



FIGURE S2. Cyclic expression of *Aanat* mRNA reflects melatonin accumulation and AANAT activity in chick chondrocyte lysates. Primary chondrocytes isolated from chick ribcages at embryonic day 18.5 were cultured in the dark, and total RNA as well as cell lysates were harvested at seven time points (4-hr intervals). (A) *Aanat* mRNA expression levels peaked 18 hr after changing the medium. Data represent mean \pm SD (n = 4). Values accompanied by different letters are significantly different ($p < 0.05$), as determined by one-way ANOVA followed by Tukey's *post hoc* tests. (B) Cellular melatonin accumulation was only detected 22 hr after changing the medium. (C) AANAT activity in cell lysates collected at three time points was monitored using tryptamine as a substrate. Concentration of the reaction product, NATP, was measured by mass spectrometry.