

**Supplemental Tables:****Supplemental Tables 1: qRT-PCR primer design**

<i>Primer (qRT-PCR)</i>	<i>Sequence</i>
36B4	5'- CCCACTTACTGAAAAGGTCA 3'- TTAGTCGAAGAGACCGAATC
aP2 (mouse)	5'- ACATGAAAGAAGTGGGAGTG 3'- GGTTATGATGCTCTTCACCT
C/EBP $\alpha$ (mouse)	5'- CAAGAACAGCAACGAGTACC 3'- TTGACCAAGGAGCTCTCAG
Caspase3 (mouse)	5'- ACTTCCATAAGAGCACTGCA 3'- ACCATGGCTTAGAATCACAC
CDS1 (human)	5'- CCTTGTCATCCAAAATCTGT 3'- GAATCCTTCCCAAGTCTTTT
CDS1 (mouse)	5'- CGCACGTCACTTTACTGATA 3'- GAATCCTTCCCAAGTCTTCT
CDS2 (human)	5'- GGCTACAACGTCTACCACTC 3'- GAACCGGTGGTATTTACTGA
CDS2 (mouse)	5'- TGGTTTATTGTTCCCATCTC 3'- AGCATCTGTACCCAGACATC
GAPDH	5'- AGAAGGCTGGGGCTCATTG 3'- AGGGGCCATCCACAGTCTTC
LPIN1 (human)	5'- CGACCTTCAACACCTAAAAG 3'- AGTGTCTGAAGATTCGCTGT
PPAR $\gamma$ (mouse)	5'- ACCACAGTTGATTTCTCCAG 3'- TAGAGCTGGGTCTTTTCAGA

Pref1 (mouse)	5'- CCATGAAAGAGCTCAACAAG 3'- TACTGCAACAGGAGGTTCTT
$\beta$ -Actin (human)	5'- AGCGAGCATCCCCAAAGTT 3'- GGGCACGAAGGCTCATCATT

Supplemental Tables 2: siRNA sequences

<i>Gene</i>	<i>Sequence</i>	<i>Supplier</i>
Human CDS1	5'- 3' CUCACUUCCACCCUUCUA	Sigma Aldrich
Human CDS2	5'- 3' CUUGUUAUCCACAACCUAU	Sigma Aldrich
Mouse CDS1	5'- 3' CAGGUUUGACUGUCAGUAU	Sigma Aldrich
Mouse CDS2	5'- 3' GAUUAAGUGUUUCCAUGAA	Sigma Aldrich
Human LPIN1	5'- 3' GCAUGAAUCAUCCUCCAGU	Sigma Aldrich
Mouse LPIN1	5'- 3' GAGACAACGGAGAAGCAU	Sigma Aldrich
Human CDS1	CDS1-homo-1111	Shanghai GenePharma Co. Ltd
Human CDS2	CDS2-homo-1497	Shanghai GenePharma Co. Ltd
Mouse CDS1	CDS1-mus-534	Shanghai GenePharma Co. Ltd
Mouse CDS2	CDS2-mus-248	Shanghai GenePharma Co. Ltd

**Supplemental Figure:**

Supplemental Figure S1: A-C: HeLa cells were transfected with negative control siRNA (siCTRL; A), si*CDS1* (B), or si*CDS2* (C) for 48 h, and then treated with 200  $\mu$ M oleate for 16 h. 3D rendering using Huygens Essential Software was carried out on Z-stack images taken from confocal microscopy.