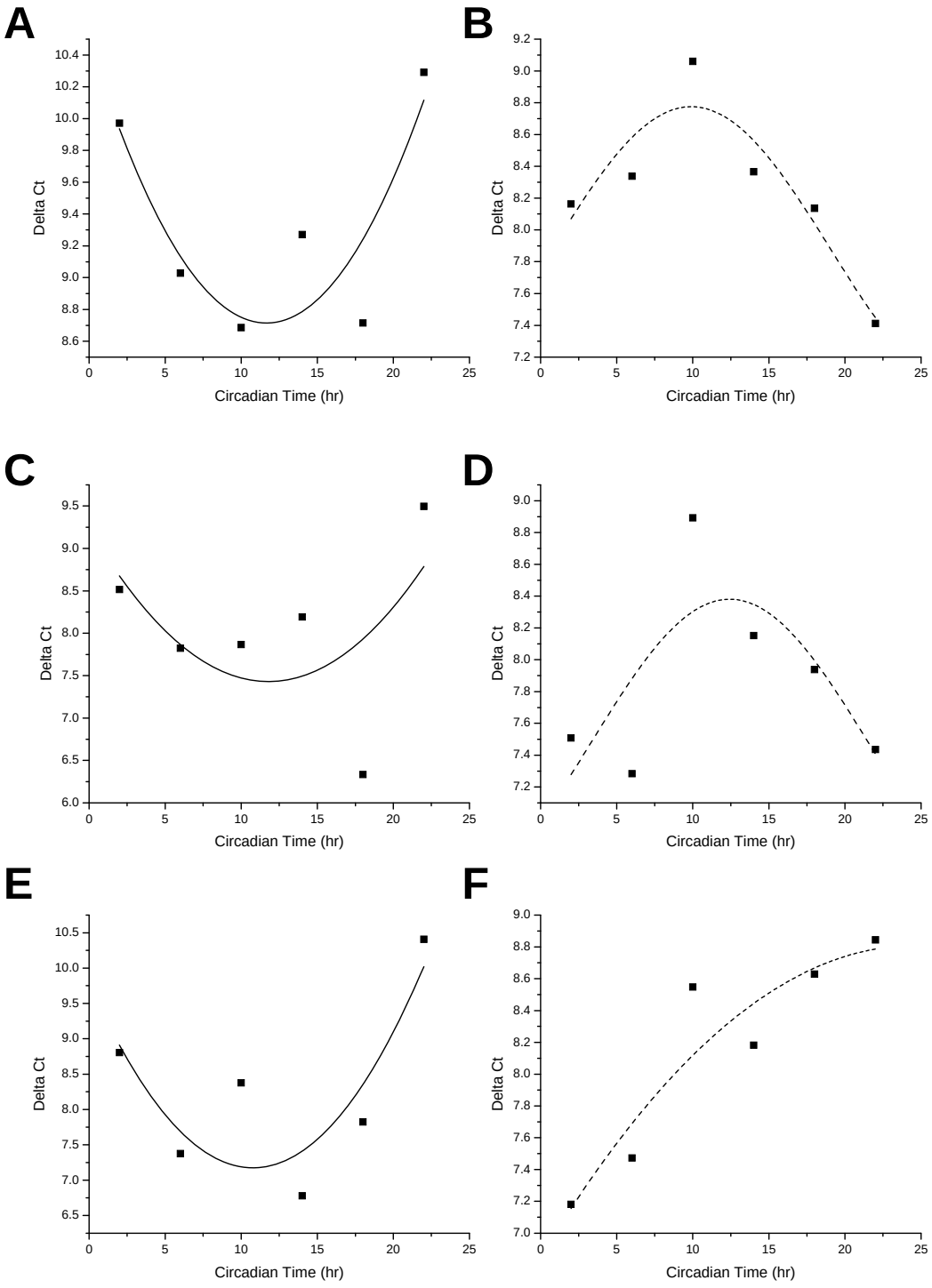
Supplementary Data

Figure 1



Supplementary Data Figure 1. Per1 Knockdown Prevents Aldosterone-Mediated Induction of αENaC expression in mIMCD-K2 Cells. A. QPCR was used to measure changes in gene expression of Per1, Per2, Sgk1 and αENaC in IMCD-K2 cells treated with vehicle or aldosterone for 1hr or 24 hr. Fold change values were normalized against actin levels, relative to the vehicle treated control. Data are presented as the mean +/- standard error, n=3. *p<0.05 versus vehicle control. B**.** Experiment was performed in mIMCD-K2 cells as described for Figure 5. Data are presented as the mean +/- standard error, n=3. *p<0.05 versus non-target siRNA vehicle control.

Figure 2



Supplementary Data Figure 2. Lack of Functional *Period* Genes Alters the Twenty-four Hour Expression Profile of αENaC in the Kidney. The mean Delta Ct values for αENaC mRNA expression from Figure 12 were used to generate scatter plots for wild type (solid line) and Period 1, 2, 3, knockout (TKO, dashed line) mice in the inner medulla (Panel A, wild type; Panel B, TKO), outer medulla (Panel C, wild type; Panel D, TKO), and cortex (Panel E, wild type; Panel F, TKO). The data were fit to a sine function using Origin 8. The sine equation period values for the inner medulla and outer medulla were set to 2600 for wild type and 18 for TKO. The cortex period values were 3000 for wild type and 1700 for TKO. The p value for the non-linear fit curves was less than 0.05 for Panels A-F.