

## Suppl. Figure S1.

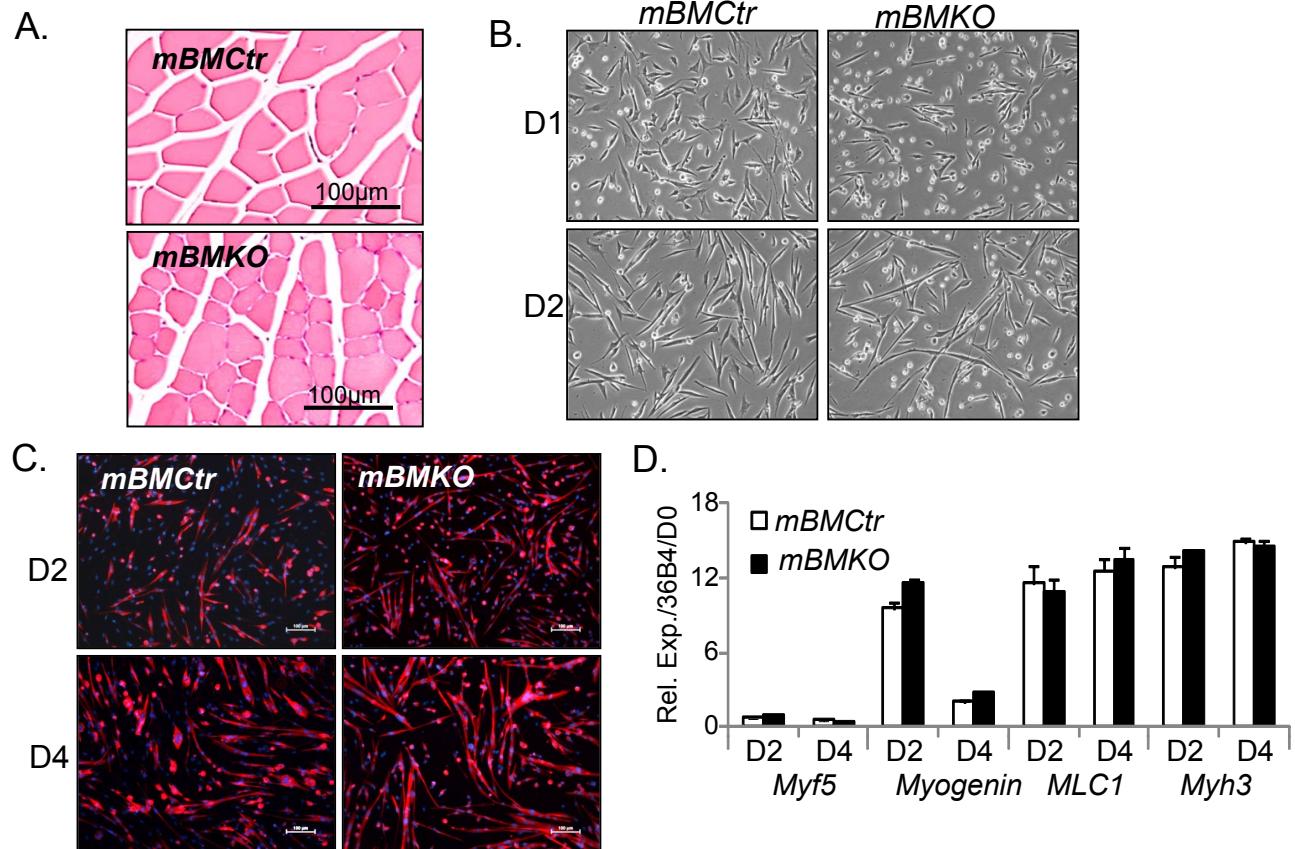


Fig. S1 Loss of Bmal1 in mature myocyte does not alter myofiber fiber size and myoblast differentiation. (A) Representative images of H/E histology of mBMCtr and mBMKO TA muscle cross section. (B, C) representative images of phase-contrast (B) and immunostaining of myosin heavy chain (C) of differentiating mBMCtr and mBMKO primary myoblasts. (D) RT-qPCR analysis of myogenic gene expression day 2 and 4-differentiated mBMCtr and mBMKO primary myoblasts ( $n=3$ ).

## Suppl. Figure S2.

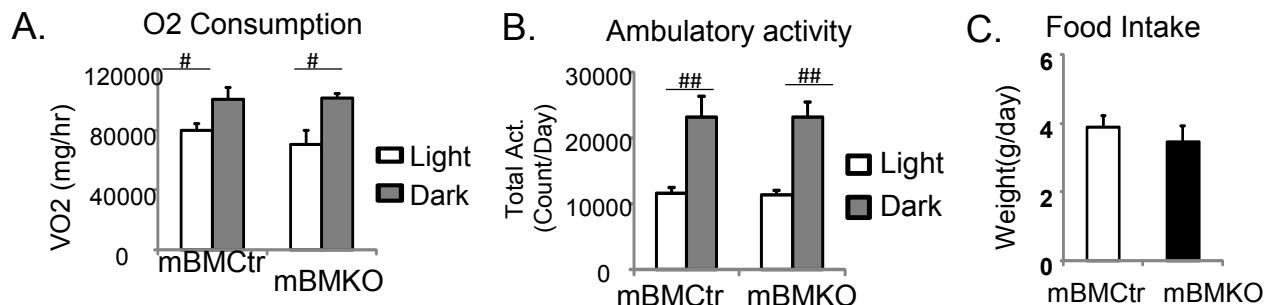


Fig. S2 Analysis of energy homeostasis by CLAMS indirect calorimetry. Analysis of oxygen consumption (A), ambulatory activity (B) and daily food intake (C) in mBMCtr and mBMKO mice ( $n=6$ /group) during light and dark cycles as monitored by CLAMS for 7 days. #, ##:  $P \leq 0.05$  or  $0.01$  light vs. dark.

**Supplemental Table 1. Primary antibodies list.**

Antibody	Source	Cat#	Dilution
myosin heavy chain 2B	Developmental Studies Hybridoma Bank	BF-F3	1:100
myosin heavy chain 2A	Developmental Studies Hybridoma Bank	SC-71	1:100
PDK4	Proteintech	12949-1-AP	1:1000
Glut4	Cell Signaling	2213S	1:1000
Bmal1	Abcam	AB93806	1:500
Rev-erba	Proteintech	14506-1-AP	1:1000
PGC-1α	Millipore	ST1204	1:1000
AMPKα	Cell Signaling	2532S	1:1000
Phospho-AMPKα	Cell Signaling	2535S	1:1000
Phospho-Akt (Ser473)	Cell Signaling	4060S	1:1000
Akt	Cell Signaling	4691S	1:1000
P-ACC	Cell Signaling	11818	1:1000
ACC	Cell Signaling	3676	1:500
FASN	Santa Cruz	sc-48357	1:1000
β-actin	Abcam	AB3280	1:4000
GAPDH	ThermoFisher	AM4300	1:3000

**Supplemental Table 2. Primer sequence for Bmal1 ChIP-qPCR analysis.**

Genes	Sequences	
Rev-erba	Forward	TGAAGGGAAAGTAGCAGGTAAA
	Reverse	CTCTTCCCGTTAGCCAATCA
Tbp	Forward	ACACTGCTGTTGGTATTGTTGGTT
	Reverse	TGGGAAGGCGGAATGTATCTGGCA
Glut4	Forward	TGTTTCCCTTCGACCTCCCC
	Reverse	TCAGCCCCACCAAGAGAGTCT
Pdp1	Forward	TGGGCTCAATGGACTCGTT
	Reverse	TCATTTGCAGTTAACAGCCAAGA
Tbc1d1	Forward	GAACCTCGCACGCCAAACAG
	Reverse	GAGCTCGGGGAAGGTGCAAG
Hk2	Forward	CAGTCTGTTGCTTGGAGGAAAC
	Reverse	ACAGCTCCGCACAGACCCTA
Pdh1	Forward	AGGAGATGCAGGTAGGAGGG
	Reverse	CACAGCCTCACACCCTTCT