**Supplementary File (for online publication only)**

**Supplementary Table S1** *Primer and probe sequences and conditions used for real-time reverse transcription-PCR*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gene | Encoded protein | Accession no. | Nucleotide sequence (5’ 🡪 3’)1 | T2 | Source |
| *ACACA* | Acetyl-CoA carboxylase alpha | NM\_001009256 | F: CAT GGA AAT GTA CGCGGA CC | 58 | Bernard *et al*., 2005 |
|  |  |  | R: GGT GGT AGA TGG GAA GGA GG |  |  |
|  |  |  | P: CGA GCG GAA GGA GCT GGA GAG CA |  |  |
| *FASN* | Fatty acid synthase | DQ223929 | F: ACA GCC TCT TCC TGT TTG ACG | 60 | Bernard *et al*., 2005 |
|  |  |  | R: CTC TGC ACG ATC AGC TCG AC |  |  |
|  |  |  | P: ATC TGG AGG CGC GTG TGG CAG CC |  |  |
| *LPL* | Lipoprotein lipase | AF228667 | F: TTC AGA GGC TAT TAC TGG AAA TCC | 60 | Bernard *et al*., 2005 |
|  |  |  | R: ATG TCA ATC ACA GCA TTC ATT CTA CT |  |  |
|  |  |  | P: TTC CAG TGG TGC CGG AAC ACT CCT TC |  |  |
| *CD36* | Thombospondin receptor | X91503 | F: ACA GAT GTG GCT TGA GCG TG | 58 | Bernard *et al*., 2012 |
|  |  |  | R: ACT GGG TCT GTG TTT TGC AGG |  |  |
| *FABP3* | Fatty acid-binding protein 3, heart | BT021486 | F: CCT CTC CTT CCA CTG ACT GC | 58 | Jurie *et al*., 2007 |
|  |  |  | R: TTG ACC TCA GAG CAC CCT TT |  |  |
| *FABP4* | Fatty acid-binding protein 4, adipocyte | NM\_174314 | F: GGT ACC TGG AAA CTT GTC TCC | 58 | Jurie *et al*., 2007 |
|  |  |  | R: CTG ATT TAA TGG TGA CCA CAC |  |  |
| *SCD1* | Stearoyl-CoA desaturase 1 | AF325499 | F: TGC TGA CAA CTT ATC TGG ATG C | 60 | Bernard *et al*., 2005 |
|  |  |  | R: AAG GAA TCC TGC AAA CAG CTA |  |  |
|  |  |  | P: CCA GAG CCT GCA GAA GTG GCT GGT ATA A |  |  |
| *SCD5* | Stearoyl-CoA desaturase 5 | NM\_001112815 | F: AGA AGG GGA GGA AGC TTG AC | 58 | Lengi and Corl, 2007 |
|  |  |  | R: GGA GGC CAG GAA GTA GGA GT |  |
| *GPAM* | Glycerol-3-phosphate acyltransferase, mitochondrial | NM\_001012282 | F: ACC AGC AGT TCA TCA CCT TC | 58 | Faulconnier *et al*., 2011 |
|  |  | R: GTA CAC GGC AAC CCT CCT CT |  |
| *CPT2* | Carnitine palmitoyl transferase 1B | NM\_001045889 | F: GCC TCT GTT TCA GCA TAA | 60 | This article |
|  |  |  | R: GGT GCT CAG GCA CCT CAT A |  |  |
| *ELOVL5* | Elongation of very long chain fatty acids like 5 | NM\_001046597 | F: CTG AAT ACC TTC TCC ACT GGA GGA | 60 | Faulconnier et al., 2011 |
|  |  |  | R: GCT CCC TGT AAT ATG AAT GTG CAA |  |
| *ELOVL6* | Elongation of very long chain fatty acids like 6 | NP\_001095625 | F: CAA TAT TTT CCC AGG GTT | 62 | This article |
|  |  |  | R: AGC TGC CCT TTC AAG AGT TG |  |  |
| *MFGE8* | Milk fat globule-EGF factor 8 | NM\_005928 | F: TGA GTA GGT CTG GGA TGG AC | 60 | Ollier *et al*., 2007 |
|  |  |  | R: GGA AGC TGC CTG TGT ACT CT |  |  |
| *XDH* | Xanthine dehydrogenase oxidase | X83508 | F: GCC CTG CAG AAC ATG AAT CT | 60 | Ollier *et al*., 2009 |
|  |  |  | R: GCA CAA ATA CTT CCT ACA CCT |  |  |
| *SREBF1* | Sterol regulatory element binding transcription | TC263657 | F: CCA GCT GAC AGC TCC ATT GA | 60 | Harvatine and Bauman, 2006 |
|  | factor 1 |  | R: TGC GCG CCA CAA GGA |  |
| *PPARG* | Peroxisome proliferator-activated receptor gamma | NM\_177945 | F: CAG GTT TGA AAG AAG CCA CA  R: TTA CGG AAA CGT CCC TCT TG | 60 | Bonnet *et al*., 2007 |
|  |  |  |  |
| *PPIA* | Cyclophilin A | XM\_001252497 | F: GGA TTT ATG TGT CCA GGG TGG TGA | 60 | Bonnet *et a*l., 2000 |
|  |  | R: CAA GAT GCC AGG ACC TGT ATG |  |  |
|  |  | P: TCT CCC CAT AGA TGG ACT TGC CAC CAG |  |  |
| *UXT* | Ubiquitously-expressed transcript | BQ676558 | F: TGT GGC CCT TGG ATA TGG TT | 60 | Kadegowda *et al*., 2009 |
|  |  | R: GGT TGT CGC TGA GCT CTG TG |  |
| *EIF3K* | Eukaryotic translation initiation factor 3 subunit K | NM\_001034489 | F: CCA GGC CCA CCA AGA AGA A | 60 | Kadegowda *et al*.,2009 |
|  |  | R: TTA TAC CTT CCA GGA GGT CCA TGT |  |

1 Sequences: F = forward primer; R = reverse primer; P = Taqman probe.

2 T = PCR annealing temperature (°C).

**Supplementary Table S2** *Other fatty acids (FA) of milk from ewes fed a total mixed ration plus 0 (control diet) or 25 g of sunflower oil/kg dry matter (SO diet).*

*(to complete the FA profile shown in Table 3)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Milk | |  |  |
| FA (g/100 g FA) | Control | SO | s.e.d. | *P* 1 |
| 5:0 | 0.02 | 0.01 | <0.01 | ns |
| 7:0 | 0.03 | 0.02 | <0.01 | \*\* |
| 9:0 | 0.06 | 0.03 | 0.01 | \*\* |
| c9-10:1 | 0.30 | 0.18 | 0.02 | \*\* |
| 11:0 | 0.09 | 0.04 | 0.01 | \*\* |
| c9-12:1 | 0.09 | 0.04 | 0.01 | \*\* |
| t9-12:1 | 0.05 | 0.03 | <0.01 | \*\* |
| iso-13:0 | 0.03 | 0.02 | <0.01 | ns |
| anteiso-13:0 | 0.010 | 0.007 | 0.001 | \* |
| 4,8,12-trimethyl-13:0 | 0.24 | 0.23 | 0.01 | ns |
| iso-14:0 | 0.14 | 0.10 | 0.02 | \* |
| c7-14:1 | 0.01 | 0.01 | <0.01 | ns |
| c12-14:1 | 0.09 | 0.04 | 0.01 | \*\* |
| t5-14:1 | 0.02 | 0.02 | <0.01 | ns |
| iso-15:0 | 0.28 | 0.26 | 0.02 | ns |
| anteiso-15:0 | 0.52 | 0.42 | 0.05 | \* |
| t5-15:1 | 0.18 | 0.13 | 0.02 | \* |
| t6-,7-15:1 | 0.03 | 0.02 | <0.01 | \* |
| iso-16:0 | 0.04 | 0.04 | <0.01 | ns |
| 3,7,11,15-tetramethyl-16:0 | 0.35 | 0.27 | 0.045 | ns |
| c7-16:1 | 0.29 | 0.32 | 0.03 | ns |
| c14-16:1 | 0.16 | 0.07 | 0.02 | \*\* |
| t5-16:1 | 0.03 | 0.02 | <0.01 | \* |
| t6-,8-16:1 | 0.08 | 0.10 | 0.01 | ns |
| t9-16:1 | 0.09 | 0.14 | 0.02 | \* |
| iso-17:0 | 0.40 | 0.34 | 0.04 | ns |
| c9-17:1 | 0.27 | 0.20 | 0.02 | \* |
| t7-17:1 | 0.02 | 0.02 | 0.01 | ns |
| 10-oxo-18:0 | 0.03 | 0.03 | 0.01 | ns |
| 13-oxo-18:0 | 0.03 | 0.02 | <0.01 | \*\* |
| c11-18:1 | 0.55 | 0.53 | 0.04 | ns |
| c13-18:1 | 0.07 | 0.11 | 0.02 | \* |
| c15-18:1 | 0.09 | 0.17 | 0.01 | \*\*\* |
| c16-18:1 | 0.08 | 0.14 | 0.01 | \*\*\* |
| t4-18:1 | 0.02 | 0.04 | <0.01 | \*\* |
| t5-18:1 | 0.02 | 0.04 | <0.01 | \*\* |
| t6-,7-,8-18:1 | 0.19 | 0.43 | 0.03 | \*\* |
| t16-18:12 | 0.35 | 0.66 | 0.05 | \*\*\* |
| c9,c15-18:2 | 0.15 | 0.10 | 0.01 | \*\* |
| c9,t13-18:2 | 0.24 | 0.50 | 0.05 | \*\* |
| 9,14-18:2 | 0.07 | 0.15 | 0.01 | \*\* |
| t9,t12-18:2 | 0.006 | 0.012 | 0.002 | \*\* |
| t9,c11-CLA | 0.02 | 0.03 | <0.01 | \* |
| t10,c12-CLA | 0.005 | 0.007 | 0.001 | \* |
| t11,t13-CLA | 0.01 | 0.01 | <0.01 | ns |
| other trans,trans-CLA3 | 0.08 | 0.07 | 0.01 | \* |
| c6,c9,c12-18:3 | 0.09 | 0.04 | 0.01 | \*\* |
| c9,t11,c15-18:3 | 0.02 | 0.02 | 0.01 | ns |
| t9,t12,c15-18:3 | 0.02 | 0.01 | <0.01 | \*\*\* |
| t9,t12,t15-18:3 | 0.04 | 0.04 | 0.01 | ns |
| 19:04 | 0.12 | 0.11 | 0.01 | ns |
| 20:0 | 0.26 | 0.29 | 0.01 | \* |
| c5-20:1 | 0.08 | 0.09 | 0.01 | ns |
| c11-20:1 | 0.07 | 0.07 | 0.01 | ns |
| c11,c14-20:2 | 0.03 | 0.02 | <0.01 | \* |
| c11,c14,c17-20:3 | 0.03 | 0.03 | 0.01 | ns |
| c5,c8,c11,c14-20:4 | 0.20 | 0.18 | 0.02 | ns |
| c8,c11,c14,c17-20:4 | 0.02 | 0.01 | <0.01 | \* |
| c5,c8,c11,c14,c17-20:5 | 0.06 | 0.05 | <0.01 | \*\*\* |
| 21:0 | 0.11 | 0.09 | 0.01 | \* |
| 22:0 | 0.21 | 0.25 | 0.02 | ns |
| c7,c10,c13,c16-22:4 | 0.04 | 0.03 | 0.01 | ns |
| c7,c10,c13,c16,c19-22:5 | 0.15 | 0.12 | 0.02 | ns |
| c4,c7,c10,c13,c16,c19-22:6 | 0.05 | 0.05 | 0.01 | ns |
| 23:0 | 0.15 | 0.10 | 0.02 | \* |
| 24:0 | 0.07 | 0.06 | <0.01 | ns |
| c15-24:1 | 0.03 | 0.03 | 0.01 | ns |

1 Probability of significant effects due to experimental diet. ns*=*non-significant (*P>*0.10); \**P<*0.05; \*\**P<*0.01; \*\*\**P<*0.001.

2 Coelutes with 10,14-18:2.

3 Sum of t7,t9-CLA + t8,t10-CLA + t9,t11-CLA + t10,t12-CLA.

4 Contains t11,t15-18:2 as a minor component.

**Supplementary Table S3** *Other fatty acids (FA) of mammary tissue from ewes fed a total mixed ration plus 0 (control diet) or 25 g of sunflower oil/kg dry matter (SO diet).*

*(to complete the FA profile shown in Table 3)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Mammary tissue | |  |  |
| FA (g/100 g FA) | Control | SO | s.e.d. | *P* 1 |
| c9-12:1 | 0.06 | 0.04 | 0.03 | ns |
| iso-15:0 | 0.19 | 0.21 | 0.04 | ns |
| anteiso-15:0 | 0.42 | 0.35 | 0.08 | ns |
| t9-14:12 | 0.06 | 0.01 | 0.04 | ns |
| iso-16:0 | 0.33 | 0.29 | 0.06 | ns |
| t9-16:1 | 0.08 | 0.11 | 0.03 | ns |
| iso-17:03 | 0.72 | 0.70 | 0.04 | ns |
| c9-17:1 | 0.48 | 0.39 | 0.05 | ns |
| c10-18:14 | 1.55 | 1.62 | 0.16 | ns |
| c11-18:1 | 1.14 | 1.13 | 0.11 | ns |
| c13-18:1 | 0.13 | 0.14 | 0.02 | ns |
| c15-18:1 | 0.15 | 0.17 | 0.02 | ns |
| c16-18:1 | 0.06 | 0.07 | 0.01 | ns |
| t4-18:1 | 0.03 | 0.04 | 0.01 | ns |
| t5-18:1 | 0.01 | 0.02 | 0.01 | † |
| t6-,7-,8-18:1 | 0.21 | 0.34 | 0.07 | † |
| t16-18:1 | 0.34 | 0.42 | 0.06 | ns |
| c9,c15-18:2 | 0.24 | 0.21 | 0.02 | ns |
| c9,t13-18:2 | 0.36 | 0.43 | 0.08 | ns |
| 9,14-18:2 | 0.16 | 0.20 | 0.03 | ns |
| 10,14-18:2 | 0.12 | 0.16 | 0.03 | ns |
| t9,c11-CLA | 0.05 | 0.06 | 0.01 | ns |
| t10,c12-CLA | 0.02 | 0.02 | 0.01 | ns |
| t11,t13-CLA | 0.05 | 0.03 | 0.01 | † |
| other *trans*,*trans*-CLA5 | 0.05 | 0.06 | 0.01 | ns |
| c6,c9,c12-18:3 | 0.03 | 0.02 | <0.01 | † |
| 19:06 | 0.12 | 0.11 | 0.01 | ns |
| 20:0 | 0.29 | 0.28 | 0.03 | ns |
| c5-20:1 | 0.02 | 0.03 | <0.01 | ns |
| c11-20:1 | 0.14 | 0.14 | 0.02 | ns |
| c11,c14-20:2 | 0.09 | 0.07 | 0.03 | ns |
| c8,c11,c14-20:3 | 0.08 | 0.09 | 0.02 | ns |
| c11,c14,c17-20:3 | 0.03 | 0.02 | 0.02 | ns |
| c5,c8,c11,c14-20:4 | 0.57 | 0.61 | 0.13 | ns |
| c5,c8,c11,c14,c17-20:5 | 0.13 | 0.13 | 0.01 | ns |
| 21:0 | 0.09 | 0.07 | 0.02 | ns |
| 22:0 | 0.15 | 0.15 | 0.02 | ns |
| c7,c10,c13,c16-22:4 | 0.11 | 0.11 | 0.13 | ns |
| c7,c10,c13,c16,c19-22:5 | 0.44 | 0.43 | 0.01 | ns |
| c4,c7,c10,c13,c16,c19-22:6 | 0.13 | 0.13 | 0.03 | ns |
| 23:0 | 0.09 | 0.07 | 0.02 | ns |

1 Probability of significant effects due to experimental diet. ns*=*non-significant (*P>*0.10); † *P<*0.10.

2 Coelutes with iso-15:0.

3 Coelutes with c7-16:1

4 Contains t15-18:1 as minor component.

5 Sum of t7,t9-CLA + t8,t10-CLA + t9,t11-CLA + t10,t12-CLA.

6 Contains t11,t15-18:2 as minor component.

**Supplementary Table S4** *Other fatty acids (FA) of subcutaneous and perirenal adipose tissues (AT) from ewes fed a total mixed ration plus 0 (control diet) or 25 g of sunflower oil/kg dry matter (SO diet).*

*(to complete the FA profile shown in Table 5)*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Subcutaneous AT | |  | Perirenal AT | |  | *P* 1 | | |
| FA (g/100 g FA) | Control | SO |  | Control | SO | s.e.d. | D | T | DxT |
| 10:0 | 0.06 | 0.09 |  | 0.08 | 0.11 | 0.01 | \* | \* | ns |
| 12:0 | 0.06 | 0.07 |  | 0.05 | 0.06 | 0.01 | ns | \*\* | ns |
| t9-14:1 | 0.05 | 0.03 |  | 0.01 | 0.01 | 0.01 | ns | \*\* | ns |
| c13-18:1 | 0.15 | 0.13 |  | 0.10 | 0.08 | 0.01 | † | \*\*\* | ns |
| iso-15:0 | 0.12 | 0.15 |  | 0.15 | 0.17 | 0.02 | ns | \*\*\* | † |
| anteiso-15:0 | 0.17 | 0.18 |  | 0.20 | 0.20 | 0.02 | ns | \* | ns |
| 3,7,11,15-tetramethyl-16:0 | 0.03 | 0.04 |  | 0.05 | 0.04 | <0.01 | ns | \*\*\* | † |
| t9-16:1 | 0.04 | 0.03 |  | 0.03 | 0.03 | <0.01 | \* | \*\* | ns |
| iso-17:0 | 0.37 | 0.38 |  | 0.37 | 0.35 | 0.02 | ns | † | ns |
| iso-18:0 | 0.26 | 0.25 |  | 0.23 | 0.21 | 0.02 | ns | \*\* | ns |
| c12-18:1 | 0.53 | 0.54 |  | 0.49 | 0.47 | 0.04 | ns | \* | ns |
| c15-18:1 | 0.19 | 0.19 |  | 0.18 | 0.16 | 0.02 | ns | \* | ns |
| c16-18:1 | 0.08 | 0.08 |  | 0.09 | 0.08 | 0.01 | ns | \* | ns |
| t4-18:1 | 0.01 | 0.01 |  | 0.01 | 0.01 | <0.01 | ns | ns | ns |
| t5-18:1 | 0.01 | 0.01 |  | 0.01 | 0.01 | <0.01 | ns | ns | ns |
| t6-,7-,8-18:1 | 0.26 | 0.23 |  | 0.32 | 0.25 | 0.05 | ns | ns | ns |
| t9-18:1 | 0.25 | 0.25 |  | 0.25 | 0.25 | 0.02 | ns | ns | ns |
| t16-18:1 | 0.29 | 0.30 |  | 0.45 | 0.37 | 0.09 | ns | ns | ns |
| c9,c15-18:2 | 0.36 | 0.33 |  | 0.21 | 0.18 | 0.03 | ns | \*\*\* | ns |
| c9,t12-18:2 | 0.01 | 0.03 |  | 0.04 | <0.01 | 0.02 | ns | ns | † |
| c9,t13-18:2 | 0.38 | 0.31 |  | 0.20 | 0.16 | 0.04 | ns | \*\*\* | ns |
| 9,14-18:2 | 0.16 | 0.13 |  | 0.03 | 0.07 | 0.03 | ns | \*\*\* | † |
| 10,14-18:2 | 0.10 | 0.09 |  | 0.10 | 0.08 | 0.01 | ns | ns | ns |
| t9,c12-18:2 | 0.03 | 0.03 |  | 0.03 | 0.03 | <0.01 | ns | ns | ns |
| t11,c15-18:2 | 0.27 | 0.23 |  | 0.25 | 0.18 | 0.04 | ns | † | ns |
| t9,c11-CLA | 0.04 | 0.03 |  | 0.02 | 0.02 | 0.01 | ns | \*\* | ns |
| t10,c12-CLA | 0.011 | 0.011 |  | 0.013 | 0.012 | 0.011 | ns | † | ns |
| t11,t13-CLA | 0.03 | 0.03 |  | 0.06 | 0.04 | 0.01 | ns | \* | ns |
| other *trans*,*trans*-CLA2 | 0.04 | 0.05 |  | 0.04 | 0.04 | <0.01 | ns | ns | ns |
| c6,c9,c12-18:3 | 0.02 | 0.02 |  | 0.02 | 0.02 | <0.01 | ns | ns | ns |
| 19:03 | 0.21 | 0.22 |  | 0.31 | 0.28 | 0.02 | ns | \*\*\* | ns |
| 20:0 | 0.08 | 0.10 |  | 0.16 | 0.18 | 0.01 | ns | \*\*\* | ns |
| c11-20:1 | 0.14 | 0.15 |  | 0.15 | 0.13 | 0.03 | ns | ns | ns |
| c13-22:1 | 0.01 | 0.01 |  | 0.01 | 0.01 | 0.01 | ns | ns | ns |
| c11,c14-20:2 | 0.03 | 0.02 |  | 0.02 | 0.02 | 0.01 | ns | ns | ns |
| c8,c11,c14-20:3 | 0.02 | 0.02 |  | 0.01 | 0.01 | <0.01 | ns | \* | ns |
| c11,c14,c17-20:3 | 0.02 | 0.02 |  | 0.01 | 0.01 | <0.01 | ns | \* | ns |
| c8,c11,c14,c17-20:4 | 0.01 | 0.02 |  | 0.01 | 0.01 | <0.01 | ns | \*\* | ns |
| 21:0 | 0.008c | 0.01 |  | 0.021a | 0.021a | 0.010 | ns | \*\*\* | \* |
| 22:0 | 0.01 | 0.01 |  | 0.02 | 0.02 | <0.01 | ns | \* | ns |
| c7,c10,c13,c16-22:4 | 0.014 | 0.014 |  | 0.008 | 0.007 | 0.005 | ns | \*\* | ns |
| c4,c7,c10,c13,c16,c19-22:6 | 0.02 | 0.02 |  | 0.01 | <0.01 | 0.01 | ns | \* | ns |
| 23:0 | 0.01 | 0.02 |  | 0.02 | 0.02 | <0.01 | ns | ns | ns |

1 Probability of significant effects due to experimental diet (D), tissue (T), and their interaction (DxT). ns*=*non-significant (*P>*0.10); † *P<*0.10; \**P<*0.05; \*\**P<*0.01; \*\*\**P<*0.001.

2 Sum of t7,t9-CLA + t8,t10-CLA + t9,t11-CLA + t10,t12-CLA.

3 Contains t11,t15-18:2 as minor component.

a,b,c Means within a row with different differ significantly (*P*<0.05).

**Supplementary Table S5** *Real-time reverse transcription -PCR performance of lipogenic genes, transcription factors and internal controls.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Ct1 | | |  | |
|  | | Mammary tissue | Subcutaneous AT | Perirenal AT | R2 statistic2 | Efficiency3 |
| Lipogenic genes | | |  |  |  |  |
| *ACACA* | | 32-33 | 27-32 | 28-32 | 0.974 | 1.85 |
| *FASN* | | 27-29 | 26-32 | 27-31 | 0.999 | 1.80 |
| *LPL* | | 26-28 | 23-29 | 23-27 | 0.998 | 1.54 |
| *CD36* | | 18-19 | 17-18 | 16-17 | 0.998 | 1.60 |
| *FABP3* | | 15-17 | 25-28 | 26-28 | 0.913 | 1.91 |
| *FABP4* | | 27-28 | 21-23 | 21-23 | 0.912 | 1.90 |
| *SCD1* | | 25-26 | 22-24 | 21-25 | 0.997 | 1.73 |
| *SCD5* | | 31-33 | 31-35 | 31-33 | 0.975 | 2.10 |
| *GPAM* | | 20-22 | 19-22 | 19-22 | 0.996 | 1.76 |
| *CPT2* | | 30-31 | 26-28 | 26-29 | 0.995 | 1.78 |
| *ELOVL5* | | 31-33 | 26-30 | 26-29 | 0.984 | 1.92 |
| *ELOVL6* | | 32-35 | 23-27 | 23-27 | 0.999 | 1.72 |
| *MFGE8* | | 21-23 | 25-28 | 26-28 | 0.998 | 1.60 |
| *XDH* | | 19-20 | 34-35 | 33-36 | 0.965 | 1.81 |
| Transcription factors | | |  |  |  |  |
| *SREBF1* | | 28-29 | 27-29 | 27-30 | 0.996 | 2.02 |
| *PPARG* | | 28-29 | 23-25 | 23-25 | 0.993 | 1.85 |
| Internal controls | | |  |  |  |  |
| *PPIA* | | 26-27 | 24-26 | 24-26 | 0.979 | 1.83 |
| *UXT* | | 27-28 | 26-27 | 25-27 | 0.998 | 1.94 |
| *EIF3K* | | 25-27 | 23-26 | 22-25 | 0.997 | 1.74 |

1Cycle threshold.

2Coefficient of determination (R2) of the standard curve.

3The efficiency was calculated as [10(-1 / Slope)].

**Supplementary Material S1** *References used in Supplementary Table S1.*

Bernard L, Leroux C, Rouel J, Bonnet M and Chilliard Y 2012. Effect of level and type of starchy concentrate on tissue lipid metabolism, gene expression, and milk fatty acid secretion in Alpine goats receiving a diet rich in sunflower oil. British Journal of Nutrition 107, 1147-1159.

Bernard L, Rouel J, Leroux C, Ferlay A, Faulconnier Y, Legrand P and Chilliard Y 2005. Mammary lipid metabolism and milk fatty acid secretion in alpine goats fed vegetable lipids. Journal of Animal Science 88, 1478-1489.

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