**Supplemental information**

**Supplementary Spreadsheets:**

**Supplementary file 1a**

**Supplementary file 1b**

**Supplementary file 1c**

**Supplementary file 1d**

**Supplementary file 1e**

**Supplementary file 1a Clinical characteristics of the patients with obese patients and** **normal individuals.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Obesity | Normal | Total |
| Number (male/female) | 70 (35/35) | 25(13/12) | 95(48/47) |
| Age (years) | 33.90±10.04 | 39.56±12.51 | 35.39±10.96 |
| HOMA-IR | 3.77±1.96 | 0.21±0.06 | 2.84±2.31 |
| Glucose (Mm) | 8.39±1.55 | 4.84±0.54 | 7.46±2.07 |
| BMI | 38.30±5.82 | 22.09±1.09 | 34.04±8.57 |

**Supplementary file 1b RNA islolated from epiWAT of wide type mice and *Mir802* KI mice, this table shows significantly changed mRNA (Log2 (FPKM (*Mir802* KI/WT)) ≥1).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| GeneName | Ensembl\_ID | log2FC | Pvalue | Style |
| *Hoxa13* | ENSMUSG00000038203 | 9.651807 | 0.01351 | up |
| *Hoxd11* | ENSMUSG00000042499 | 6.658209 | 0.006495 | up |
| *Hoxc10* | ENSMUSG00000022484 | 4.693734 | 0.007714 | up |
| *En2* | ENSMUSG00000039095 | 4.595353 | 0.035864 | up |
| *srebp1a* | ENSMUSG00000020538 | 4.571764 | 0.009166 | up |
| *Pitx1* | ENSMUSG00000021506 | 4.341437 | 0.04596 | up |
| *Pou2f3* | ENSMUSG00000032015 | 4.150321 | 0.009676 | up |
| *Hoxa11* | ENSMUSG00000038210 | 3.980337 | 0.001692 | up |
| *Isl1* | ENSMUSG00000042258 | 3.860387 | 0.006858 | up |
| *Hand2* | ENSMUSG00000038193 | 3.725467 | 0.008763 | up |
| *Klf14* | ENSMUSG00000073209 | 3.49996 | 0.026366 | up |
| *Smad9* | ENSMUSG00000027796 | 2.841659 | 0.00793 | up |
| *Myc* | ENSMUSG00000022346 | 2.752626 | 0.000554 | up |
| *Hoxa10* | ENSMUSG00000000938 | 2.700145 | 0.011039 | up |
| *Mecom* | ENSMUSG00000027684 | 2.491253 | 0.000465 | up |
| *Wt1* | ENSMUSG00000016458 | 2.457969 | 0.008922 | up |
| *Ikzf3* | ENSMUSG00000018168 | 2.432464 | 0.001121 | up |
| *Id3* | ENSMUSG00000007872 | 2.411512 | 0.000256 | up |
| *Gata5* | ENSMUSG00000015627 | 2.323285 | 0.030167 | up |
| *Hsf3* | ENSMUSG00000045802 | 2.288822 | 0.006623 | up |
| *Atoh8* | ENSMUSG00000037621 | 2.25444 | 1.23E-09 | up |
| *Mxd3* | ENSMUSG00000021485 | 2.230772 | 0.002364 | up |
| *Tbx21* | ENSMUSG00000001444 | 2.182149 | 0.022158 | up |
| *Tcf15* | ENSMUSG00000068079 | 2.121915 | 0.026416 | up |
| *Fosb* | ENSMUSG00000003545 | 2.120021 | 0.009825 | up |
| *Nfatc2* | ENSMUSG00000027544 | 2.101469 | 0.000191 | up |
| *E2f2* | ENSMUSG00000018983 | 2.049752 | 0.003236 | up |
| *Hhex* | ENSMUSG00000024986 | 2.032146 | 0.000615 | up |
| *Meis2* | ENSMUSG00000027210 | 2.02506 | 0.001657 | up |
| *Klf2* | ENSMUSG00000055148 | 1.983177 | 0.000109 | up |
| *Fos* | ENSMUSG00000021250 | 1.962284 | 0.009234 | up |
| *Id4* | ENSMUSG00000021379 | 1.952154 | 0.00125 | up |
| *Id1* | ENSMUSG00000042745 | 1.947201 | 2.84E-05 | up |
| *Nr2f1* | ENSMUSG00000069171 | 1.893459 | 0.000532 | up |
| *Zfp532* | ENSMUSG00000042439 | 1.870363 | 0.010996 | up |
| *Batf2* | ENSMUSG00000039699 | 1.817167 | 0.005769 | up |
| *Tcf7l2* | ENSMUSG00000024985 | 1.785068 | 0.000178 | up |
| *Nfatc4* | ENSMUSG00000023411 | 1.733202 | 0.00053 | up |
| *Zbtb16* | ENSMUSG00000066687 | 1.700151 | 0.001574 | up |
| *Gm9791* | ENSMUSG00000044434 | 1.65468 | 0.049874 | up |
| *Meis1* | ENSMUSG00000020160 | 1.624023 | 8.06E-05 | up |
| *Stat5b* | ENSMUSG00000020919 | 1.588919 | 0.005036 | up |
| *Jdp2* | ENSMUSG00000034271 | 1.528232 | 0.017023 | up |
| *Meis3* | ENSMUSG00000041420 | 1.516706 | 0.000168 | up |
| *Hoxd10* | ENSMUSG00000050368 | 1.51041 | 0.037859 | up |
| *E2f1* | ENSMUSG00000027490 | 1.480872 | 0.007018 | up |
| *Sp100* | ENSMUSG00000026222 | 1.46691 | 0.039014 | up |
| *Stat5a* | ENSMUSG00000004043 | 1.427695 | 0.019569 | up |
| *Zfp811* | ENSMUSG00000055202 | 1.416561 | 0.003906 | up |
| *Carhsp1* | ENSMUSG00000008393 | 1.398672 | 0.004082 | up |
| *Prox1* | ENSMUSG00000010175 | 1.367738 | 0.031229 | up |
| *Fosl1* | ENSMUSG00000024912 | 1.339838 | 0.00617 | up |
| *Zeb1* | ENSMUSG00000024238 | 1.326205 | 0.015982 | up |
| *Prrx2* | ENSMUSG00000039476 | 1.321378 | 0.028109 | up |
| *Tcf4* | ENSMUSG00000053477 | 1.304501 | 0.013775 | up |
| *Klf6* | ENSMUSG00000000078 | 1.287591 | 4.22E-05 | up |
| *Nr2f2* | ENSMUSG00000030551 | 1.279173 | 0.019253 | up |
| *Tsc22d3* | ENSMUSG00000031431 | 1.27762 | 0.017579 | up |
| *Twist2* | ENSMUSG00000007805 | 1.268628 | 0.012384 | up |
| *Hic1* | ENSMUSG00000043099 | 1.267624 | 0.041162 | up |
| *Creb3l1* | ENSMUSG00000027230 | 1.266721 | 0.008765 | up |
| *Elk3* | ENSMUSG00000008398 | 1.233368 | 0.000975 | up |
| *Irf5* | ENSMUSG00000029771 | 1.206849 | 0.028752 | up |
| *E2f7* | ENSMUSG00000020185 | 1.179313 | 0.045124 | up |
| *Irf8* | ENSMUSG00000041515 | 1.157934 | 0.019144 | up |
| *Atf5* | ENSMUSG00000038539 | 1.145464 | 0.002427 | up |
| *Nfatc1* | ENSMUSG00000033016 | 1.145201 | 0.001501 | up |
| *Klf4* | ENSMUSG00000003032 | 1.130278 | 0.003696 | up |
| *Klf11* | ENSMUSG00000020653 | 1.121365 | 0.000285 | up |
| *Zfp808* | ENSMUSG00000074867 | 1.11147 | 0.00275 | up |
| *Nfia* | ENSMUSG00000028565 | 1.099911 | 0.005283 | up |
| *Mitf* | ENSMUSG00000035158 | 1.099293 | 0.004785 | up |
| *Gli3* | ENSMUSG00000021318 | 1.090808 | 0.006217 | up |
| *Jun* | ENSMUSG00000052684 | 1.03333 | 3.60E-14 | up |
| *Zfp874b* | ENSMUSG00000059839 | 1.002869 | 0.027519 | up |
| *E430018J23Rik* | ENSMUSG00000078580 | -1.00115 | 0.00899 | down |
| *Sox4* | ENSMUSG00000076431 | -1.01503 | 2.93E-06 | down |
| *9130019O22Rik* | ENSMUSG00000030823 | -1.02271 | 0.005096 | down |
| *Creb3l2* | ENSMUSG00000038648 | -1.02491 | 0.003621 | down |
| *Zfp458* | ENSMUSG00000055480 | -1.03078 | 0.006384 | down |
| *Zfp316* | ENSMUSG00000046658 | -1.03655 | 0.002049 | down |
| *Ncor2* | ENSMUSG00000029478 | -1.05786 | 0.001175 | down |
| *Cers6* | ENSMUSG00000027035 | -1.06075 | 0.006106 | down |
| *Litaf* | ENSMUSG00000022500 | -1.06154 | 5.26E-05 | down |
| *Pbx4* | ENSMUSG00000031860 | -1.08448 | 0.040166 | down |
| *Bach2* | ENSMUSG00000040270 | -1.08683 | 0.020266 | down |
| *Hoxb5* | ENSMUSG00000038700 | -1.09818 | 0.005408 | down |
| *Zfp1* | ENSMUSG00000055835 | -1.10056 | 1.39E-06 | down |
| *Zfp871* | ENSMUSG00000024298 | -1.10284 | 0.016568 | down |
| *Zfp612* | ENSMUSG00000044676 | -1.11372 | 0.000339 | down |
| *2810021J22Rik* | ENSMUSG00000020491 | -1.11666 | 0.000271 | down |
| *Sall2* | ENSMUSG00000049532 | -1.12955 | 0.004711 | down |
| *Sox13* | ENSMUSG00000070643 | -1.1318 | 0.007724 | down |
| *Plag1* | ENSMUSG00000003282 | -1.14004 | 0.026975 | down |
| *Hmga1* | ENSMUSG00000046711 | -1.16212 | 0.001131 | down |
| *Hoxd4* | ENSMUSG00000079277 | -1.164 | 0.001094 | down |
| *Mzf1* | ENSMUSG00000030380 | -1.19607 | 0.00022 | down |
| *Zfp213* | ENSMUSG00000071256 | -1.21342 | 0.004789 | down |
| *Etv1* | ENSMUSG00000004151 | -1.22741 | 0.000872 | down |
| *Bbx* | ENSMUSG00000022641 | -1.24668 | 6.30E-06 | down |
| *Hey2* | ENSMUSG00000019789 | -1.25209 | 0.021605 | down |
| *Sox12* | ENSMUSG00000051817 | -1.25921 | 0.006839 | down |
| *Vdr* | ENSMUSG00000022479 | -1.26995 | 0.005441 | down |
| *Hoxd8* | ENSMUSG00000027102 | -1.28756 | 0.000209 | down |
| *Erf* | ENSMUSG00000040857 | -1.31185 | 0.000252 | down |
| *Zfp105* | ENSMUSG00000057895 | -1.32159 | 0.000478 | down |
| *Gtf2ird1* | ENSMUSG00000023079 | -1.34195 | 0.007083 | down |
| *Sox9* | ENSMUSG00000000567 | -1.38557 | 0.014846 | down |
| *Hoxb3* | ENSMUSG00000048763 | -1.44753 | 9.20E-06 | down |
| *Zfp13* | ENSMUSG00000062012 | -1.47314 | 4.17E-05 | down |
| *Hoxb8* | ENSMUSG00000056648 | -1.48028 | 0.017419 | down |
| *Klf1* | ENSMUSG00000054191 | -1.48493 | 0.005377 | down |
| *Hoxb6* | ENSMUSG00000000690 | -1.50297 | 0.002964 | down |
| *Zfp189* | ENSMUSG00000039634 | -1.50583 | 0.004554 | down |
| *Runx1* | ENSMUSG00000022952 | -1.50718 | 0.011316 | down |
| *Trp63* | ENSMUSG00000022510 | -1.53182 | 2.35E-06 | down |
| *Sim1* | ENSMUSG00000019913 | -1.58265 | 0.005785 | down |
| *Tcf24* | ENSMUSG00000099032 | -1.59684 | 0.001423 | down |
| *Ebf4* | ENSMUSG00000053552 | -1.61954 | 0.000134 | down |
| *Snai3* | ENSMUSG00000006587 | -1.68222 | 0.047432 | down |
| *Bhlhe40* | ENSMUSG00000030103 | -1.68666 | 0.015231 | down |
| *Gm6104* | ENSMUSG00000062588 | -1.69835 | 0.01131 | down |
| *Bhlhe41* | ENSMUSG00000030256 | -1.73093 | 0.003425 | down |
| *Zfp618* | ENSMUSG00000028358 | -1.73194 | 0.000579 | down |
| *Hmgb3* | ENSMUSG00000015217 | -1.76117 | 0.000174 | down |
| *Hsf5* | ENSMUSG00000070345 | -1.76479 | 0.006223 | down |
| *Trp73* | ENSMUSG00000029026 | -1.79092 | 0.001251 | down |
| *Hoxb1* | ENSMUSG00000018973 | -1.79188 | 0.005758 | down |
| *Hoxb7* | ENSMUSG00000038721 | -1.80942 | 1.85E-06 | down |
| *Prdm6* | ENSMUSG00000069378 | -1.88098 | 0.02543 | down |
| *Gm20939* | ENSMUSG00000095193 | -1.91425 | 0.00028 | down |
| *Pax2* | ENSMUSG00000004231 | -1.94359 | 0.009466 | down |
| *Emx2* | ENSMUSG00000043969 | -1.94656 | 4.23E-09 | down |
| *Zkscan2* | ENSMUSG00000030757 | -1.96299 | 0.015069 | down |
| *Nkx3-1* | ENSMUSG00000022061 | -2.03865 | 0.011156 | down |
| *Pax9* | ENSMUSG00000001497 | -2.05567 | 0.022889 | down |
| *Lef1* | ENSMUSG00000027985 | -2.06109 | 0.003616 | down |
| *Scx* | ENSMUSG00000034161 | -2.10484 | 7.74E-09 | down |
| *Dlx3* | ENSMUSG00000001510 | -2.1411 | 0.011598 | down |
| *Tcf7* | ENSMUSG00000000782 | -2.14481 | 0.001787 | down |
| *Aire* | ENSMUSG00000000731 | -2.16065 | 0.019215 | down |
| *Etv4* | ENSMUSG00000017724 | -2.19505 | 0.023468 | down |
| *Hoxd1* | ENSMUSG00000042448 | -2.20092 | 0.017915 | down |
| *Hnf1a* | ENSMUSG00000029556 | -2.20866 | 0.031263 | down |
| *Zfp941* | ENSMUSG00000060314 | -2.22479 | 0.004722 | down |
| *Nr1h5* | ENSMUSG00000048938 | -2.36293 | 0.014714 | down |
| *Myb* | ENSMUSG00000019982 | -2.39568 | 1.09E-09 | down |
| *Tfcp2l1* | ENSMUSG00000026380 | -2.42119 | 7.41E-13 | down |
| *Bhlhe22* | ENSMUSG00000025128 | -2.45754 | 0.006164 | down |
| *Esrrg* | ENSMUSG00000026610 | -2.46386 | 3.38E-06 | down |
| *Glis1* | ENSMUSG00000034762 | -2.46484 | 0.001618 | down |
| *Pou3f1* | ENSMUSG00000090125 | -2.51799 | 0.001973 | down |
| *Tox3* | ENSMUSG00000043668 | -2.52657 | 1.02E-05 | down |
| *Nfe2l3* | ENSMUSG00000029832 | -2.5395 | 0.000503 | down |
| *Sall1* | ENSMUSG00000031665 | -2.55742 | 1.72E-05 | down |
| *Dbx2* | ENSMUSG00000045608 | -2.56639 | 0.00521 | down |
| *Sp5* | ENSMUSG00000075304 | -2.59169 | 3.22E-06 | down |
| *Esr2* | ENSMUSG00000021055 | -2.62893 | 0.003077 | down |
| *Hes2* | ENSMUSG00000028940 | -2.67322 | 0.001086 | down |
| *Esrrb* | ENSMUSG00000021255 | -2.72137 | 0.000244 | down |
| *Pitx2* | ENSMUSG00000028023 | -2.73104 | 0.024335 | down |
| *L3mbtl1* | ENSMUSG00000035576 | -2.76041 | 0.004755 | down |
| *Pax8* | ENSMUSG00000026976 | -2.82564 | 0.005089 | down |
| *Lhx1* | ENSMUSG00000018698 | -2.93839 | 0.001171 | down |
| *Pou3f4* | ENSMUSG00000056854 | -3.0065 | 0.03371 | down |
| *Foxi1* | ENSMUSG00000047861 | -3.03271 | 0.000474 | down |
| *Evx1* | ENSMUSG00000005503 | -3.05044 | 4.01E-05 | down |
| *Gfi1b* | ENSMUSG00000026815 | -3.11227 | 7.72E-05 | down |
| *Zfp541* | ENSMUSG00000078796 | -3.13686 | 0.000672 | down |
| *Mycn* | ENSMUSG00000037169 | -3.14579 | 5.11E-07 | down |
| *Arnt2* | ENSMUSG00000015709 | -3.14871 | 0.00319 | down |
| *Tcfl5* | ENSMUSG00000038932 | -3.16475 | 0.001862 | down |
| *Mesp2* | ENSMUSG00000030543 | -3.30298 | 0.00088 | down |
| *Foxj1* | ENSMUSG00000034227 | -3.45902 | 2.02E-05 | down |
| *Lhx4* | ENSMUSG00000026468 | -3.47487 | 4.04E-05 | down |
| *Ascl2* | ENSMUSG00000009248 | -3.48941 | 0.000492 | down |
| *Tfap2b* | ENSMUSG00000025927 | -3.51738 | 1.43E-14 | down |
| *Hnf4a* | ENSMUSG00000017950 | -3.58372 | 0.000256 | down |
| *Gm17067* | ENSMUSG00000091594 | -3.60455 | 0.016235 | down |
| *Scrt2* | ENSMUSG00000060257 | -3.63211 | 2.55E-06 | down |
| *Zfp488* | ENSMUSG00000044519 | -3.63919 | 0.04901 | down |
| *Nr1i2* | ENSMUSG00000022809 | -3.79131 | 0.031518 | down |
| *Zfp474* | ENSMUSG00000046886 | -3.88809 | 8.20E-06 | down |
| *Hmgb4* | ENSMUSG00000048686 | -4.01943 | 4.76E-05 | down |
| *Gm6871* | ENSMUSG00000090744 | -4.02229 | 8.57E-07 | down |
| *Nkx2-6* | ENSMUSG00000044186 | -4.04249 | 0.015039 | down |
| *Tbx22* | ENSMUSG00000031241 | -4.19646 | 3.97E-08 | down |
| *Traf3* | ENSMUSG00000021277 | -4.20009 | 3.99E-05 | down |
| *Rnf138rt1* | ENSMUSG00000083695 | -4.55924 | 0.003643 | down |
| *Cdx2* | ENSMUSG00000029646 | -4.59039 | 0.008581 | down |
| *L3mbtl4* | ENSMUSG00000041565 | -5.27874 | 0.006449 | down |

**Supplementary file 1c Primer sequences used for RT-PCR.**

|  |  |  |
| --- | --- | --- |
| Gene | Forward strand (5’-3’) | Reverse strand (5’-3’) |
| oe*-Traf3* | CCGCTCGAGATGGAGTCAAGCAAAAAG | CGCGGATCCTCAGGGGTCAGGCAGATC |
| oe*-Srebp1* | GGAATTCCATGGACGAGCTGGCCTTCGGTGAGG | TTGCGGCCGCAATAGCTGGAAGTGACGGTGGTTCCG |
| oe*-Rela* | GGAATTCCATGGACGATCTGTTTCCCCT | TTGCGGCCGCAAGGAGCTGATCTGACTCAAAAGA |
| oe*-RelB* | GGAATTCCATGCCGAGTCGCCGCGCTG | TTGCGGCCGCAACGTGGCTTCAGGCCCTGGAGAT |
| *Traf3-*WT | TCGAGCATCCTAAAATTCAAGAGTGCAATCTTGTTTCAAATATAGTATATT | CTAGAATATACTATATTTGAAACAAGATTGCACTCTTGAATTTTAGGATGC |
| *Traf3-*mut | TCGAGGTTAGTGACACTACTTCATCCGTCACATGAGAGGGACAATGCTCAT | CTAGATGAGCATTGTCCCTCTCATAAGGCAGTGTGAAGTAGTGTCACTAAC C |
| *Rela-*WT | AACTGGGTTAGGTAGGGAATGCTTTCTCTGGGGAGCCTG | GCAGGCTCCCCAGAGAAAGCATTCCCTACCTAACCCAGTT |
| *Rela-*mut | AACTGGGTTAGGTCTTTGGCAAGTTCTCTGGGGAGCCTGC | GCAGGCTCCCCAGAGAACTTGCCAAAGACCTAACCCAGTT |
| *Adipoq-*Cre | ACGGACAGAAGCATTTTCCA | GGATGTGCCATGTGAGTCTG |
| *Mir802* KO  allele | GCATCGCATTGTCTGAGTAGGTG | AGTGCAGTTACCCGTCACCA |
| *Mir802* KI allele | CTAGAGCCTCTGCTAACCATGTTC | AAGAGCCTTCAGTAAAGAGCAGG |

**Supplementary file 1d Oligo sequences used for shRNA.**

|  |  |  |
| --- | --- | --- |
| Gene | Forward strand (5’-3’) | Reverse strand (5’-3’) |
| Sh*-Traf3-*1 | GATCCGAATGAAAGTGTTGAGAAA TTCAAGAGATTTCTCAACACTTTCATTC TTTTTTG | AATTCAAAAAAGAATGAAAGTGTTGAGAAATCTCTTGAATTTCTCAACACTTTCATTC G |
| Sh*-Traf3-*2 | GATCCCGGTGGAAGACAAGTACAA TTCAAGAGATTGTACTTGTCTTCCACCG TTTTTTG | AATTCAAAAAACGGTGGAAGACAAGTACAATCTCTTGAATTGTACTTGTCTTCCACCG G |
| Sh*-Traf3-*3 | GATCCGGAAGATCCGTGACTACAATTCAAGAGATTGTAGTCACGGATCTTCC TTTTTTG | AATTCAAAAAAGGAAGATCCGTGACTACAATCTCTTGAATTGTAGTCACGGATCTTCC G |
| Sh*- Rela-*1 | GATCCGCCTCATCCACATGAACTTGT TTCAAGAGAACAAGTTCATGTGGATGAGGCTTTTTTG | AATTCAAAAAAGCCTCATCCACATGAACTTGTTCTCTTGAAACAAGTTCATGTGGATGAGGC G |
| Sh- *Rela -*2 | GATCCGCGAATCCAGACCAACAATAA TTCAAGAGATTATTGTTGGTCTGGATTCGC TTTTTTG | AATTCAAAAAAGCGAATCCAGACCAACAATAATCTCTTGAATTATTGTTGGTCTGGATTCGC G |
| Sh*- Rela* -3 | GATCCGGACCTATGAGACCTTCAAGATTCAAGAGATCTTGAAGGTCTCATAGGTCCTTTTTTG | AATTCAAAAAAGGACCTATGAGACCTTCAAGATCTCTTGAATCTTGAAGGTCTCATAGGTCC G |
| Sh*-Relb-*1 | GATCCGCTACGGTGTGGACAAGAATTCAAGAGATTCTTGTCCACACCGTAGC TTTTTTG | AATTCAAAAAAGCTACGGTGTGGACAAGAATCTCTTGAATTCTTGTCCACACCGTAGC G |
| Sh*-Relb*-2 | GATCCGGATTTGCCGAATCAACAATTCAAGAGATTGTTGATTCGGCAAATCC TTTTTTG | AATTCAAAAAAGGATTTGCCGAATCAACAATCTCTTGAATTGTTGATTCGGCAAATCC G |
| Sh*-Relb*-3 | GATCCCAGAAATCATCGACGAATATTCAAGAGATATTCGTCGATGATTTCTG TTTTTTG | AATTCAAAAAACAGAAATCATCGACGAATATCTCTTGAATATTCGTCGATGATTTCTG G |
| Sh*-Srebp1-*1 | GATCCGCAGCAGCAAGCACTTCAATTCAAGAGATTGAAGTGCTTGCTGCTGC TTTTTTG | AATTCAAAAAAGCAGCAGCAAGCACTTCAATCTCTTGAATTGAAGTGCTTGCTGCTGC G |
| Sh-*Srebp1*-2 | GATCCGCTACAGCAGCTATTCCAATTCAAGAGATTGGAATAGCTGCTGTAGC TTTTTTG | AATTCAAAAAAGCTACAGCAGCTATTCCAATCTCTTGAATTGGAATAGCTGCTGTAGC G |
| Sh*-Srebp1*-3 | GATCCGGGTCAACAGCAACTCCAA TTCAAGAGATTGGAGTTGCTGTTGACCCTTTTTTG | AATTCAAAAAAGGGTCAACAGCAACTCCAATCTCTTGAATTGGAGTTGCTGTTGACCCG |

**Supplementary file 1e The primers used in Real-time PCR (5’-3’).**

|  |  |  |
| --- | --- | --- |
| Gene | Forward Primer | Reverse Primer |
| *Mus-Mir802-5p* | CGGCGTCAGTAACAAAGATTC | TATGGTTTTGACGACTGTGTGAT |
| *Pri-mus-Mir802* | TCCCCACCTGACTCTACATAACCT | CGTCCTCTCATCTTCCCTTTCGA |
| *Mus-Traf3* | CAGCCTAACCCACCCCTAAAG | TCTTCCACCGTCTTCACAAAC |
| *Mus-Srebp1a* | ATGGACGAGCTGGCCTTCGGTGAGGCGGC | CA  GGAAGGCTTCCAGAGAGGA |
| *Mus-Tnfa* | CCCTCACACTCAGATCATCTTCT | GCTACGACGTGGGCTACAG |
| *Mus-Il6* | TAGTCCTTCCTACCCCAATTTCC | TTGGTCCTTAGCCACTCCTTC |
| *Mus-Il1b* | GCAACTGTTCCTGAACTCAACT | ATCTTTTGGGGTCCGTCAACT |
| *Mus-Inos* | GTTCTCAGCCCAACAATACAAGA | GTGGACGGGTCGATGTCAC |
| *Mus-Ccl2* | TTAAAAACCTGGATCGGAACCAA | GCATTAGCTTCAGATTTACGGGT |
| *Mus-Fizz1* | CCAATCCAGCTAACTATCCCTCC | ACCCAGTAGCAGTCATCCCA |
| *Mus-Chil3* | CAGGTCTGGCAATTCTTCTGAA | GTCTTGCTCATGTGTGTAAGTGA |
| *Mus-Arg1* | CTCCAAGCCAAAGTCCTTAGAG | AGGAGCTGTCATTAGGGACATC |
| *Mus-Il10* | GCTCTTACTGACTGGCATGAG | CGCAGCTCTAGGAGCATGTG |
| *Mus-F4/80* | TGACTCACCTTGTGGTCCTAA | CTTCCCAGAATCCAGTCTTTCC |
| *Mus-Adipor1* | AGACAACGACTACCTGCTACA | GTGGATGCGGAAGATGCTCT |
| *Mus-Adipor2* | GGAGTGTTCGTGGGCTTAGG | GCAGCTCCGGTGATATAGAGG |
| *Mus-Col1a1* | GCTCCTCTTAGGGGCCACT | CCACGTCTCACCATTGGGG |
| *Mus-Col3a1* | CTGTAACATGGAAACTGGGGAAA | CCATAGCTGAACTGAAAACCACC |
| *Mus-Col4a1* | CTGGCACAAAAGGGACGAG | ACGTGGCCGAGAATTTCACC |
| *Mus-Col6a1* | CTGCTGCTACAAGCCTGCT | CCCCATAAGGTTTCAGCCTC |
| *Ccl5* | GCTGCTTTGCCTACCTCTCC | TCGAGTGACAAACACGACTGC |
| *Ccl7* | GCTGCTTTCAGCATCCAAGTG | CCAGGGACACCGACTACTG |
| *Ccl12* | ATTTCCACACTTCTATGCCTCCT | ATCCAGTATGGTCCTGAAGATCA |
| *Ccl19* | GGGGTGCTAATGATGCGGAA | CCTTAGTGTGGTGAACACAACA |
| *Ccl20* | GCCTCTCGTACATACAGACGC | CCAGTTCTGCTTTGGATCAGC |
| *Ccl21a* | GTGATGGAGGGGGTCAGGA | GGGATGGGACAGCCTAAACT |
| *Cxcl2* | CCAACCACCAGGCTACAGG | GCGTCACACTCAAGCTCTG |
| *U6* | CAGCACATATACTAAAATTGGAACG | ACGAATTTGCGTGTCATCC |
| *Gapdh* | AGGTCGGTGTGAACGGATTTG | TGTAGACCATGTAGTTGAGGTCA |
| *Rn18s* | CCCGAAGCGTTTACTTTGA | ACTTTGGTTTCCCGGAAG |
| *Hus-Mir802-5p* | GCCGCGCAGTAACAAAGATT | TATGGTTGTTCACGACTCCTTCAC |
| *Hus-pri-Mir802-5p* | TTCTCTGCAGCCTCTTGTGTCAT | TTCTCCTTGTTGCATGATGGACA |
| *Hus-Traf3* | TCTTGAGGAAAGACCTGCGAG | GCGATCATCGGAACCTGACT |
| ChipR1 | ACACAATCTTCAGTGTGAA | GTAAAATGGTAAACGTGTGT |
| ChipR2 | TATACACTATATAACGAGG | ACGGCCAGCCCCCACCTGT |
| ChipR3 | AAAGCGTGGACAGAGCTGA | CGTCGTGTGCTCCACAGCA |
| ChipR4 | CGACCCCAGCCAAGGCCAG | GTGCTAGATTCGTGTACAA |
| ChipR5 | TAACATATATATAGAGGGG | GCCTGGCTACCCTCTAGCA |
| ChipR6 | GTTGGTGTTTTGTCTGGGA | TGCGGGCTGGCCTGGGGTG |
| ChipR7 | GGAAAGGGGACAAACAGAA | AGCCTTTCTTAGAGGCCCA |
| ChipR8 | ATGCCAAGTGCTGAGCCAT | GGCAAGTCCCCTGCAAGTT |
| ChipR9 | GGGCACAGCTTGCATGCCA | CTGGCGTGAGGCCTAGGTT |
| ChipR10 | AAGCCTGGCCCCGGTTTTC | TGCCGTTGTAATCCCCGTG |
| ChipR11 | AGCTCTTCTTCCTCGGAGT | AGTTACTTTGCCAGTCTAG |
| ChipR12 | CCTGTCCTTCCACAAGAA | TAAGGTAGGTGAGCAGGC |
| ChipR13 | CTGGGTTAGGTAGGGAAT | TAAGGTAGGTGAGCAGGC |
| ChipR14 | TGGGTTAGGTAGGGAATG | CTCTGCATCACCACAGAAA |
| ChipR15 | GAGCAAAGAAAAGTTTCTG | AGGCCAGGAAGGGACATAG |
| ChipR16 | AGAGGTGCAGCCCCTCTG | ATGAGTGTTCCTTCTCCT |
| ChipR17 | TGGCCATCTCCCTCCTAC | GCAGTTGTCAGTCACCCA |
| ChipR18 | GGTCCATGCTCAGAAAGC | GATCATGAGAGCACACAG |
| ChipR19 | TCTATATTGTAGATCAAT | GGGGGATTCATCTAGACCT |
| ChipR20 | AGACAGCAGTAGGAGGTTA | ATGGCTAGGTTTTCTTATG |