Table 1. Special oligonucleotide sequence of siRNA for *ELOVL7*.

Name	Sequence
siELOVL7-sense	5'- GCACCUGCUGGCUUUAUUATT -3'
siELOVL7-antisense	5'- UAAUAAAGCCAGCAGGUGCTT -3'

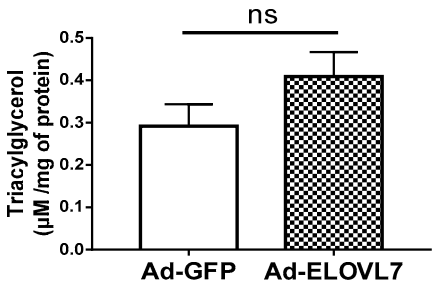
Table 2. Name, accession number, sequences, amplicon length of primer pairs used in the present experiment, efficiency of amplification of PCR, and references.

Gene/Acc. #	Primers[1]	Sequence (5' to 3')	bp[2]	Efficiency[3]	Reference.
ACACA	F. 3609	CTCCAACCTCAACCACTACGG	171	2.03	Shi et al., 2013
XM_005693156.1	R.3779	GGGGAATCACAGAAGCAGCC			
DGAT1	F. 657	CCACTGGGACCTGAGGTGTC	101	1.85	Bionaz and Loor., 2008
XM_005688895.1	R.757	GCATCACCACACACCAATTCA			
DGAT2	F. 192	CATGTACACATTCTGCACCGATT	100	2.10	Bionaz and Loor., 2008
HM566448.1	R. 291	TGACCTCCTGCCACCTTTCT			
ELOVL7	F. 308	ACTATTCACAGTCGCCTACGG	166	2.07	This manuscript
XM_005694673.2	R.473	CAGGTCCATGGCATGATGGT			
FABP3	F. 214	GATGAGACCACGGCAGATG	120	1.92	Shi et al., 2013
NM_001285701.1	R.333	GTCAACTATTTCCCGCACAAG			
FADS1	F. 552	GGTGGACTTGGCCTGGATG	101	2.18	Bionaz and Loor., 2008
EE347846	R. 652	TGACCATGAAGACAAGCCCC			
FADS2	F. 192	AAAGGGTGCCTCTGCCAACT	101	2.06	Bionaz and Loor., 2008
DV895683	R. 291	ACACGTGCAGCATGTTCACA			
FASN	F. 6762	GGGCTCCACCACCGTGTTCCA	226	1.93	Shi et al., 2013
DQ915966.3	R.6987	GCTCTGCTGGGCCTGCAGCTG			
MRPL39	F. 370	AGGTTCTCTTTTGTTGGCATCC	101	1.94	Kadegowda et al., 2009
XM_005674737.1	R.470	TTGGTCAGAGCCCCAGAAGT			
PLIN2	F. 83	TGGTCTCCTCGGCTTACATC	268	2.07	Shi et al., 2013
NM_173980	R.350	TCTTTTGCCCCAGTCATAGC			
RPS9	F.72	CCTCGACCAAGAGCTGAAG	64	2.10	Bionaz and Loor., 2007
XM_005709411.1	R.135	CCTCCAGACCTCACGTTTGTTC			
SCD1	F. 357	CCATCGCCTGTGGAGTCAC	256	1.92	Shi et al., 2013
GU947654	R.612	GTCGGATAAATCTAGCGTAGCA			
UXT	F. 270	TGTGGCCCTTGGATATGGTT	101	2.06	Bionaz and Loor., 2007
XM_005700842.1	R.370	GGTTGTCGCTGAGCTCTGTG			

[1]Primer direction (F-forward, R-reverse) and hybridization position on the sequence.
[2]Amplicon size in base pair (bp)
[3]Efficiency of amplification

Figure 1. Cellular TAG Assays after altering ELOVL7 expression.The protocol for cellular TAG assay was described previously (Kang et al., 2015, Shi et al., 2015b). Total cellular TAG was extracted using the GPO-Trinder triglyceride assay kit (http://www.applygen.com/a/meixueyushenghuaceding/276.html, Applygen Technologies, Beijing, China). The quantification of total cellular TAG was normalized to the cellular protein concentration. Protein concentration of each well was determined using a BCA protein assay kit (Pierce, Thermo fisher Scientific, USA) according to the manufacturer's instructions (https://www.thermofisher.com/order/catalog/product /23225).

A



B

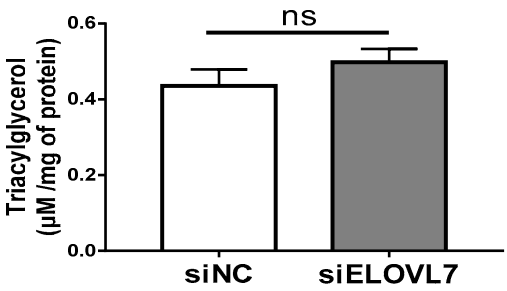


Figure S1. Elongation of very long chain fatty acid-like fatty acid elongase 7 (*ELOVL7*) did not significantly alter the accumulation of cellular triacylglycerol (TAG). The goat mammary epithelial cells (GMEC) were transfected with Ad-ELOVL7 or Ad-GFP or incubated with siRNA target *ELOVL7* (siELOVL7) or negative control (siNC), and collected at 48 h for cellular TAG analysis. Values are means ± SEM from 3 individual cultures. The data were determined via Student's t-test (Ad-ELOVL7 *vs.* Ad-GFP or siELOVL7 *vs.* siNC). ns represents no significant change compared with control.