

Supporting Information

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Table S1. Quantitative PCR analysis of mRNAs in the adipose, liver, and muscle tissues of *db/db* and *db/db-tg* mice using 36B4 as the invariant control

Genes	Genotype	Tissues		
		Fat	Liver	Muscle
MCP-1	<i>db/db</i>	0.51 ± 0.19	3.88 ± 0.63	0.20 ± 0.06
	<i>db/db-tg</i>	0.57 ± 0.20	3.25 ± 1.12	0.46 ± 0.19
	<i>P</i> value	0.793	0.564	0.263
SAA-1	<i>db/db</i>	0.0009 ± 0.00038	0.39 ± 0.11	0.0014 ± 0.0007
	<i>db/db-tg</i>	0.0002 ± 0.00016	0.47 ± 0.21	0.0030 ± 0.0005
	<i>P</i> value	0.109	0.67	0.026
IL-1β	<i>db/db</i>	0.99 ± 0.65	2.71 ± 1.48	0.14 ± 0.02
	<i>db/db-tg</i>	1.36 ± 0.16	1.46 ± 0.13	0.16 ± 0.06
	<i>P</i> value	0.492	0.306	0.612
IL-6	<i>db/db</i>	0.018 ± 0.011	0.21 ± 0.17	0.064 ± 0.01
	<i>db/db-tg</i>	0.008 ± 0.002	0.20 ± 0.10	0.054 ± 0.02
	<i>P</i> value	0.192	0.41	0.27
CRP	<i>db/db</i>	0.020 ± 0.004	1.61 ± 0.23	0.007 ± 0.0014
	<i>db/db-tg</i>	0.031 ± 0.009	3.04 ± 0.69	0.006 ± 0.0027
	<i>P</i> value	0.183	0.05	0.416
TNF-α	<i>db/db</i>	0.088 ± 0.018	0.296 ± 0.126	0.057 ± 0.017
	<i>db/db-tg</i>	0.111 ± 0.103	0.352 ± 0.164	0.119 ± 0.080
	<i>P</i> value	0.772	0.719	0.296

Table S2. The sequences of SYBR Green PCR primers used in this study

Genes	Accession no.	Forward primer	Reverse primer
AMPK α 1	XM_139298	CAGTAGGTACACACAGCGTAACACA	ACCTGTTACAGCAAATTC AAATGG
AMPK α 2	XM_131633	TCCAGCACAGCTGAGAACCA	GGGATGCCGAGGACAAAGT
PPAR α	X57638	CTGCAGAGCAACCATCCAGAT	GCCGAAGGTCCACCATTIT
PPAR γ	NM_011146	CACAATGCCATCAGGTTTGG	GCTGGTCGATACTCTGGAGATC
PGC1 α	AF049330	GATGGCACGCAGCCCTAT	CATTGTTGATGTGTGCGCTTCTTGCT
LXR α	AF085745	AGGAGTGTGACTTCGCAAA	CTCTTCTGCCCCTCAGTTT
RXR α	M84817	TGCCCCATCCCTCAGGAAA	GCGGTCCCCACAGATAGC
SREBP-1c	NM_011480	GGCACTAAGTGCCCTCAACCT	TGCGCAGGAGATGTATCTCCA
C/EBP α	NM_007678	GCGCAAGAGCCGAGATAAAG	CGGTCAATGTACTGGTCAACT
C/EBP β	NM_009883	CGCCTTTAGACCCATGGAAG	CCCGTAGGCCAGGCAGT
C/EBP δ	NM_007679	TCCACGACTCCTGCCATGTA	GCGGCCATGGAGTCAATG
Pref-1	NM_010052	AATAGACGTTCCGGGCTTGCA	TCCAGGTCCACGCAAGTTCATTGTT
Insig-1	NM_153526	TTTGTGGTGGACATTTGATCGT	CCC GAAGCGGCTTGGGG
FOXO1	NM_019739	ACCCACCTGGACATGCA	GCAGATGTGTGAGGCATGGT
FOXO2	NM_013519	GCAAGGCTGGCAGAACAG	CGGCACCTTCACGAAGCA
IR	J05149	CGAGTGCCCGTCTGGCTATA	GGCAGGGTCCCAGACATG
IRS1	NM_010570	GCGGGCTGACTCCAAGAAC	GCTATCCGCGGCAATGG
IRS2	L24563	GGAGAACCCAGACCCTAAGCTACT	GATGCCTTTGAGGCCTTCAC
ACO	NM_015729	GCCAATGCTGGTATCGAAGAA	GGAATCCCACTGCTGTGAGAA
CPT1	NM_013495	ACCACTGGCCGAATGTCAAG	AGCGAGTAGCGCATGGTCAT
ACC α	AF374169	CCCAGCAGAATAAAGTACTTTGG	TGAGCATGGCATCCGGCGACT
ACC β	AF290178	AACTCCCTGCCAAGCTCATG	AGGCCTCCGAGGAAACCCACTGTCTT
FAS	XM_126624	CCTGGATAGCATTCCGAACCT	CCTGAGGGACCCTACCGCATAGC
GPAT	NM_008149	GTGACCTTCGATTATGCGATCA	CAACACCATCCCCGACATC
DGAT1	NM_010046	TCCGCCTCTGGGCATTC	GAATCGGCCACAAATCCA
DGAT2	AF384160	CCGCAAAGGCTTTGTGAA	GGAATAAGTGGGAACCAGATCAG
MCD	BC004764	CCGCTACTACCTGGAGGAGACA	ATCTGCTCGGAAGCTTTGATG
SCD-1	NM_009127	CCTTCGACTACTCTGCCAGTGA	TACCGCTGGCACATCAACTCCACC
Leptin	U22421	AACCCTCATCAAGACCATTGTCA	ATCAATGACATTTACACACGCAGTC
Resistin	NM_022984	AGGGCTTGATTCTGGAAACTAC	TCAGTGCCCATGTGGAAGTG
Adiponectin	NM_009605	TGTTGGAATGACAGGAGCTGAA	TGAACGCTGAGCGATACACAT
Lepr-b	U58861	CTTTGTACCTTACATGCCCAAT	AGTCACACATCTTATCTCCATTATCTTG
SOCS3	NM_007707	CACCTGGACTCCTATGAGAAAAGTG	GAGCATCATACTGATCCAGGAACT
TNF- α	D84199	TGGGACAGTGACCTGGACTGT	AGTGAATTCGGAAAAGCCCAT
IL-1 β	BC011437	CACTCATTGTGGCTGTGGAGAA	CCACGGGAAAAGACACAGGtAG
IL-6	NM_031168	CTCTGGGAAAATCGTGAAATG	AAGTGCATCATCGTTGTTTATACA
CRP	NM_007768	GAAATTTCTTGTGTCATGTTGCA	CCATCACTCTAGGTTGCCAAA
SAA1	NM_009117.3	ATTTGTTACGAGGCTTCCAA	CCGAGCATGGAAGTATTTGTC
MCP1	BC055070.1	TCACCTGCTGTA CTACTCATTACC	CTCCAGCCTACTCATTGGGATC
UCP1	U63419	ACTGGAGGTGTGGCAGTGTTT	ACGACCTGTAGGCTGCCCAA
UCP2	NM_011672	TGTTGATGTGGTCAAGACGAGAT	CATGGTAAGGGCACAGTGA
UCP3	NM_009464	CATCACAAGAAATGCCATTGTCA	TCCAGCAAATTCTCCTTGATGA
36B4	NM_007475	GGACCCGAGAAGACCTCCT	TCCAGGCTTTGGGCATCACC