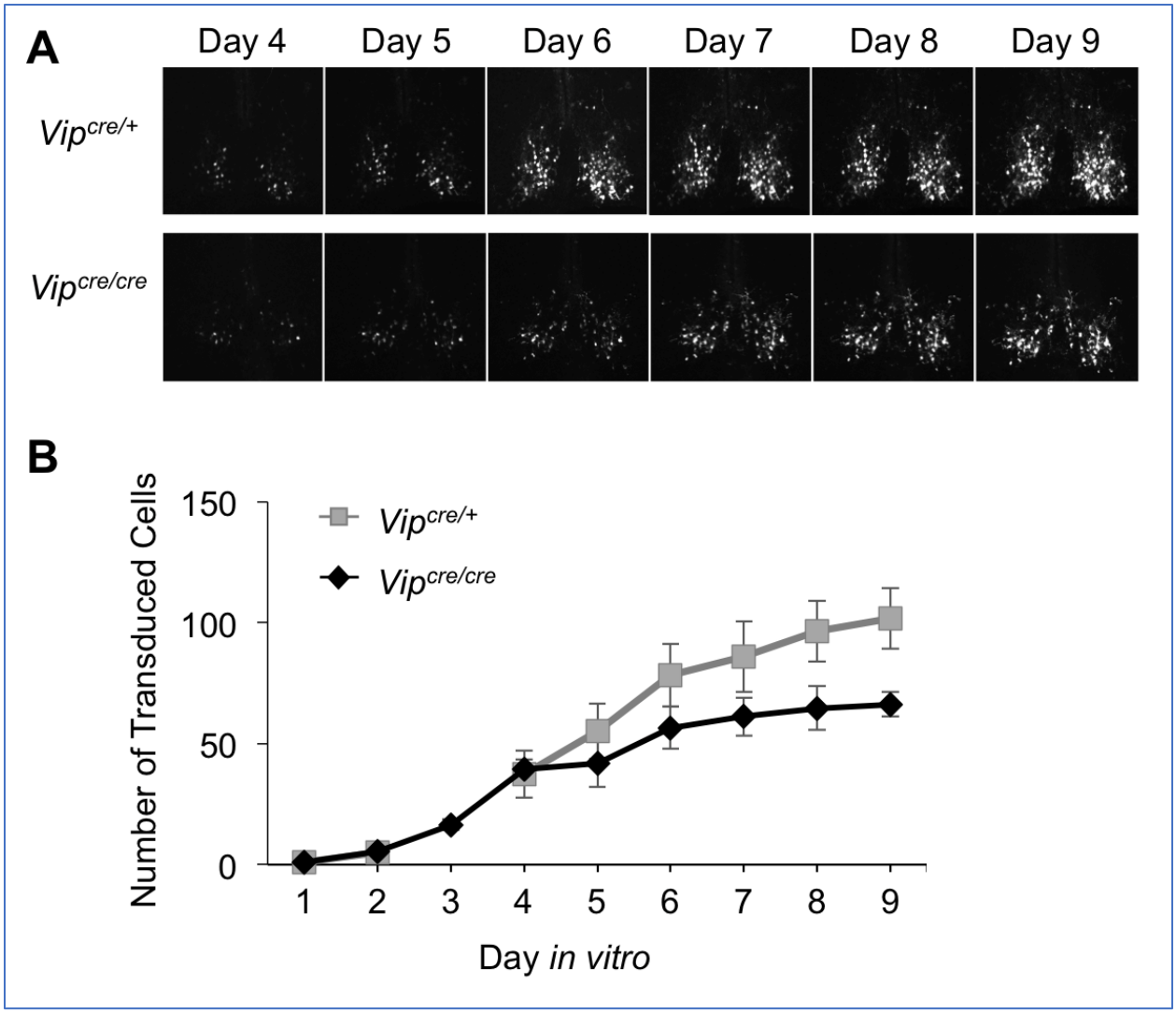

Figure S1. Cre-dependent transduction is retained in the *Vip*$^{cre/cre}$ SCN. A) Representative images illustrating Cre-dependent tdTomato transduction *in vitro* in a *Vip*$^{cre/+}$ and *Vip*$^{cre/cre}$ SCN. B) Viral-mediated transduction does not differ statistically between *Vip*$^{cre/+}$ and *Vip*$^{cre/cre}$ SCN (n = 4-5 SCN slices/condition).

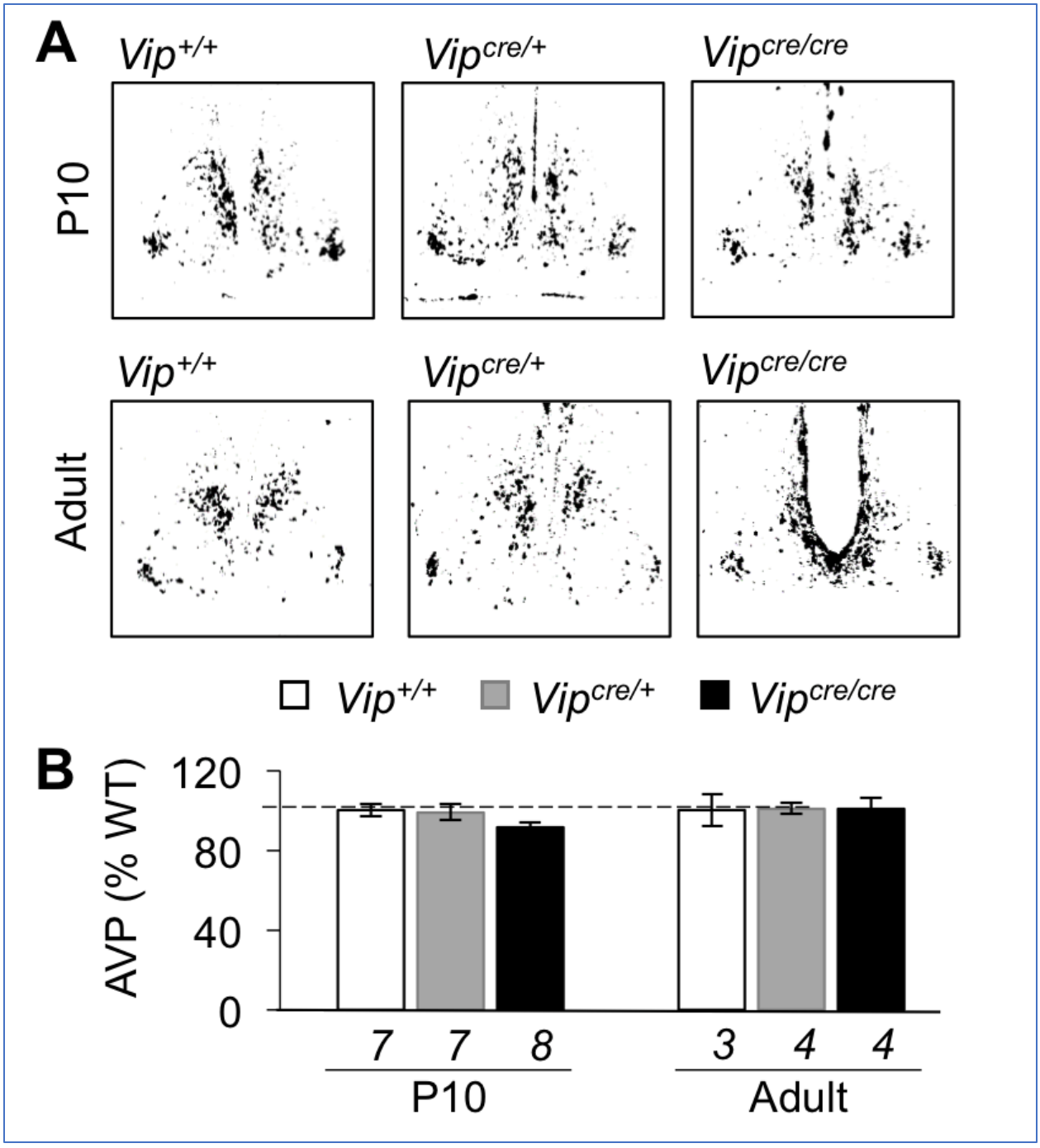

Figure S2. The VIP-IRES-Cre transgene does not alter AVP expression. A) Representative thresholded images of AVP expression in the SCN of *Vip*$^{+/+}$, *Vip*$^{cre/+}$, and *Vip*$^{cre/cre}$ mice collected at P10 or in adulthood. B) Average AVP-immunoreactivity in the SCN does not differ by genotype. Italicized numbers below abscissa in B) indicate sample size.

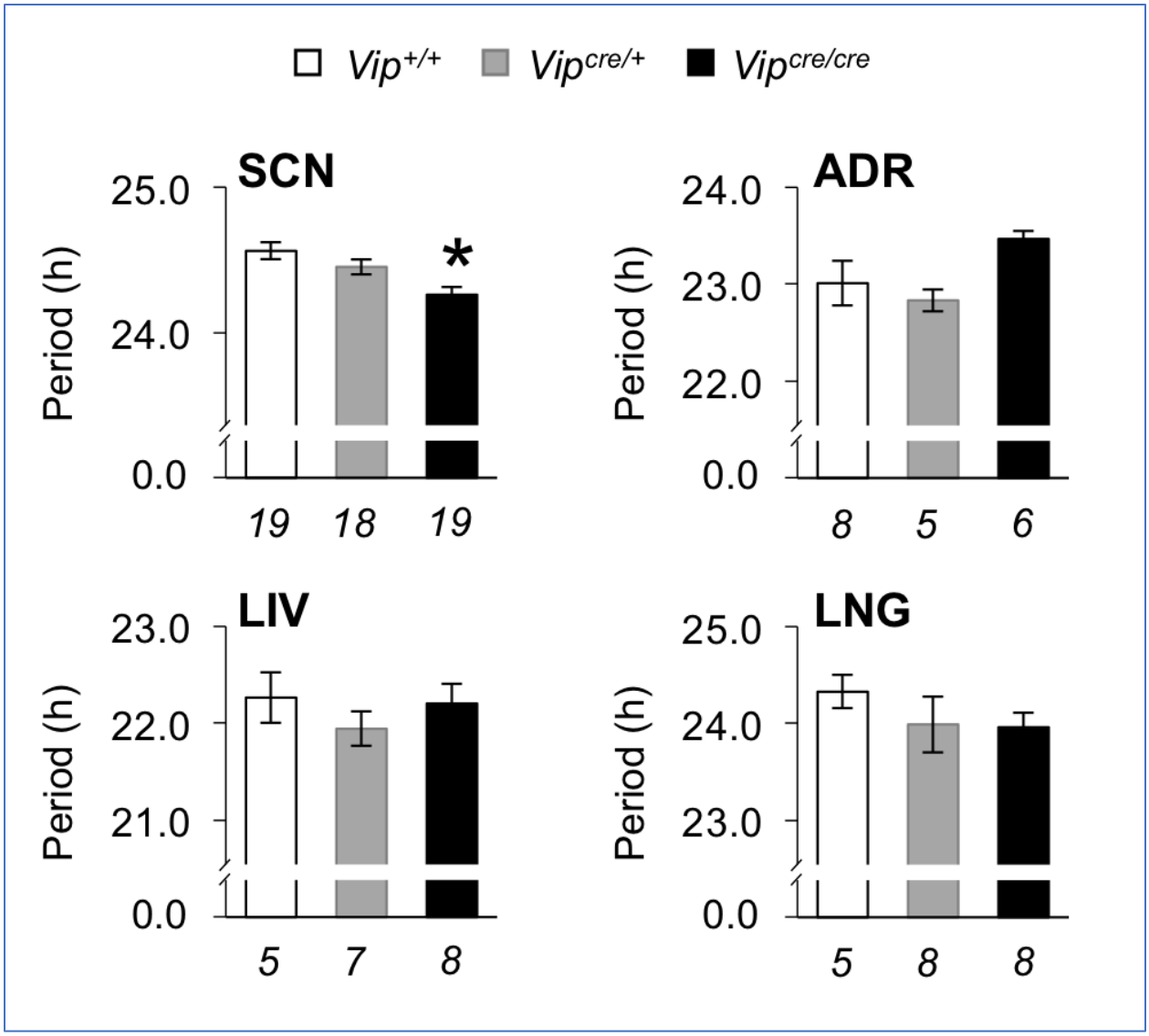

Figure S3. PER2::LUC rhythms have shorter period in *Vip*$^{cre/cre}$ SCN, but not in peripheral tissues. Italicized numbers below abscissa indicate sample size. * Differs from *Vip*$^{+/+}$, Tukey's HSD, $p < 0.05$. Note that the ordinate is plotted differently for each tissue. ADR: adrenal, LIV: liver, LNG: lung.

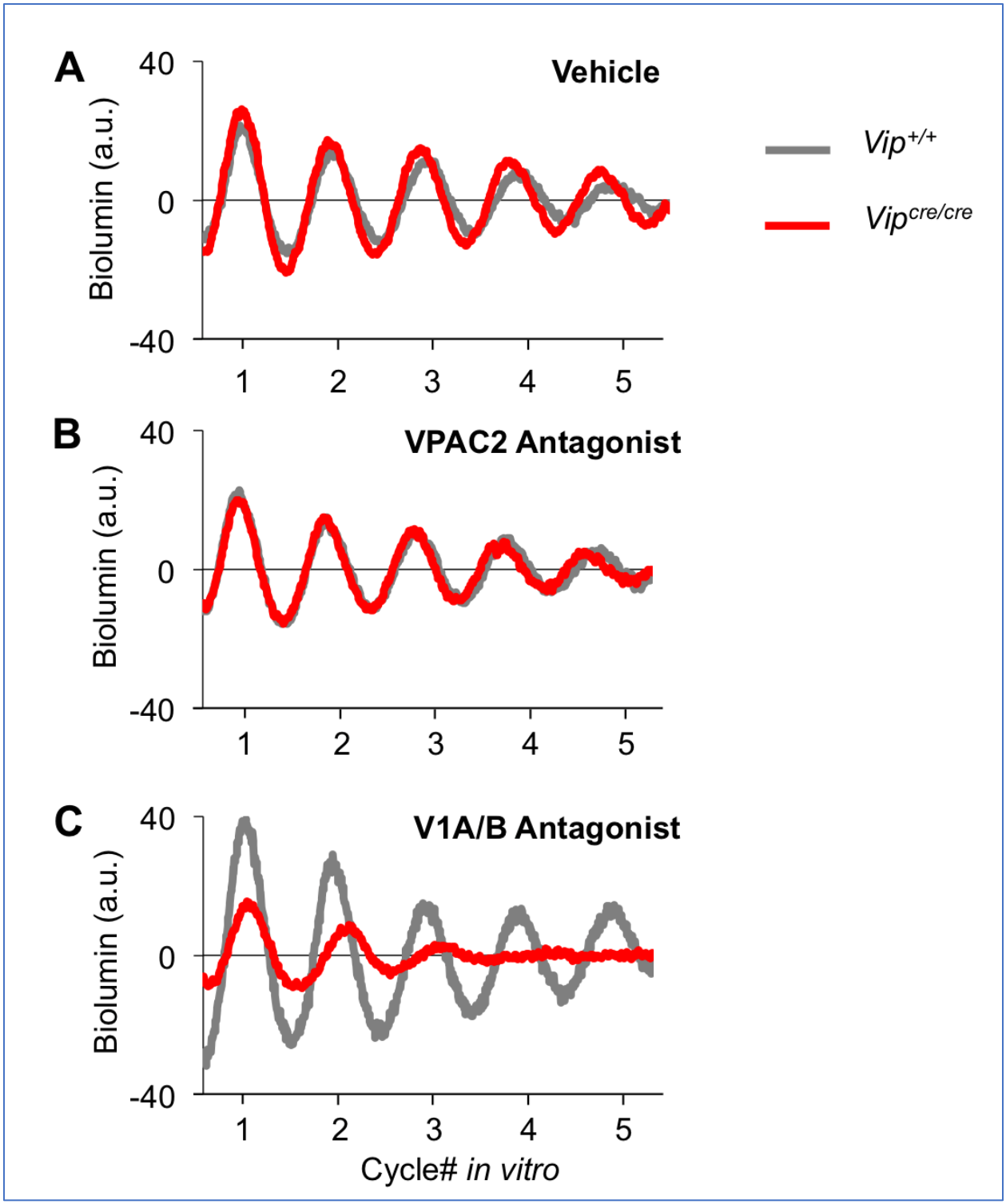

Figure S4. Representative PER2::LUC time series illustrating SCN bioluminescence rhythms under standard culture conditions (A), VPAC2 antagonism (B), and AVP receptor antagonism (C).