## **Supplement Material**

Gene	Primers (5'-3')		Access Number
Tnfα	F	CCACCACGCTCTTCTGTCTAC	NM_013693.3
	R	AGGGTCTGGGCCATAGAACT	
<i>ll6</i>	F	TGATGCACTTGCAGAAAACA	NM_031168.2
	R	ACCAGAGGAAATTTTCAATAGGC	
Vcam1	F	CCGGCATATACGAGTGTGAA	NM_011693.3
	R	TCGGGCGAAAAATAGTCCT	
Ccr7	F	CAAACAGGAGCTGATGTCCA	NM_007719.2
	R	GTCTCTCCAGCTAGCCCA	
Cxcl10	F	CTCATCCTGCTGGGTCTGAG	NM_021274.2
	R	CCTATGGCCCTCATTCTCAC	
Inos (Nos2)	F	TGAAGAAAACCCCTTGTGCT	NM_010927.4
	R	TTCTGTGCTGTCCCAGTGAG	
Arg2	F	AGAAGCTGGCTTGCTGAAGA	NM_009705.3
	R	AGGGATCATCTTGTGGGACA	
Ccl17	F	TGCTTCTGGGGACTTTTCTG	NM_011332.3
	R	ATAGGAATGGCCCCTTTGAA	
Cd206 (Mrc1)	F	TGGCATGTCCTGGAATGAT	NM_008625.2
	R	CAGGTGTGGGGCTCAGGTAGT	

Supplemental Table I: Primers sequences used in RT-PCR. F = forward, R = reverse



**Supplemental Figure I.** (A) Fat mass (Total, Abdominal and Visceral) (B) Glucose tolerance test (IPGTT) (C) Time course of plasma fasting IGF-1 levels.



**Supplemental Figure II.** (A and B) Total plasma cholesterol (A) and triglycerides (B) of HFD-fed control and insulin treated ApoE-/- mice (C) fast performance liquid chromatography gel-filtration for cholesterol concentration.



**Supplemental Figure III.** (A and B) Fasting plasma glucose (A) and insulin (B) measurements from control and HFD-fed control, Phlorizin and insulin treated ApoE-/- mice.

A

B



**Supplemental Figure IV.** Body weights of experimental animals during HFD feeding on insulin or Phlorizin-treated ApoE-/- mice.

Α



+Insulin +Phlorizin

Supplemental Figure V. (A-B) Ki67 staining and quantification of macrophage proliferation (B). (C and D) TUNEL staining (C) and quantification of apoptosis (D).



**Supplemental Figure VI.** (A and B) Plasma levels of VLDL/LDL (A) and HDL (B) from control and insulin or phlorizin treated HFD-ApoE-/- mice.



Supplemental Figure VII. (A and B) Time course of plasma LPL activity and quantification of activity (AUC) in control and insulin or phlorizin treated HFD-ApoE-/- mice. (C and D) level of Lpl mRNA in WAT (C) and liver (D).

С



B



**Supplemental Figure VIII.** (A) Circulating Ly6C+/CCR2+ monocyte levels in blood from control and insulin or phlorizin treated HFD-ApoE-/-mice. (B) Quantification of FACS analysis.

A



B



**Supplemental Figure IX.** (A and B) Tnfα (A) and Il6 (B) mRNA expressions in subcutaneous WAT from control and insulin or phlorizin treated HFD-ApoE-/- mice.

A



**Supplemental Figure X.** Correlations between plasma cholesterol levels and atherosclerosis events.