

Supplementary Figure 3. Pretreatment with a specific IL-1 receptor antagonist (IL-1ra) prevents IL-1 $\beta$ -mediated decline in *Per2*-driven bioluminescence in  $\beta$ -cells. A representative example of circadian *Per2*-driven bioluminescence rhythms in islets isolated from *Per2*:LUC-MIP:GFP mice exposed for 72 hours to either IL-1 $\beta$  (2 ng/ml) + IL-1 receptor antagonist (IL1-ra:  $\beta\mu$ g/ml) versus vehicle. Note clear absence of amplitude reduction and phase advance of *Per2*:LUC expression in islets exposed to IL-1 $\beta$  + IL1-ra.