**SUPPLEMENTARY MATERIAL** (Lucas et al)

\*\*

**B**

|  |  |
| --- | --- |
| Supp fig1**A** | \*\*\*\*\***Final body weight (g)****SD****HFD** |

**Figure S1**: A) Weight gain induced by 30 weeks of HFD feeding in WT and GRK2+/- genotypes expressed as fold-increase over control SD-fed mice (N=5-7 per genotype and condition). Data are means±SEM. ++p<0.01; +p<0.05 referred to SD-fed mice; \*p<0.05 referred to fold increase between genotypes. B) Final body weight after 30 weeks of SD or HFD feeding in WT and GRK2+/- genotypes (N = 5-7). Data are means±SEM. Statistical analysis was performed using unpaired two-tail Student’s t-test. \*p<0.05, \*\*p<0.01

\*

**Figure S2**: Circulating plasma NEFA concentrations in 30-week SD and HFD-fed control and GRK2+/- mice upon 16 hours of fasting. Data are represented as means ± SEM of 6-9 mice per group. Statistical significance was analyzed by unpaired two-tail Student’s t-test. \*p<0.05

|  |  |
| --- | --- |
| **HFD****SD****A** | **HFD****SD****B** |

**Figure S3:** mRNA levels of TFAM and COI genes were quantified by qPCR and normalized by a geometrical mean of HPRT and RPS29. Data are means ± SEM (N=5-6 per group) and the statistical analysis used was a unpaired two-tail Student’s t-test.

**Table S1.** Primers used for RT-PCR analysis.

|  |  |  |
| --- | --- | --- |
|  *acta1* |  | *TaqMan® Gene Expression Assay (Applied Biosystems):**Ref. Mm00808218\_g1* |
| *atp2a2* (serca2) |  | *TaqMan® Gene Expression Assay (Applied Biosystems):**Ref. Mm01201431\_m1* |
| *adrbk1* | ForwardReverse | *5´-CATGCACAATCGCTTTGTAGTC-3′**5´ -GGTCCGAGATTCTCACATGG-3′* |
| *bnp* | ForwardReverse | *5´-GTCAGTCGTTTGGGCTGTAAC-3′**5´-AGACCCAGGCAGAGTCAGAA-3′* |
| *mt-coI* | ForwardReverse | *5´-TCTCCTTCTCCTAGCATCATCA-3′**5´-CCGGCTAGAGGTGGGTAGA-3′* |
| *hprt1* | ForwardReverse | *5´ -TCCTCCTCAGACCGCTTTT-3´**5´ -CCTGGTTCATCATCGCTAATC-3´* |
| *ppara* | ForwardReverse | *5´ -CACGCATGTGAAGGCTGTAA-3´**5´ -CAGCTCCGATCACACTTGTC-3´* |
| *ppargc1a* | ForwardReverse | *5´ -CCCTTCTTTGCCATTGAATC -3′**5´ -AATGTTAGGAAAGTTTAGCATCTGG-3′* |
| *ppargc1b* | ForwardReverse | *5´ -GGCGCGCTGCTGGAT-3´**5´ -CTCCAGAGTCCCCACCCTG-3´* |
| *rps29* | ForwardReverse | *5´ -CTGAACATGTGCCGCCAGT-3′**5´ -TCAAGGTCGCTTAGTCCAACTTAAT-3′* |
| *tfam* | ForwardReverse | *5´ -ATTGACCATGTGCTTCAGAGC-3′**5´ -GCATCCCTGTATCGCTGTAGT-3′* |