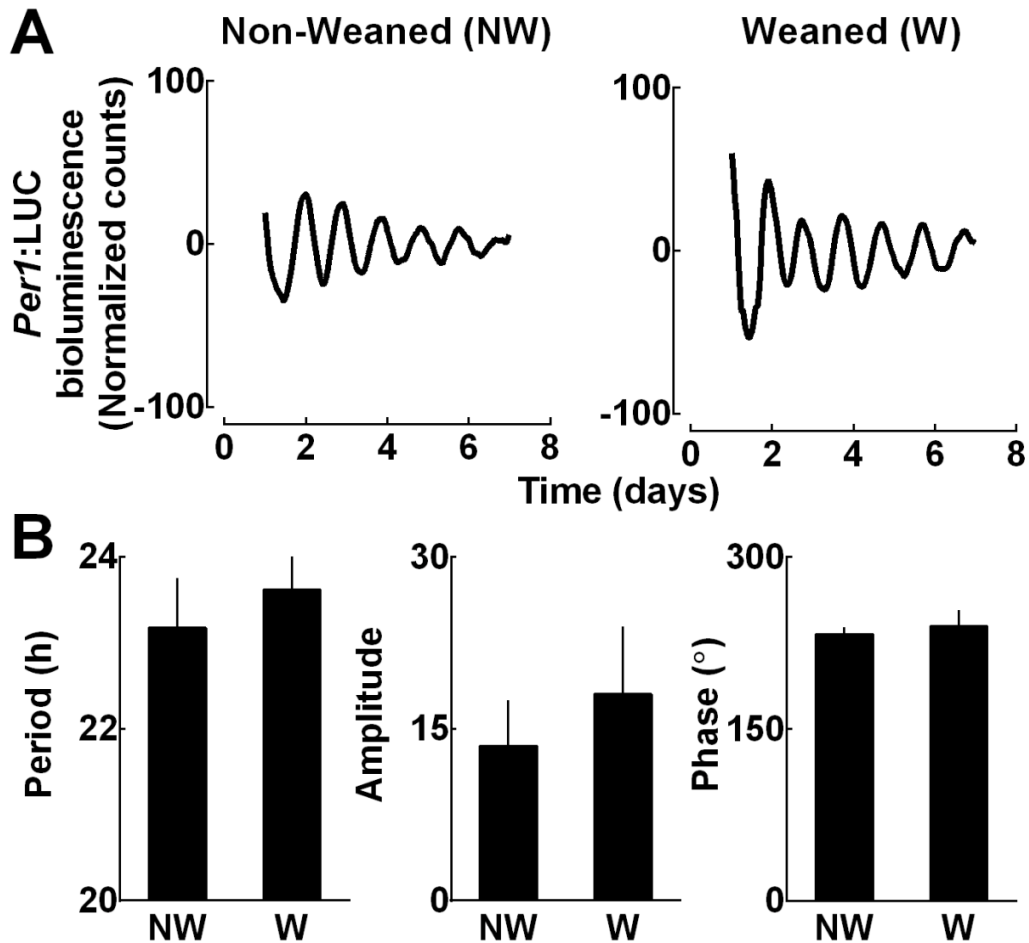


SUPPLEMENTARY DATA

**Supplementary Figure 1.** (A) Representative examples of circadian *Per1*-driven bioluminescence rhythms in batches of 50 islets isolated from *Per1*:LUC male and female rat pups at postnatal day 24. Pups indicated as weaned (W) were exposed to a standard weaning procedure at day 20 and were separated from mothers and placed in a separate cage. Pups indicated as non-weaned (NW) remained with mothers for the duration of the study. (B) Bar graphs represent (from left to right) mean period, amplitude, and phase angle of *Per1* bioluminescence rhythms in NW and W pups at 24 days post birth. Values are mean  $\pm$  SEM ( $n=5$  per data point).



SUPPLEMENTARY DATA

**Supplementary Figure 2.** Heat map representing relative fold change in mRNA expression in mature (Day 25) vs. immature (Day 5) pancreatic islets of (Control)  $\beta$ -*Bmal1*<sup>+/+</sup> and clock deficient  $\beta$ -*Bmal1*<sup>-/-</sup> mice. mRNA values were obtained from the microarray analysis conducted according to manufacturer's instructions for the GeneChip® WT Pico Reagent Kit (Affymetrix, Santa Clara, CA) as described in detail in Methods section

