

Supplementary Table S1: Quantitative real-time PCR primer sequences

Gene	Forward primer	Reverse primer
<i>Actin</i>	5'-CTAAGGCCAACCGTGAAAAG-3'	5'-GGGGTGTGAAGGTCTCAAA-3'
<i>Bmal1</i>	5'-CAAGAATGCAAGGGAGGCC-3'	5'-TTGTCCCGACGCCTCTTTT-3'
<i>Clock</i>	5'-CCTAGAAAATCTGGCAAAATGTCA-3'	5'-CCTTTCCATATTGCATTAAGTGCT-3'
<i>Cry1</i>	5'-AGGCAGCTGATGTATTCCCA-3'	5'-AGTTTAGTGATGTTCCATTCTTGAA-3'
<i>Rora</i>	5'-CAGAAATGCCTGGCCGTG-3'	5'-CCGACCAAACCTTGACAGCATC-3'
<i>Reverba</i>	5'-GGGCACAAGCAACATTACCAA-3'	5'-CACCTTACACAGTAGCACCATGC-3'
<i>Myogenin</i>	5'-GGCAATGCACTGGAGTTCG-3'	5'-AGCCGCGAGCAAATGATC-3'
<i>Pld2</i>	5'-TTGCGGAAGCACTGTTTCAGTGTC-3'	5'-TTGTTCTCCGCTGTTTCTTGCCAC-3'

Supplementary Table S2: Phase and amplitude of clock genes in HMB-treated C2C12 cells

Gene	Phase (h)			Amplitude		
	Control (h)	HMB (h)	Shift (h)	Control	HMB	Fold change
<i>Bmal1</i>	24	18	-6	0.36	0.55	1.52
<i>Clock</i>	12	24	+12	0.29	0.61	2.1
<i>Cry1</i>	6	24	-6	0.28	0.39	1.39
<i>Rora</i>	24	18	-6	0.47	0.63	1.34
<i>Rev-erba</i>	18	18	0	1.06	1.67	1.57