Supplementary Table 1. PCR primers used in the present study for real-time quantitative PCR (qPCR).

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| **Transcript** | **Primer sequence (5’→3’)** | **Amplicon (bp)** | **Ta** | **Accession no** |
| *fads2d6* | F: TCCTCTGGTGCGTACTTTGT | 163 | 59˚ C | NM\_001123575.2a |
| R: AAATCCCGTCCAGAGTCAGG |
| *fads2d5* | F: GCCACTGGTTTGTATGGGTG | 148 | 59˚ C | NM\_001123542.2a |
| R: TTGAGGTGTCCACTGAACCA |
| *elovl2* | F: GGTGCTGTGGTGGTACTACT | 190 | 59˚ C | NM\_001136553.1a |
| R: ACTGTTAAGAGTCGGCCCAA |
| *elovl5a* | F: TGTTGCTTCATTGAATGGCCA | 150 | 59˚ C | GU238431.1a |
| R: TCCCATCTCTCCTAGCGACA |
| *elovl5b* | F: CTGTGCAGTCATTTGGCCAT | 192 | 59˚ C | NM\_001136552.1a |
| R: GGTGTCACCCCATTTGCATG |
| *srebp1* | F: gccatgcgcaggttgtttcttca | 151 | 63˚ | TC148424b |
| R: Tctggccaggacgcatctcacact |
| *srebp2* | F: TCGCGGCCTCCTGATGATT | 147 | 63˚ | TC166313b |
| R: AGGGCTAGGTGACTGTTCTGG |
| *lxr* | F: GCCGCCGCTATCTGAAATCTG | 210 | 58˚ | FJ470290a |
| R: CAATCCGGCAACCAATCTGTAGG |
| *pparα* | F: TCCTGGTGGCCTACGGATC | 111 | 60˚ | DQ294237a |
| R: CGTTGAATTTCATGGCGAACT |
| *pparγ* | F: CATTGTCAGCCTGTCCAGAC | 144 | 60˚ | AJ416951a |
| R: TTGCAGCCCTCACAGACATG |
| *aco* | F: AAAGCCTTCACCACATGGAC | 230 | 60° | TC49531b |
| R: TAGGACACGATGCCACTCAG |
| *cptI* | F: CCTGTACCGTGGAGACCTGT | 212 | 60° | AM230810a |
| R: CAGCACCTCTTTGAGGAAGG |
| *hmgcr* | F: CCTTCAGCCATGAACTGGAT | 224 | 60˚ | DW561983a |
| R: TCCTGTCCACAGGCAATGTA |
| *fas* | F: ACCGCCAAGCTCAGTGTGC | 212 | 60˚ | CK876943a |
| R: CAGGCCCCAAAGGAGTAGC |
| *hprt* | F: GATGATGAGCAGGGATATGAC | 165 | 60˚ | BT125296.1 |
| R: GCAGAGAGCCACGATATGG |
| *ef1a* | F: CTGCCCCTCCAGGACGTTTACAA | 175 | 60˚ C | AF321836a |
| R: CACCGGGCATAGCCGATTCC |
| *rpl2* | F: CTGCCCCTCCAGGACGTTTACAA | 112 | 60˚ C | XM\_014137227.1a |
| R: TGTTCACAGCTCGTTTACCG |
| *tbp* | F: TCCCCAACCTGTGACGAACA | 117 | 60˚ C | NM\_001176374.1a |
| R: GTCTGTCCTGAGCCCCCTGA |

*fads2d6*, delta-6 fatty acyl desaturase; *fads2d5*, delta-5 fatty acyl desaturase; *elovl2*, fatty acyl elongase 2; *elovl5a*, fatty acyl elongase 5 isoform a; *elovl5b*, fatty acyl elongase isoform b; *srebp1*, sterol regulatory element binding protein 1; *srebp2*,sterol regulatory element binding protein 2; *lxr*, liver X receptor; *pparα*, peroxisome proliferator-activated receptor alpha; *pparγ*, peroxisome proliferator-activated receptor gamma; *aco*, acyl-CoA oxidase; *cptI*, carnitine palmitoyltransferase I; *hmgcr*, 3-hydroxy-3-methyl-glutaryl-CoA reductase; *hprt*, hypoxanthine-guanine phosphoribosyltransferase; *ef1α*, elongation factor 1 alpha; *rpl2*, ribosomal protein L2; *tbp*, TATA box binding protein.

 aGenBank (<http://www.ncbi.nlm.nih.gov/>)

bAtlantic salmon Gene Index (<http://compbio.dfci.harvard.edu/tgi/>)