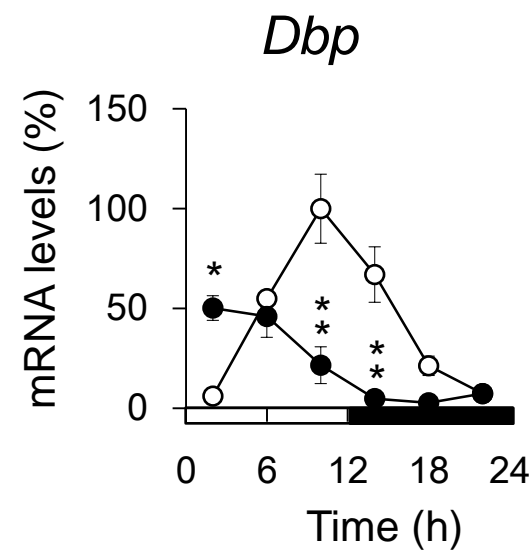
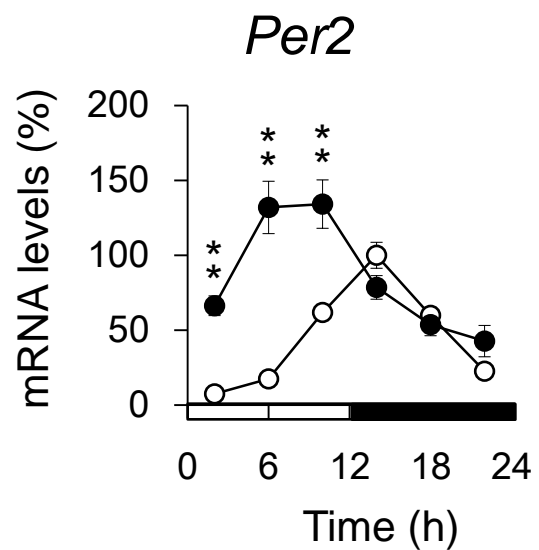
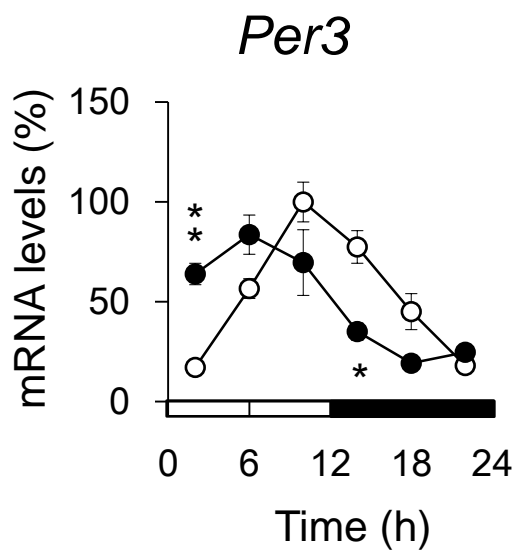
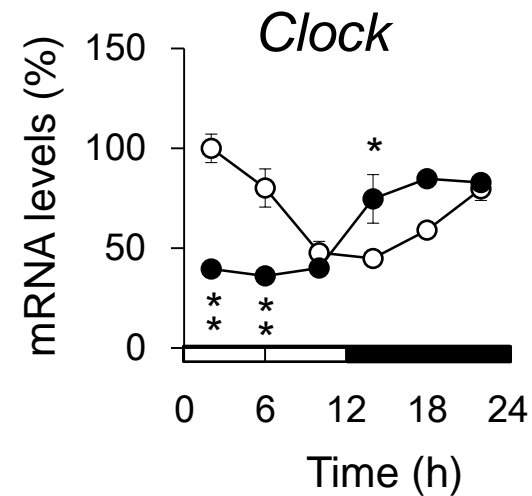
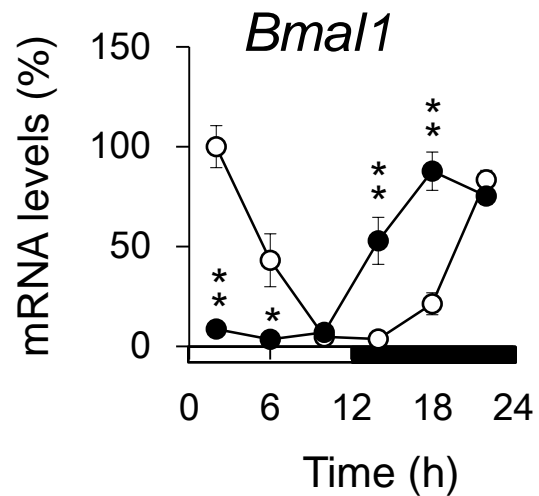
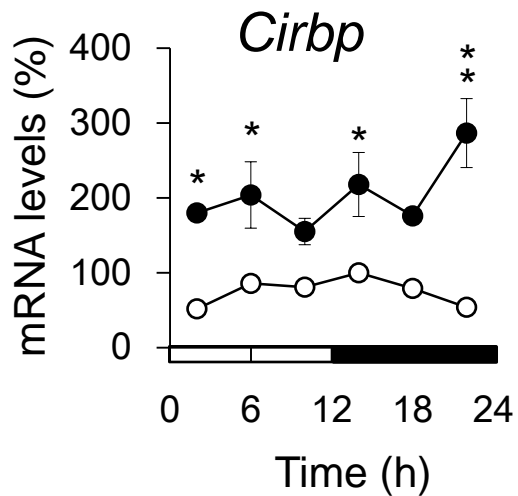


Supplemental Table 1. Primer sequences for quantitative real-time PCR

Gene	Direction	Primer sequence (5' to 3')
<i>Cirbp</i>	Forward	GTGGGCGATGACATTGCC
	Reverse	ACTGAGGTGCCAGGAGCAAC
<i>Fgf21</i>	Forward	ATGGAATGGATGAGATCTAGAGTTGG
	Reverse	TCTTGGTGGTCATCTGTGTAGAGG
<i>Pdk4</i>	Forward	CACATGCTCTTCGAACTCTTCAAG
	Reverse	TGATTGTAAGGTCTTCTTTTCCCAAG
<i>Hmgcs2</i>	Forward	ACCTGCTCACCTGCTCTCAGCAG
	Reverse	GGTCAGTTTGGTCCACATATTGG
<i>Bmal1</i>	Forward	ACGACATAGGACACCTCGCAGA
	Reverse	CGGGTTCATGAAACTGAACCATC
<i>Clock</i>	Forward	ACCACAGCAACAGCAACAAC
	Reverse	GGCTGCTGAACTGAAGGAAG
<i>Per3</i>	Forward	TGCGCTGTGTACACAGTGTGC
	Reverse	CAGTCACATCTGCCTGGTGTG
<i>Per2</i>	Forward	CACTCAGGAGTGCATGGAGGAGA
	Reverse	CTGCTCTTGACCTTGACCAGGT
<i>Dbp</i>	Forward	GGAAGTGAAGCCTCAACCAAT
	Reverse	CTCCGGCTCCAGTACTTCTCA
18S rRNA	Forward	GTAACCCGTTGAACCCCAT
	Reverse	CCATCCAATCGGTAGTAGCG



Supplemental Figure 1. Temporal mRNA expression profiles of *Cirbp* and circadian clock-related genes in the heart of KD mice.

Mice were fed with normal (ND; unfilled circles) or ketogenic (KD; filled circles) diets for 14 days under LD 12:12 (lights on at 0 h) and then total RNA was extracted from the heart after sacrifice. Messenger RNA levels were measured by quantitative RT-PCR. Maximal value for ND mice is expressed as 100%. Values are shown as means  $\pm$  SEM (n = 4). Significant differences between groups are indicated as \* $P < 0.05$ , \*\* $P < 0.01$ . Horizontal open and solid bars, day and night, respectively.

Supplemental Table 2. Cosinor analysis of *Bmal1*, *Clock*, *Per3*, *Per2*, and *Dbp* mRNA expression in the heart of mice fed with a ketogenic diet.

		MESOR	Amplitude	Acrophase (h)
<i>Bmal1</i>	ND	42.7 ± 4.7	51.5 ± 6.6	0.76 ± 0.49
	KD	39.2 ± 4.5	47.3 ± 6.4	18.6 ± 0.51**
<i>Clock</i>	ND	68.6 ± 2.1	27.4 ± 3.0	1.6 ± 0.41
	KD	59.7 ± 3.0*	29.3 ± 4.3	18.3 ± 0.56**
<i>Per3</i>	ND	52.4 ± 3.0	41.7 ± 4.2	11.3 ± 0.39
	KD	49.4 ± 1.3	34.1 ± 1.9	6.5 ± 0.21**
<i>Per2</i>	ND	44.9 ± 3.9	44.5 ± 5.5	14.1 ± 0.47
	KD	84.5 ± 5.1**	49.4 ± 7.2	8.5 ± 0.55**
<i>Dbp</i>	ND	42.8 ± 4.5	47.3 ± 6.3	10.6 ± 0.51
	KD	22.1 ± 3.6**	25.9 ± 5.1*	4.6 ± 0.75**

KD, ketogenic diet; ND, normal diet. MESOR, mean statistics of rhythm; Amplitude, one-half the total peak-trough variation; Acrophase, delay from 0:00 (lights on). Data are shown as means ± SEM (n = 4). Significant differences compared with ND value are indicated as \* $P < 0.05$ , \*\* $P < 0.01$ .