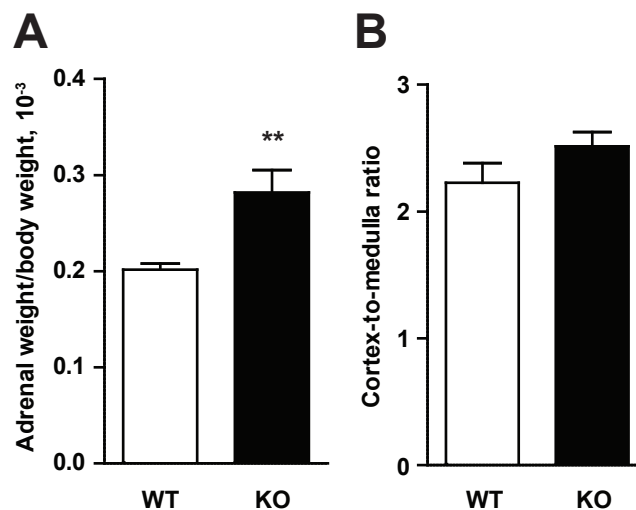
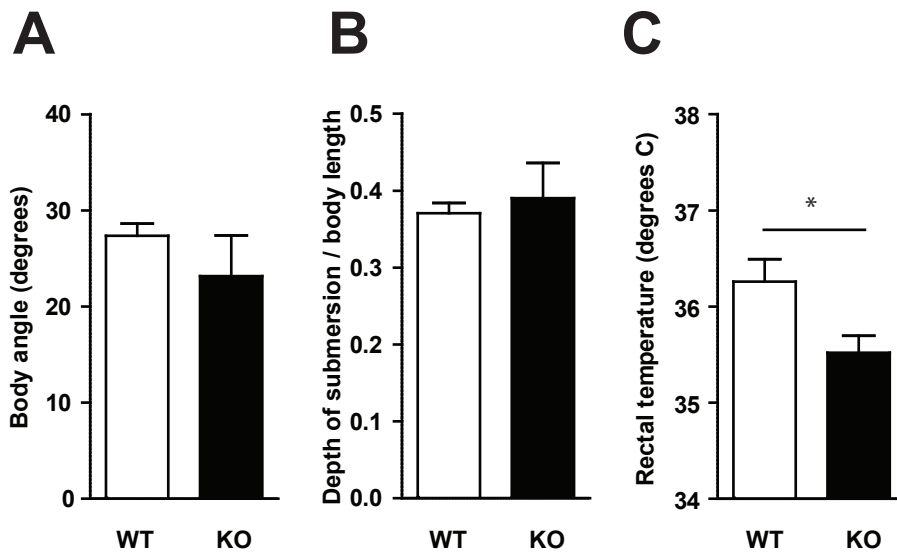


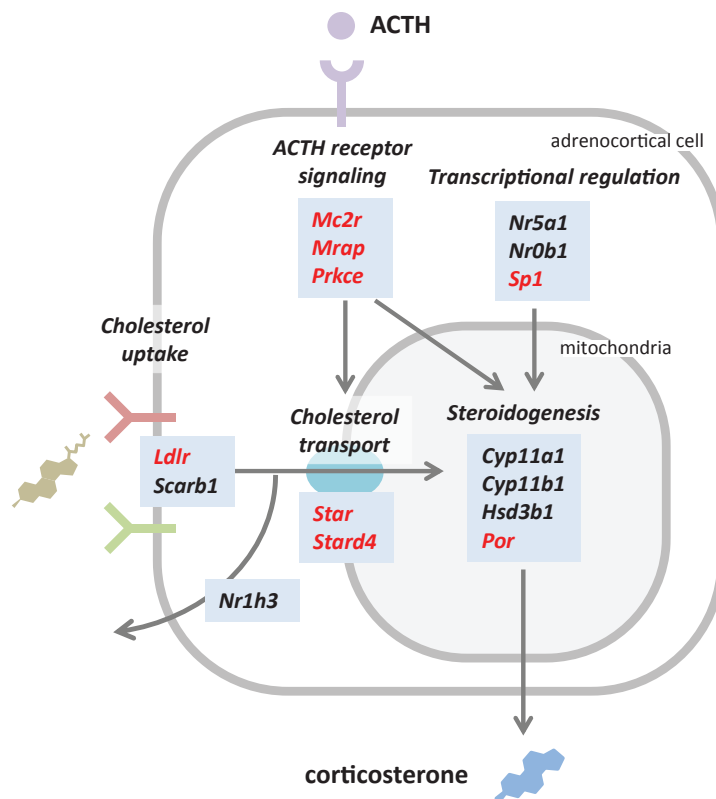
**Supplemental Figure 1.** 24-hour profile of corticoid excretion in fecal samples from WT and KO mice on the first day in DD (n = 5–6). \*\*\* P < .001 (2-way ANOVA with Bonferroni post-hoc test).



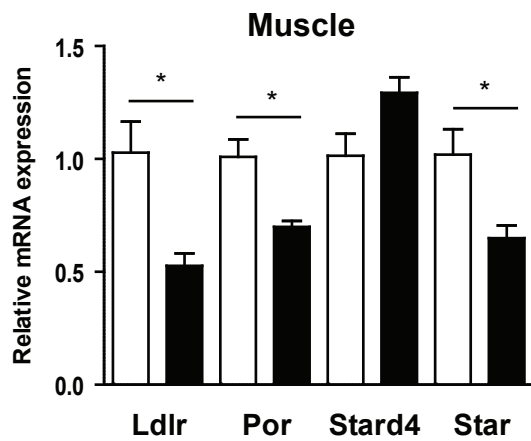
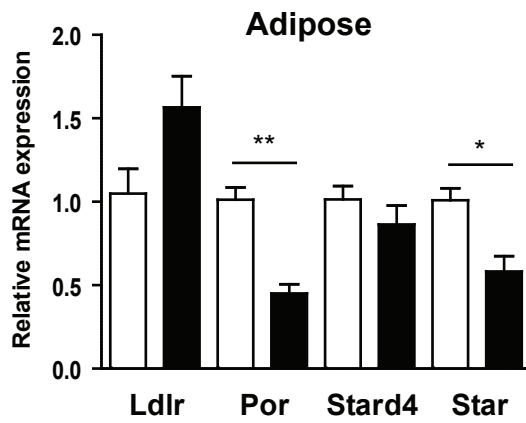
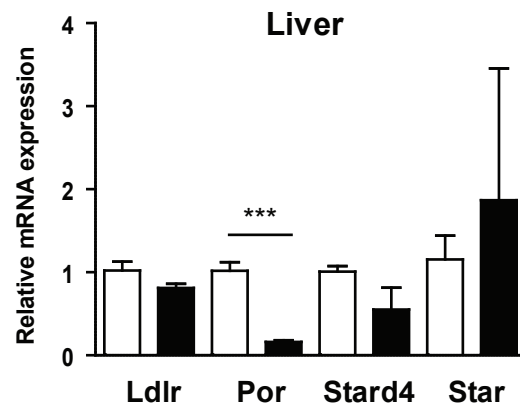
**Supplemental Figure 2.** Anatomical examination of *Arntl*-deficient adrenal glands. (A) Relative adrenal weight in WT and KO mice (n = 9–13). (B) Adrenal cortex-to-medulla ratio in KO mice and age-matched WT controls (n = 5–6).



**Supplemental Figure 3.** Body axis angle (A) and submersion in water (B) of WT and KO mice during immobility periods in the FST. (C) Rectal temperature measured in WT and KO mice at ZT12. \* P < .05 (Student's t-test).



**Supplemental Figure 4.** Schematic representation of tested genes involved in regulation of adrenocortical functions. Rhythmically expressed genes are labeled in red.



**Supplemental Figure 5.** mRNA levels of genes of interest in liver, epididymal adipose tissue and skeletal muscle from WT and KO mice at 48 h after “lights off” (n = 3–4). \* P < .05, \*\* P < .01, \*\*\* P < .001 (Student's t-test).

**Supplemental Table 1.** Primer sequences used for quantitative RT-PCR

<b>Gene</b>	<b>Forward primer (5' to 3')</b>	<b>Reverse primer (5' to 3')</b>
<i>Star</i>	TTGGGCATACTCAACAACCA	GAAACACCTTGCCCACATCT
<i>Mc2r</i>	AAGCCTCGTGGCAGTTTTGAA	AGGATGAACATGCAGTCAATGAT
<i>Ldlr</i>	TGACTCAGACGAACAAGGCTG	ATCTAGGCAATCTCGGTCTCC
<i>Prkce</i>	GGGGTGTTCATAGGAAAACAGG	GACGCTGAACCGTTGGGAG
<i>Por</i>	ATGGGGGACTCTCACGAAGAC	TCTTGCTGAACTCCGGTATCTC
<i>Stard4</i>	TGTTTGGTATGGAGAGTGTGGA	GTCACAGCAGAGACTGACATTG
<i>Scarb1</i>	TTTGGAGTGGTAGTAAAAAGGGC	TGACATCAGGGACTCAGAGTAG
<i>Nr5a1</i>	GTAAGTGAAGTGGTCAAACCCC	AAGCCTGGCTAGTGCATGTC
<i>Nr0b1</i>	CGGATGATGCAGAGAGAGTACC	AATGATGGGCCTGAAAAAGAGTT
<i>Sp1</i>	GCCGCCTTTTCTCAGACTC	TTGGGTGACTCAATTCTGCTG
<i>Nr1h3</i>	CTCAATGCCTGATGTTTCTCCT	TCCAACCCTATCCCTAAAGCAA
<i>Cyp11a1</i>	AGGTCCTTCAATGAGATCCCTT	TCCCTGTAAATGGGGCCATAC
<i>Cyp11b1</i>	CTGAACCCAAATGTTCTGTCACC	CAAAGTCCCTTGCTATCCCATC
<i>Hsd3b1</i>	AGCATCCAGACACTCTCATC	GGAGCTGGTATGATATAGGGTA
<i>Mrap</i>	ACTGTCATGGCCAACGG	AGTGTGAGGCCAGCTGAT
<i>Eef1a1</i>	TGCCCCAGGACACAGAGACTTCA	AATTCACCAACACCAGCAGCAA