

Supplementary Information and data:

Supplementary Table S1. Sequences of primers used in QRT-PCR and ChIP assays

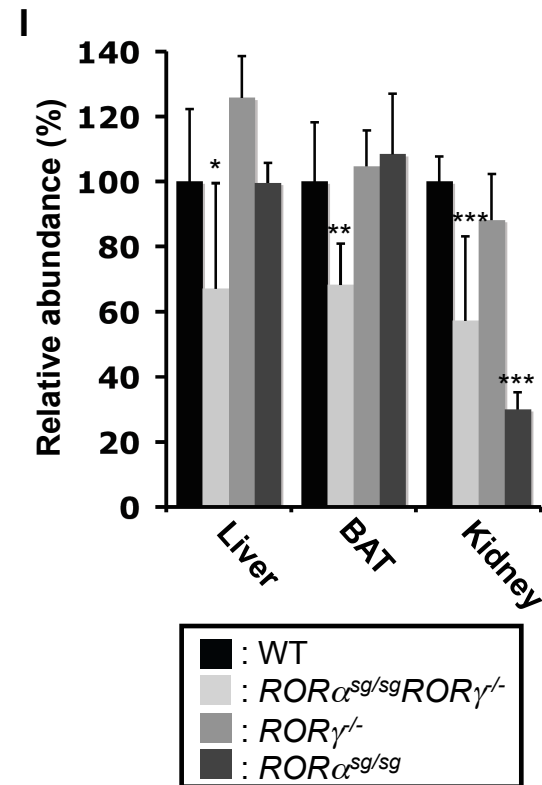
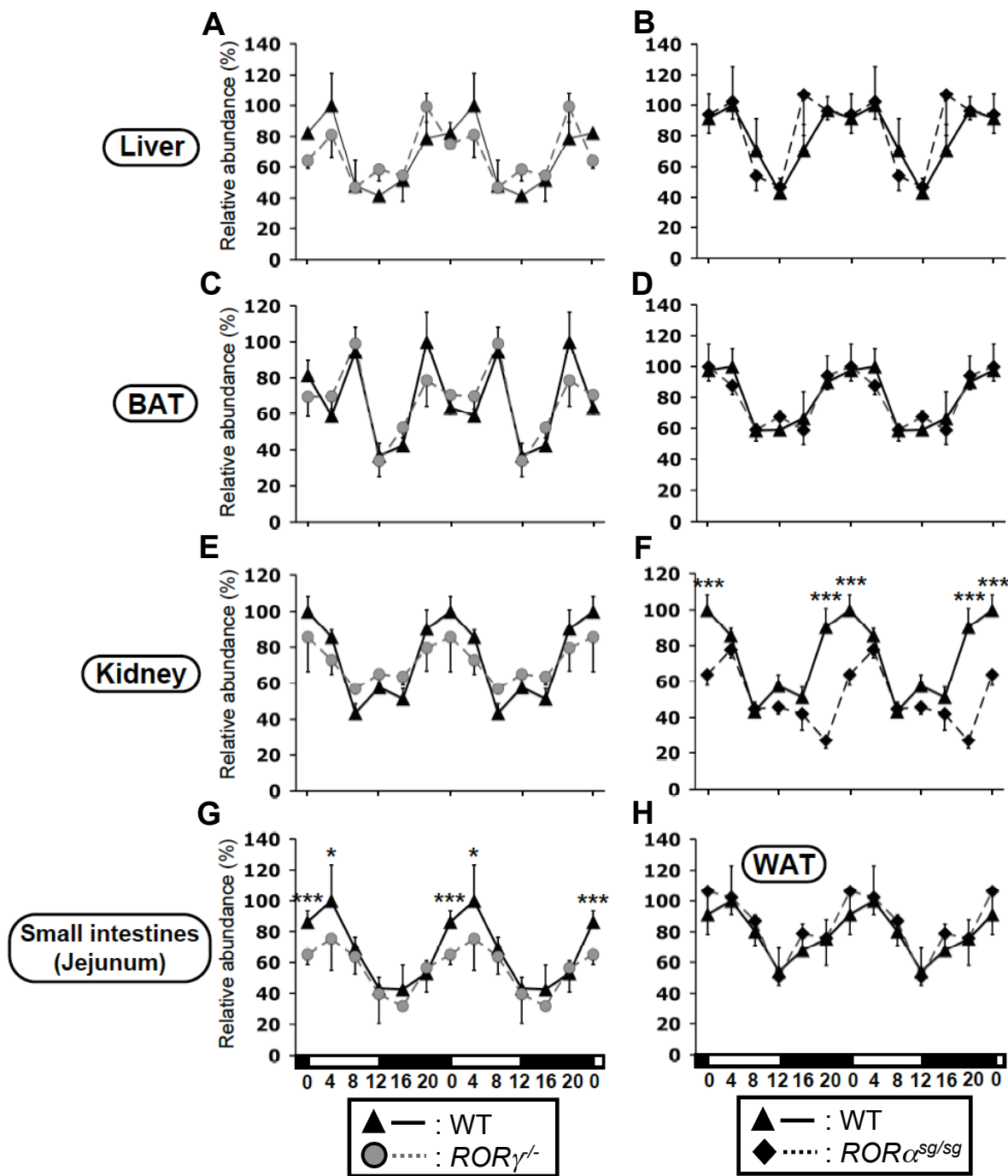
Gene	Sense primer	Antisense primer
<i>mGapdh</i>	AGTATGACTCCACTCACGGCAAAT	GTCTCGCTCCTGGAAGATGGT
<i>mNpas2</i>	CGCAGATGTTCGAGTGGAAAG	GTGCATTAAGGGCTGTGGAG
<i>mClock</i>	GGCGTTGTTGATTGGACTAGG	GAATGGAGTCTCCAACACCCA
<i>mUcp1</i>	TCCTAGGGACCATCACCACC	GCAGGCAGACCGCTGTACA
<i>mGlut4</i>	AAGATGGCCACGGAGAGAG	GTGGGTTGTGGCAGTGAGTC
<i>mFabp4</i>	ACGACAGGAAGGTGAAGAGCAT	TGTGGAAGTCACGCCTTTCAT
<i>mMfsd2a</i>	AAAGACACGCAAAATGCTTACCT	AATGAAGGCACAGAGGACGTAGA
<i>mDio2</i>	AGAGTGGAGGCGCATGCT	GGCATCTAGGAGGAAGCTGTTC
<i>mNpas2</i> -RORE1,2	TTCTTGATTCTCGCCTGTCTC	TGCCCTCTCTCCTTTTGAC
<i>mNpas2</i> -896/813	CCCTAGTGACAACCTTAGCAGGAC	CTTCCAGGTTCCGCACTAAG
<i>mNpas2</i> -distal	CGCAGATGTTCGAGTGGAAAG	CATGGGAGGTGCCACTGCTT

Supplementary Figure S1. Comparison of the circadian expression of *Clock* in several peripheral tissues from WT, *RORγ*^{-/-} *RORα*^{sg/sg}, and DKO mice.

(A-H) Various tissues from WT, *RORγ*^{-/-}, and *RORα*^{sg/sg} mice (n=4) were isolated every 4 hr over a period of 24 hr and expression of *Clock* was analyzed by QRT-PCR. The 24-hr expression pattern was double-plotted. (I) Tissues were isolated from WT, *RORα*^{sg/sg}, *RORγ*^{-/-}, *RORα*^{sg/sg}*RORγ*^{-/-} DKO mice (n=4) at CT20. *Clock* expression in DKO, *RORα*^{sg/sg}, and *RORγ*^{-/-} mice was normalized to the expression in littermate WT mice. Data present mean ±SD, * p< 0.05, ** p< 0.01, *** p<0.001 by ANOVA.

Supplementary Figure S2. RORE3 plays a minor role in the activation of the *Npas2*(-1534/+81) promoter by RORs and the repression by Rev-Erbα.

Huh-7 cells were co-transfected with the indicated p3xFlag-CMV10-ROR expression vector, pCMV-β-Gal, and a pGL4.10 reporter plasmid driven by either the wild type *Npas2*(-1534/+81) promoter or the promoter in which RORE3 was mutated (RORE3m), as shown in the Figure. 24 h later the relative luciferase reporter activities were determined. Data present mean ±SEM.



Supplementary Figure S1

