

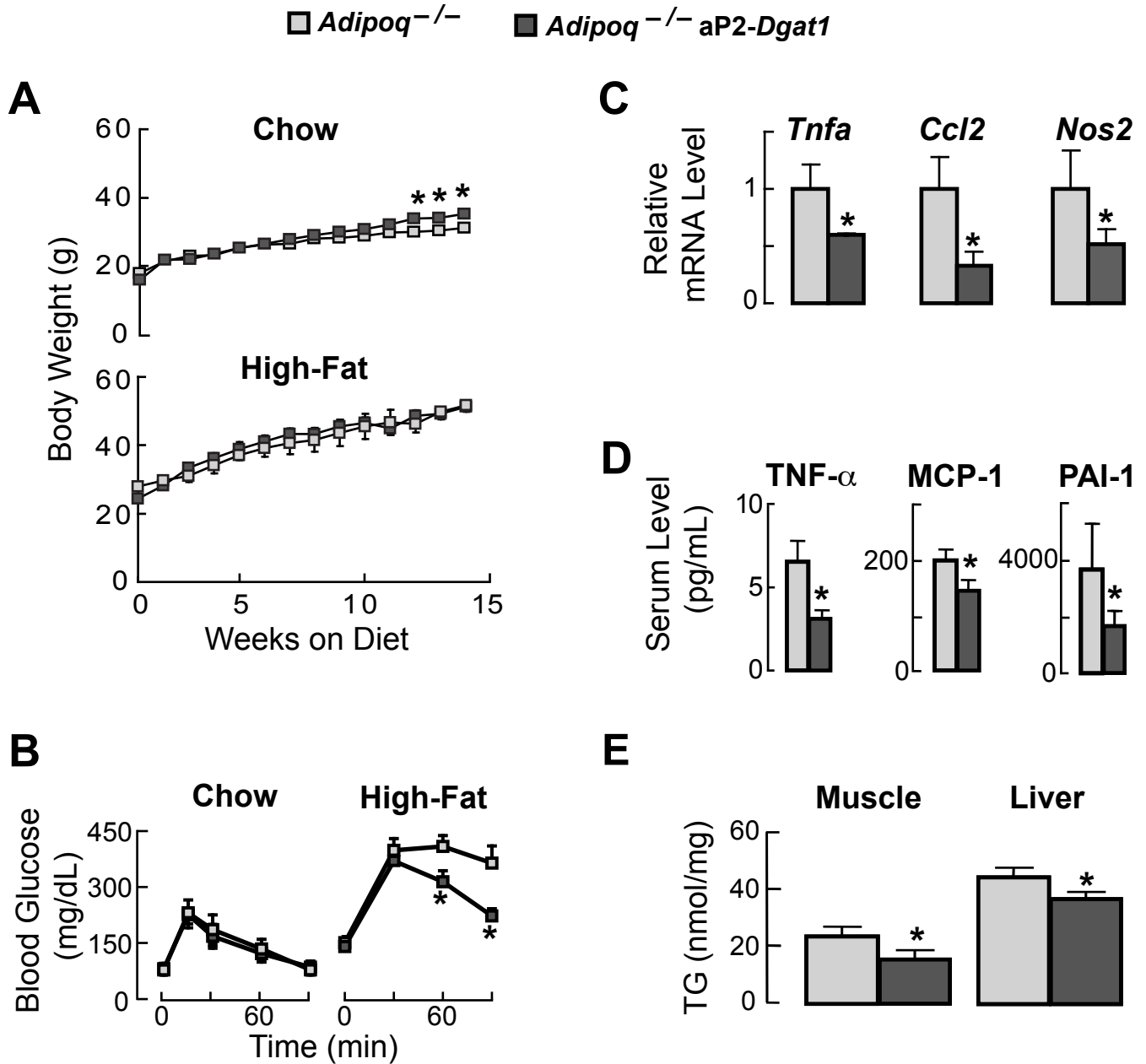


Figure S1

Protection against inflammatory and metabolic consequences of DIO in *Adipoq*^{-/-} aP2-*Dgat1* mice. Data are from mice (n = 5–9 per group) with DIO, and are compared with *Adipoq*^{-/-} mice. (A) Weight curves of WT and *Adipoq*^{-/-} aP2-*Dgat1* mice fed a chow (top) or high-fat (bottom) diet (*p<0.05). (B) Improved glucose tolerance in *Adipoq*^{-/-} aP2-*Dgat1* mice with DIO (*p<0.05). (C) Decreased mRNA expression of M1 macrophage genes in the WAT of *Adipoq*^{-/-} aP2-*Dgat1* mice with DIO (*p<0.05). (D) Decreased levels of serum inflammatory cytokines in *Adipoq*^{-/-} aP2-*Dgat1* mice (*p<0.05). (E) Decreased TG content in the skeletal muscle and livers of *Adipoq*^{-/-} aP2-*Dgat1* mice fed a high-fat diet (*p<0.05)

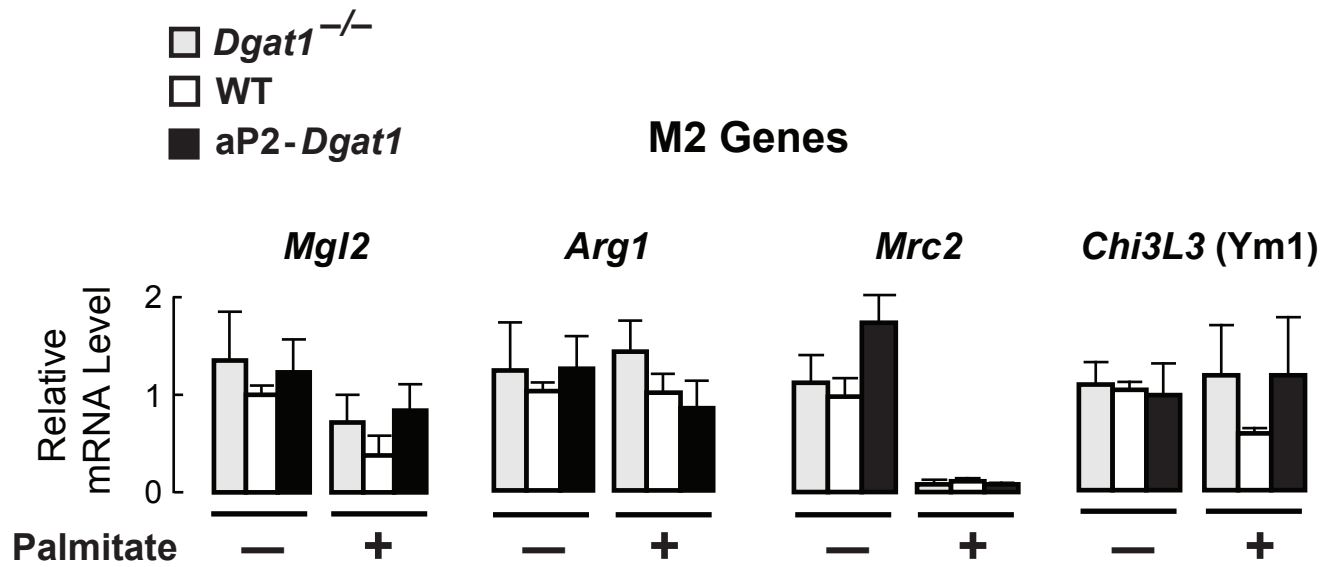
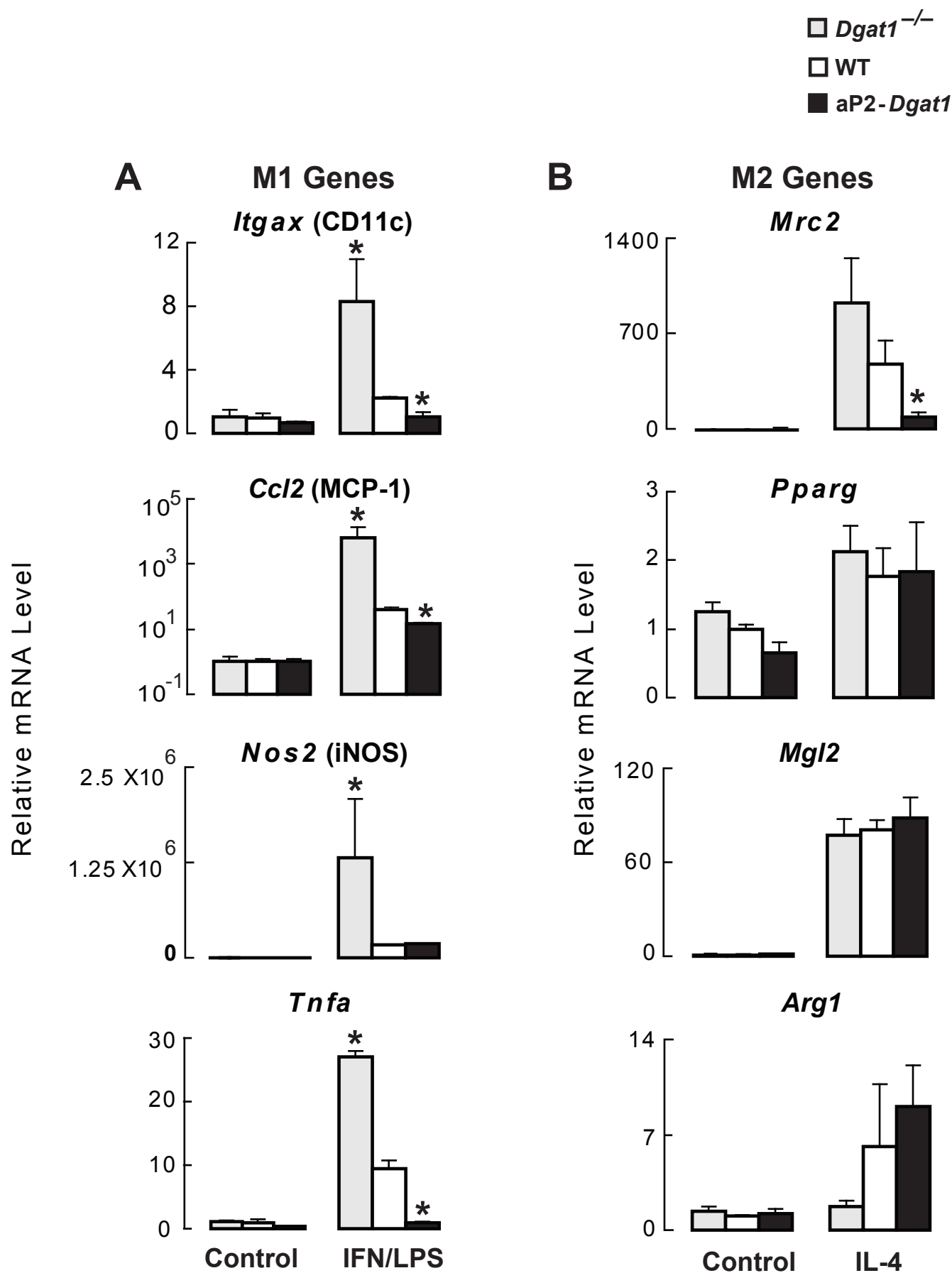


Figure S2

qPCR analysis of M2 pathway gene expression from *Dgat1*^{-/-}, WT, and aP2-*Dgat1* BMD-Mφ after 24 h in medium alone (control) or containing 150 μM palmitate (n = 3–4 per group).



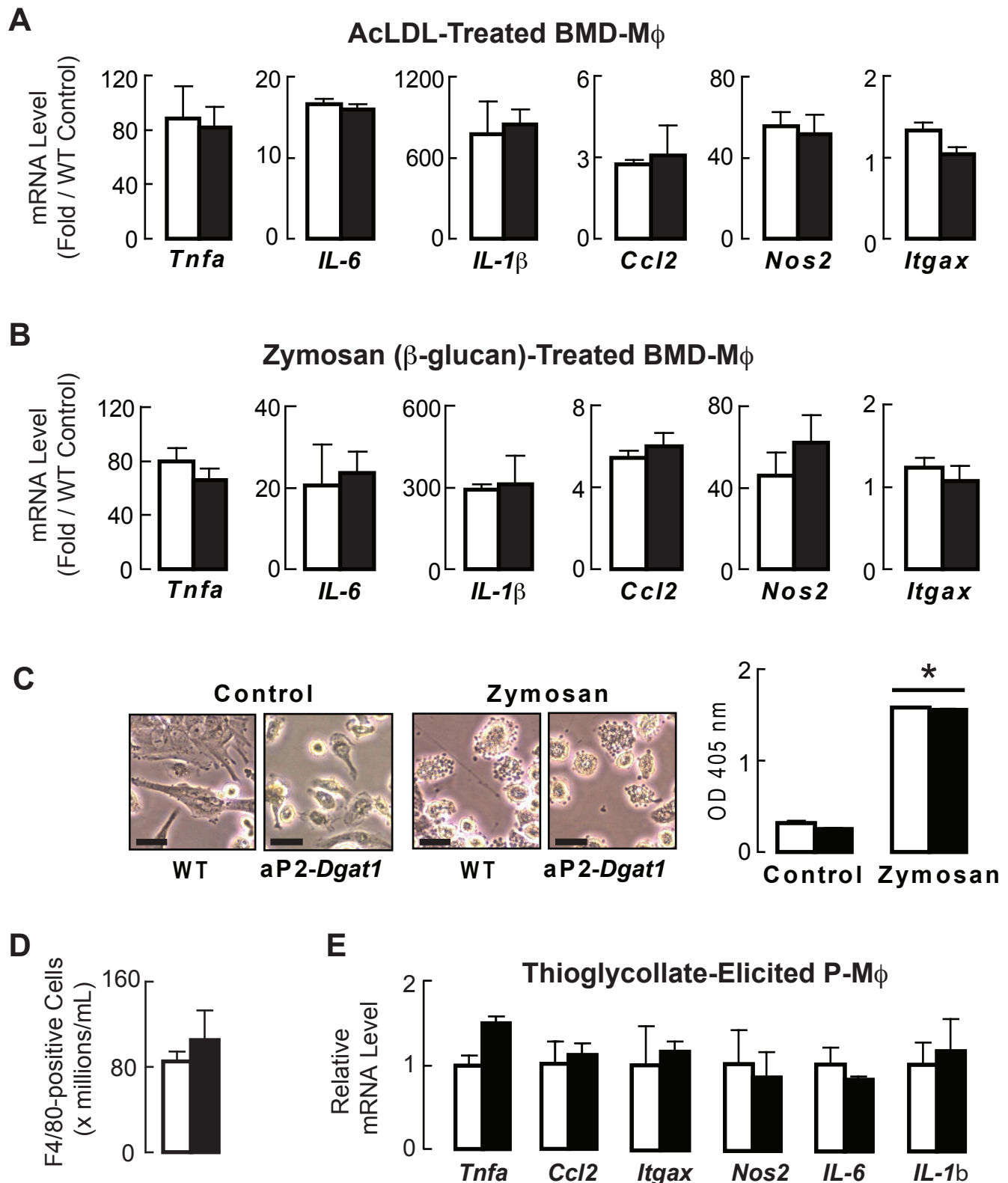
□ WT ■ *aP2-Dgat1*

Figure S4

aP2-Dgat1 macrophages can mount an M1 inflammatory response. (A) qPCR analysis of M1 gene mRNA levels in WT and *aP2-Dgat1* BMD-M ϕ after 6 h in medium containing 50 mg/ml AcLDL, showing an intact M1 response in *aP2-Dgat1* cells ($n = 5$ per group). Shown are fold increases in mRNA levels over those of WT cells in medium alone (control). (B) As for A, except that the cells were incubated for 2 h in medium containing non-opsinized zymosan particles. (C) Phase-contrast images (right) and colorimetric quantification (left) showing the equivalent capacity of WT and *aP2-Dgat1* BMD-M ϕ to phagocytose zymosan particles over 2 h ($n = 5$ per group; * $p < 0.01$ vs. WT control). Scale bars = 15 μ m. (D) Numbers of F4/80-positive P-M ϕ harvested 72 h after peritoneal instillation of thioglycollate and counted by FACS, showing equivalence between genotypes ($n = 3-4$ per group). (E) Similar M1 gene mRNA levels in thioglycollate-elicited P-M ϕ measured by qPCR from WT and *aP2-Dgat1* mice ($n = 4$ per group).

Table S1. Primers for quantitative real-time PCR

Gene	Sequence
<i>Arg1</i>	Forward: 5'-CTCCAAGCCAAAGTCCTTAGAG-3' Reverse: 5'-AGGAGCTGTCATTAGGGACATC-3'
<i>Ccl2</i>	Forward: 5'-AGGTCCCATGTCATGCTTCTGG-3' Reverse: 5'-CTGCTGCTGGTGATCCTCTTG-3'
<i>Chi3l3</i>	Forward: 5'-AGAAGGGAGTTTCAAACCTGGT-3' Reverse: 5'-GTCTTGCTCATGTGTGTAAGTGA-3'
<i>Cyclo</i>	Forward: 5'-TGGAAGAGCCAAGACAGACA-3' Reverse: 5'-TGCCGGAGTCGACAATGAT-3'
<i>Dgat1</i>	Forward: 5'-TTCCGCCTCTGGGCATT-3' Reverse: 5'-AG AATCGGCCCACAATCCA-3'
<i>Dgat2</i>	Forward: 5'-AGTGGCAATGCTATCATCATCGT-3' Reverse: 5'-TCTTCTGGACCCATCGGCCCCAGGA-3'
<i>Emr1</i>	Forward: 5'-CTTTGGCTATGGGCTTCCAGTC-3' Reverse: 5'-GCAAGGAGGACAGAGTTTATCGTG-3'
<i>IL-1β</i>	Forward: 5'-GCAACTGTTCCTGAACTCAACT-3' Reverse: 5'-ATCTTTTGGGGTCCGTCAACT-3'
<i>IL-6</i>	Forward: 5'-TAGTCCTTCCTACCCCAATTTCC-3' Reverse: 5'-TTGGTCCTTAGCCACTCCTTC-3'
<i>Itgax</i>	Forward: 5'-CTGGATAGCCTTTCTTCTGCTG-3' Reverse: 5'-GCACACTGTGTCCGAACTC-3'
<i>Mgl2</i>	Forward: 5'-TTAGCCAATGTGCTTAGCTGG-3' Reverse: 5'-GGCCTCCAATTCTTCTTGAAACCT-3'
<i>Mrc2</i>	Forward: 5'-TACAGCTCCACGCTATGGATT-3' Reverse: 5'-CACTCTCCCAGTTGAGGTACT-3'
<i>Nos2</i>	Forward: 5'-CCAAGCCCTCACCTACTTCC-3' Reverse: 5'-CTCTGAGGGCTGACACAAGG-3'
<i>Pparg</i>	Forward: 5'-TGCCAGTTTCGATCCGTAGA-3' Reverse: 5'-CAAGGTTAATGAAACCAGGGATTATT-3'
<i>Tnfa</i>	Forward: 5'-ACGGCATGGATCTCAAAGAC-3' Reverse: 5'-AGATAGCAAATCGGCTGACG-3'