

Table S1 Primer sequences

qPCR primers		
Gene	Forward	Reverse
b2m	GGTCTTTCTGGTGCTTGTCTCA	GTTCGGCTTCCCATTCTCC
Cry1	CTGGCGTGGAAGTCATCGT	CTGTCCGCCATTGAGTTCTATG
RevErba	GGGCACAAGCAACATTACCA	CACGTCCCACACACCTTAC
Per2	GGCTTCACCATGCCTGTTGT	GGAGTTATTCGGAGGCAAGTGT
Bmal1	ATGCAGAACACCAAGGAAGG	CCATCCTTAGCACGGTGAGT
Ppar $\gamma$ 1	AGAAGCGGTGAACCACTGATATTC	AGAGGTCCACAGAGCTGATTCC
Ppar $\gamma$ 2	TGGGTGAACTCTGGGAGATTC	AGAGGTCCACAGAGCTGATTCC
Ppar $\gamma$ _I1	TCTGCTGGGGATCTGAAGGC	TGTGTAAGAACTTGGGGGCAGTT
Ppar $\gamma$ _I6	AATCTCAGGTGGCTTTGTGGT	GTTTTTCCAAATGCTTCCCTTAGT
Dbp	AATGACCTTTGAACCTGATCCCGCT	GCTCCAGTACTTCTCATCCTTCTGT
Dbp_I1	GTCCACGGCACCTATCAG	CTCCAGGCGTCAGATTTG
Dbp_I3	AAGGGCTCAGGTTCCAAG	GCAGAGGCAGTTCTACAGATG
Ppar $\alpha$	ACAAGGCCTCAGGGTACCA	GCCGAAAGAAGCCCTTACAG
Ppar $\alpha$ _I1	CATTGCTCTGATCGTAGTG	GGAGGGCAGAGACATAGGGT
Srebp1c	GGAGCCATGGATTGCACATT	GGCCCGGGAAGTCACTGT
Srebp1c_I1	CAGAGGGAAAGCAGAGGATGTGG	CCACCTTGGGCTGGAATTGGT
Gm36355_I2	GTGGAGATCGTGTTGCCTGC	GAGACCCTGAGTTCCATTCCAG
Syn2_I8	ACTTTCCTGGTGTGGCTGAC	CGAGCCAGTGTGTTGCTTCCA
Timp4_I2	CAAAGACCTGCTGACACTCAA	GTTCTGCTCCCTCCCATAGCAC
Tsen2_I3	TTCTTTCAGAAAGCCGTCCA	GCACCAAATGAGAGCGACAC
Fgf21	TTGACACCCAGGATTTGAATGACC	GATGACGACCAAGACACTGAAGC
Fgf21_I1	CCTCCTCCTCTCAACCTCCA	GATGACGACCAAGACACTGAAGC
Fgf21_I2	TGAAACCTACGCTCTGTGAGG	GGTCATTCAAATCCTGGGTGTCAA
Akt1s1	ATGAGGACGAGCCCACTGAA	GTCTGTGCTCTCCGGGTCT
Irf_I3	CGGAAAGAAGTGTGCGGTT	GTGGAAGTGAGCGTGTAGGT
Irf3	GCCGAACGAGGTTCAAGGA	CTCTTCCAGGTTGACACGTCC
Rpl13a	CCTGCTGCTCTCAAGGTTGTTG	CCGACCTCATGCGCCAGA
Rpl13a_I1	TGGGACACTTGCTTCATCTG	GCCATCCAATACCAGAACCTG
Snord32a	GGGAGTCCATGATGAGCAACAC	AGCGGTGCATGGGTTGAT
Snord35a	CTCAAGACTGGCACATGATGTT	CCTTGGCATTATCGGCACTG
Enhancer candidates		
PPARY2_EN1	GATCGGTACCAGCTGGTACTCTTGCCACT	GATCAAGCTTCAATCTTTCCCCCTCCCCAA
PPARY2_EN3	GATCGGTACCATGTCTCCTGTCCCCATCA	GATCAAGCTTGGGCGGAGGAGGAAGTTTAT
PPARY2_EN4	GATCGGTACCATGTGTTCCCTGCGTTGACA	GATCAAGCTTCTGAGCCGTATTTCTCCAG
Dbp_EN1	GATCGGTACCATGGCTGTTTCTCCTGTGTTGA	GATCAAGCTTCTCAGACCAAGGAGCACAG
Dbp_EN2	GATCGGTACCGCTTCCCATGTCCCTGTGTTG	GATCAAGCTTGTGTGTCCGAGTCTACTT
Srebp1c_EN1	GATCGGTACCAGGAAGGGTCAGGGTAGCAT	GATCAAGCTTTCACCTCAGTTTGGAGCAGC
Ppar $\alpha$ _EN1	GATCGGTACCGCAACCTCTGTATTCCTGAAGA	GATCAAGCTTTCACAGACAGCACCCAGATA
Ppar $\alpha$ _EN2	GATCGGTACCATGGAAGTGATAAGCCCCATCA	GATCAAGCTTGCCTCCCCTGTACCTTTACC

4C DNA amplification primers	
Ppar $\gamma$ 2_EcoRI	TCGTCGGCAGCGTCAGATGTGTATAAGAGACAGGGATTAGTTTTATCTCTATTTAACTTGA
Ppar $\gamma$ 2_Csp6I	GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGATAGACTTGTTGAATAAATCACCT
Dbp_HindIII	TCGTCGGCAGCGTCAGATGTGTATAAGAGACAGAAACCTGTTCTGTGGTGGATAAGC
Dbp_Csp6I	GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGCACTGGTTTTTGCCTGGAGGTC
Ppar $\alpha$ _HindIII	TCGTCGGCAGCGTCAGATGTGTATAAGAGACAGCATCTCCAGGGTCTCAGTTTGTGA
Ppar $\alpha$ _Csp6I	GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGCCATTTTCTACCCTGGCCTGTA
Srebp1c_HindIII	TCGTCGGCAGCGTCAGATGTGTATAAGAGACAGATCTGTCCCTGTCCCTGCTGG
Srebp1c_Csp6I	GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGGGTGTGCGGGTAGCGTCTG

ChIP		
Fgf21 promoter	CCACTCTGACGCGTGATATT	ATTGCATCATCCGTCCAGGC
Dbp I2	AACAGTGCTGCACATTCCT	CTCCTCCCAACCAAGCACC
Dbp 3' UTR	GCCTGGAATGTATGAGCTAGCA	GGCACCGGAGTAGGCAAGA
Pparg RE2	TGTTTGTTTTAACTACTCTGGA	TCTGCAAATCTGCGAGGGAT