

## Supplementary files

**Table S1 Primer sequences used for the Real-time qPCR**

<b>Primer name</b>	<b>Forward (5'-3')</b>	<b>Reverse (5'-3')</b>
Cyclin A	TTATTGCTGGAGCTGCCTTT	CTCTGGTGGGTTGAGGAGAG
Cyclin D1	AACTACCTGGACCGCTTCCT	CCACTTGAGCTTGTTACCA
Cdk2	CCATTTTGCCAGAAATTCGT	CATTCCTCTTCCCCTCATCA
P21	GACACCACTGGAGGGTGACT	CAGGTCCACATGGTCTTCCT
CPT-1a	AGACAAGAACCCCAACATCC	CAAAGGTGTCAAATGGGAAGG
Hadha	TGTCCCTGAAGTGTTGCTG	GTCCCATTTTCTTTGCTCTGTC
Etfdh	GGATATTGAGAGGAATGGAGCC	CAAAGCCACAGAGGATAAGAGG
Acs15	GCAGAAAATTGGGAAAGAGGG	TTTCAGTGTCGGTGTGAGAAG
Acaa2	TGTTCTAAAGATGCTGAGGTCG	TTGATCCGTTAATCCTGCCC
Lpl	AACAAGGTCAGAGCCAAGAG	CCATCCTCAGTCCCAGAAAAG
Ndufb8	ACATCTCTTCGGCTTTGTGG	CAGGCTCTTTGGTAGGATCAC
Sdhd	ACCCCTTCTCTGTCTACCG	AATGCTCGCTTCTCCTTGTAG
Dio2	CCTCCTAGATGCCTACAAACAG	TGATTCAGGATTGGAGACGTG
Slc27a2	ACATCTACTTCAACAGCGGAG	ACAAAATCTACCAGTCCCACG
Zfp516	GGACATCACTAACAGGGACAC	ACCGTCACACTCAAACACC
Atf2	TGAGAAATGAAGTGGCCCAG	TTCTGTATGTGGACTGCTTGG
Lsd1	AGCTACAGAGTTTTGGGATGG	GATTCCCTCCAAGACCTGTTAC
Sncg	GTTGTGGGTGCTGTAGAAAAG	GCCTGCTCCTTGGTCTTC
Gsn	AGGTCTTTGTCTGGGTTGG	TTTGCTGGATCTGTCTCGATG
Rarres2	ATAGTCCACTGCCCAATTCTG	AGGGCTTATTTGGTTCTCAGG
Uqcrc2	TTCCAGTGCAGATGTCCAAG	CTGTTGAAGGACGGTAGAAGG
Cox1	TTTTCAGGCTTCACCCTAGATGA	GAAGAATGTTATGTTTACTCCTACGAATAT
		G
Atp5a	CATTGGTGATGGTATTGCGC	TCCCAAACACGACAACCTCC

**Table S2 List of Antibodies**

Antibodies	Source	Catalogue
ATGL	Cell Signaling Technology	#2439
phospho (Ser563)-HSL	Cell Signaling Technology	#4139
HSL	Cell Signaling Technology	#4107
MGL	Abclonal	A6654
ABHD5	Santa Cruz Biotechnology	sc100468
PLIN5	Abclonal	A20418
FSP27	Abcam	ab213693
RAB7	Cell Signaling Technology	#9367
RAB18	Abcam	ab224466
$\beta$ 3-AR	Abcam	ab94506
CPT1a	Cell Signaling Technology	#97361
NDUFB8	Abcam	ab192878
$\beta$ -actin	Abcam	ab8226

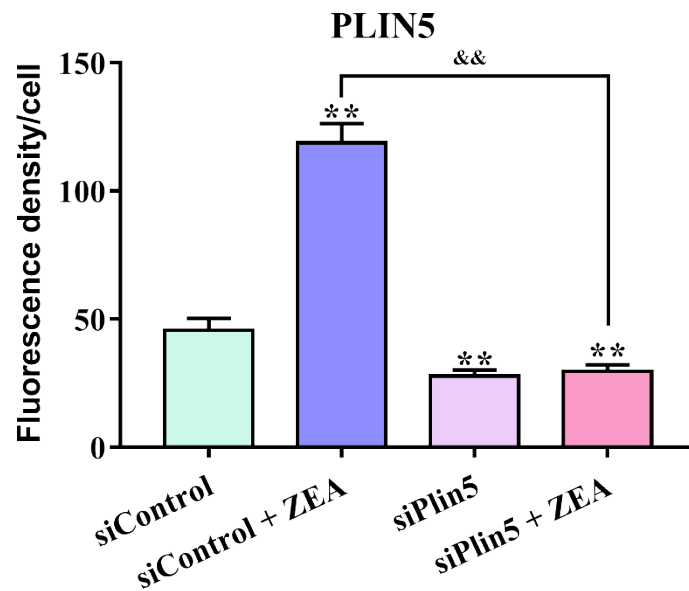


Fig. S1 Quantification of PLIN5-positive adipocytes ( $n = 3$ ). \*\* $p < 0.01$  vs. siControl group; && $p < 0.01$  siControl + ZEA group vs. siPlin5 + ZEA group.