

**TABLE S1. QPCR PRIMERS USED IN THE STUDY. RELATED TO STAR METHODS SECTION**

| <b>PRIMER</b>  | <b>FORWARD</b>             | <b>REVERSE</b>             |
|----------------|----------------------------|----------------------------|
| UCP1           | GGCCTCTACGACTCAGTCCA       | TAAGCCGGCTGAGATCTTGT       |
| CIDEA          | AGCCACCAACATCACCAAT        | CGACTTGACCCGACCTTG         |
| ADRB3          | TCTTGGGGCAACCAGTCAAG       | CACCGCTCAACAGGTTTGATG      |
| ELOVL3         | TCCGCGTTCTCATGTAGGTCT      | GGACCTGATGCAACCCTATGA      |
| COX8B          | GAACCATGAAGCCAACGACT       | GCGAAGTTCACAGTGGTTCC       |
| PRDM16         | GCCATGTGTCAGATCAACGA       | CCTTCTTTCACATGCACCAA       |
| OTOP1          | GACAACCCGATGTCTGGACT       | GCCAAAGCAAATTTCTCTCA       |
| SLC27A2        | GCGTGCCTCAACTACAACATT      | CCTCCTCCACAGCTTCTTGT       |
| ELOVL6         | CAGCAAAGCACCCGAACTA        | AGGAGCACAGTGATGTGGTG       |
| EPHX1          | TCCCTCAATTCCTGGCTATG       | GGCCACCGAATTTAAACCTT       |
| ADIPOQ         | CCGGAACCCCTGGCAG           | CTGAACGCTGAGCGATACACA      |
| FABP4          | TTCGATGAAATGACCGCAGA       | GGTCGACTTTCATCCCCTT        |
| PLIN1          | CCATCTCTACCCGCCTTCG        | CTTGTCAGAGGTGCTTGCAATG     |
| AQP7           | CTGGATGAGGCATTCGTGACT      | TGATGGCGAAGAGACACAGC       |
| TLE3           | AGTCTCGCCTCCATTCCTG        | CATCTGCCCATCAGCACTC        |
| PPAR $\gamma$  | AACTCTGGGAGATTCTCCTGTTGA   | TGGTAATTTCTTGTGAAGTGCTCATA |
| IL6            | GCTACCAAACCTGGATATAATCAGGA | CCAGGTAGCTATGGTACTCCAGAA   |
| MCP1           | CATCCACGTGTTGGCTCA         | GATCATCTTGCTGGTGAATGA      |
| TNF $\alpha$   | TCTTCTCATTCTGCTTGTGG       | GGTCTGGGCCATAGAACTGA       |
| IL1 $\beta$    | AGAAGCTGTGGCAGCTACCTG      | GGAAAAGAAGGTGCTCATGTCC     |
| IL10R $\alpha$ | GCGTGACTCTGAAAGCAATG       | TGAGAACTTCCGGATGGAAA       |
| DIO2           | CAGTGTGGTGACGTCTCCAATC     | TGAACCAAAGTTGACCACCAG      |
| TLE3           | TGGTGAGCTTTGGAGCTGTT       | CGGTTTCCCTCCAGGAAT         |
| EVA1           | GTC CCA ACC AGA CCA TCA AC | CTC CAT CTT GCT CTG GAA GC |
| IL10R $\beta$  | TCTCTTCCACAGCACCTGAA       | GAACACCTCGGCCTCCTC         |

|                         |                            |                        |
|-------------------------|----------------------------|------------------------|
| IL12P40                 | ACCTGCCCAACTGCCGAGGA       | CTGCCGTGCTTCCAACGCCA   |
| IL12P35                 | CTTAGCCAGTCCCGAAACCT       | TTGCTGCCGTGTGATGTCT    |
| IFN $\gamma$            | TTGCCAAGTTTGAGGTCAACAAC    | CGAATCAGCAGCGACTTCTT   |
| IL17A                   | CAGGGAGAGCTTCATCTGTGT      | GCTGAGCTTTGAGGGATGAT   |
| IL17F                   | CCCAGGAAGACATACTCAGAAGAAAA | GCAAGTCCCAACATCAACAG   |
| IL23P19                 | TCCCTACTAGGACTCAGCCAAC     | TGGGCATCTGTTGGGTGT     |
| SOCS3                   | AAGGCCGGAGATTTCGCT         | AACTTGCTGTGGGTGACCAT   |
| TMEM26                  | ACCCTGTCATCCCACAGAG        | TGTTTGGTGGAGTCCTAAGGTC |
| KLHL13                  | AGAATTGGTTGCTGCAATACTCC    | AAGGCACAGTTTCAAGTGCTG  |
| CD40                    | TTGTTGACAGCGGTCCATCTA      | CCATCGTGGAGGTACTGTTTG  |
| CD137                   | CGTGCAGAACTCCTGTGATAAC     | GTCCACCTATGCTGGAGAAGG  |
| EAR2                    | CCTGTAACCCCAGAACTCCA       | CAGATGAGCAAAGGTGCAAA   |
| PM20D1                  | TGGAGAATATATCCGCAAAGC      | GCCACGACTTCATGTTGGA    |
| PPARGC1 $\alpha$        | GAAAAGGCCAAACAGAGAGA       | GTAAATCACACGGCGCTCTT   |
| STAT3                   | GGATCGCTGAGGTACAACCC       | GTCAGGGGTCTCGACTGTCT   |
| UCP1 1°<br>TRANSCRIPT   | TGGACAGCCACTTCTCTCTG       | AGGGTGGTGATGGTCCCTA    |
| CIDEA 1°<br>TRANSCRIPT  | TTCGAGTTTCAAACCATGACC      | GAGGGTACCTGAGGTGGTGA   |
| ELOVL3 1°<br>TRANSCRIPT | CGCCGTAGTCAGATTCTGGT       | CGCCGTAGTCAGATTCTGGT   |
| UCP1 2.4 kb<br>eRNA     | CAAAGCGCTGTGGATGCTTT       | GGTCACCATTTGCTCACTCA   |
| 36B4                    | AGATGCAGCAGATCCGCAT        | GTTCTTGCCCATCAGCACC    |