Supporting Information

Liu et al. 10.1073/pnas.1721578115

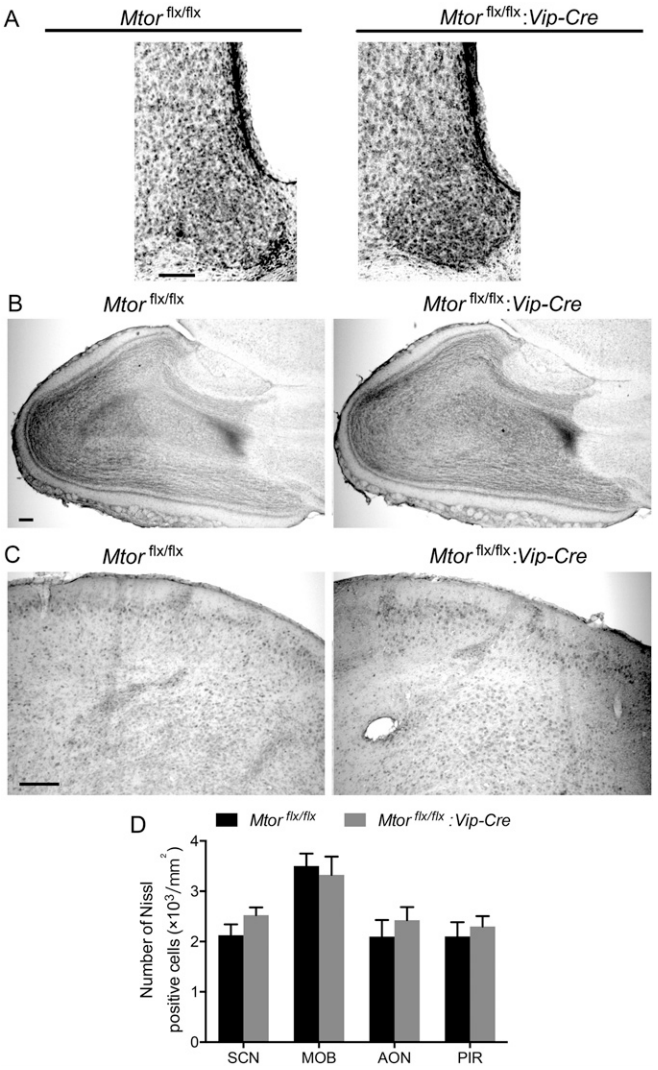

Fig. S1. Nissl staining shows no difference in cell numbers between brains of *Mtor*$^{flx/flx}$ and *Mtor*$^{flx/flx}$*:Vip-Cre* mice. Bright-field microscopic images of Nissl staining in the suprachiasmatic nucleus (*A*), olfactory bulb (*B*), and piriform cortex (*C*). No histological difference was found between *Mtor*$^{flx/flx}$ (*Left*) and *Mtor*$^{flx/flx}$*:Vip-Cre* (*Right*) tissue. Quantification of the numbers of cells in the SCN, OB, and PIR is shown (*D*). Numbers of cells were not different in these regions between *Mtor*$^{flx/flx}$ and *Mtor*$^{flx/flx}$*:Vip-Cre* mice. (Scale bars, 100 μm.) Values are presented as the mean ± SEM.

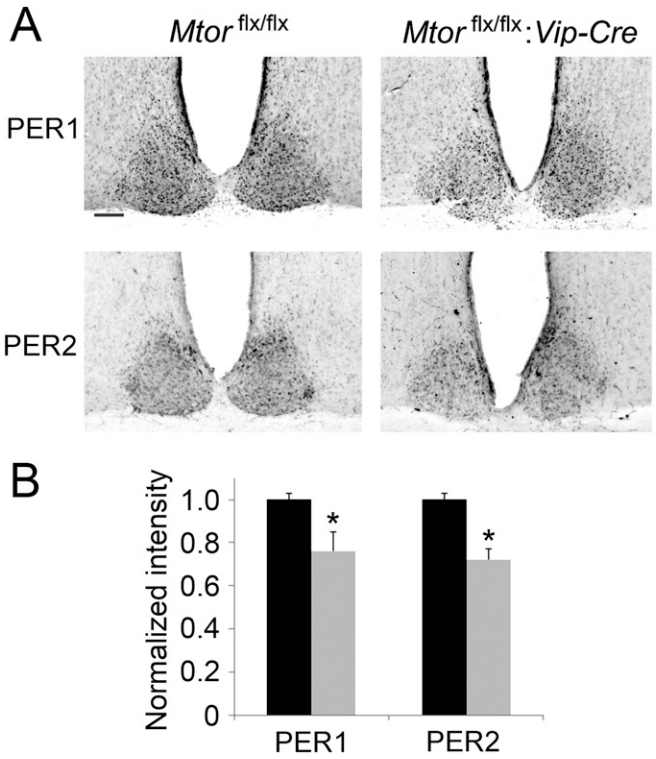

Fig. S2. Clock protein PER1 and PER2 levels are decreased in the SCN of *Mtor*$^{flx/flx}$*:Vip-Cre* mice. (*A*) Bright-field microscopic images show immunostaining for PER1 and PER2 in SCN sections. (Scale bar, 100 μm.) (*B*) Quantitation of staining intensity is shown. Values are presented as the mean ± SEM. *$P < 0.05$.

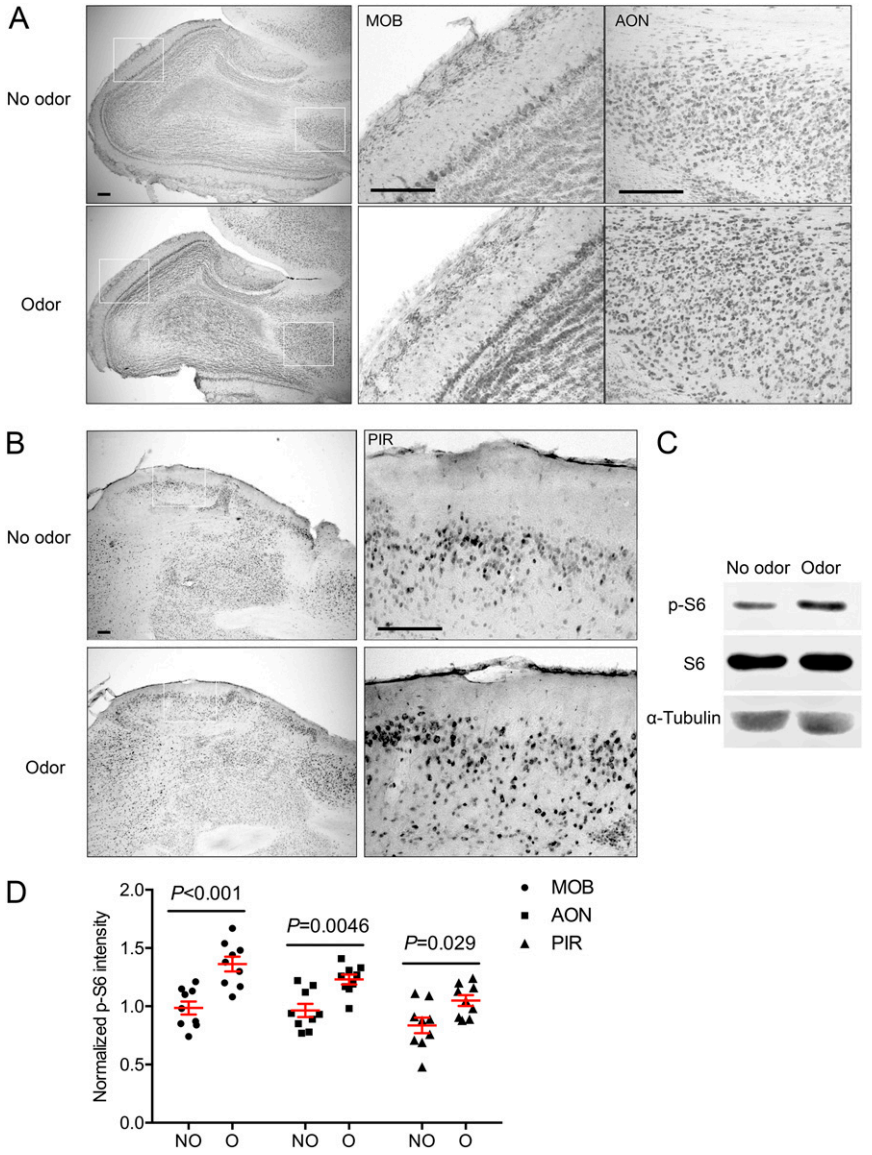

Fig. S3. Odor-induced mTOR activation in the olfactory pathway. (*A*) Bright-field microscopic images of the main olfactory bulb and anterior olfactory nucleus immunostained for phospho-S6. For this experiment, mice were exposed to an odorant (essence oil) for 15 min at circadian time (CT) 15 and killed 45 min after the end of odor exposure. Note that odor induced an increase of S6 phosphorylation in MOB and AON. Framed regions are shown to the *Right*. (*B* and *D*) Bright-field microscopic images of the PIR (*B*). Note that odor induced an increase of S6 phosphorylation in the PIR. Framed regions are shown to the *Right*. (Scale bars, 100 μm.) Quantitation of the staining intensity is shown (*D*). Values are presented as the mean ± SEM. (*C*) Western blots of OB tissue lysates.