Supplementary TABLE 1 (S1). Oligonucleotides for PMR assay

Gene	Sense Primer (5’ – 3’)	Anti-sense Primer (5’ – 3’)	Probe (5’FAM – 3’BHQ1)	Amplicon lenght	Amplicon CpG No.	Sequence source
PER1	CGTTCGTGTGTGTGATATAGTTTTG	ACGAATTACATAATACCGAACACTACC	AACCTCTTACCGACGAAACCGCAAACCC	150bp	11	Beacon Designer
PER2	GTAGGGTGCGTTCGTTTGAATTG	CGCGCAATCACTCGATAACTCG	CCTACACACGCTACCTCACCTTTCGAACCT	133bp	13	Beacon Designer
PER3	ATCGGAGTGAGAAATCGGTGTTTG	AACATCTCGAAATCTCCGCGAAAC	ACTAAAACGACCCGCAACCTACTTCTCGCT	105bp	10	Beacon Designer
CRY1	GACGGTTATTAGTCGGTATAGGAAAGG	AACGACAACCGCTTAATCCCAAAC	ACCCTCGTCCACACGCTAAACTCACTACCT	92bp	6	Beacon Designer
NPAS2	GTCGGTTTTTCGTAGGAGTC	CTACTCTAACTACTACCGCCGC	CCGCCGCCGCGACTACGA	117bp	21	Beacon Designer
ACTB	TGGTGATGGAGGAGGTTTAGTAAGT	AACCAATAAAACCTACTCCTCCCTTAA	ACCACCACCCAACACACAATAACAAACACA	NA	NA	(Eads et al., 2000)
MYOD	CCAACTCCAAATCCCCTCTCTAT	TGATTAATTTAGATTGGGTTTAGAGAAGGA	TCCCTTCCTATTCCTAAATCCAACCTAAATACCTCC	NA	NA	(Eads et al., 2000)

Supplementary TABLE 2 (S2). Oligonucleotides for MI assay

Gene	Methylated Sense Primer (5’ – 3’)	Methylated Anti-sense Primer (5’ – 3’)	Unmethylated Sense Primer (5’ – – 3’)	Unmethylated Anti-sense Primer (5’ – 3’)	Sequence source
BMAL1	GGAGGTGTTTGTTTATTCGC	AAATACGCGAAATCGCGTCG	TAGGTTAGGGATGGAGGTGTTTG TTTATTTGT	AACCCCCAACAAAATACACAAAATCACA TCA	(Shih et al., 2006)
CLOCK	TCGTTTTTTCGGTTTTTTAGTAATC	CTTACCCCGTTAAACAACACG	TTGTTTTTTTGGTTTTTTAGTAATT	CTTACCCCATTAAACAACACA	(Hoffman et al., 2010a)
CRY2	GTTTGCGGATAGTTTTAGTTTGC	CCTAACGATTAACCCAAAAACG	GTTTGTGGATAGTTTTAGTTTGT	CACCTAACAATTAACCCAAAAACA	(Hoffman et al., 2010b)