**Supporting information table S1: Primers used for quantitative Real-Time Polymerase Chain Reaction**

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| **Species** | **Gene** | **Sequence (5**`to **3**`**)** |
| Human | AHNAK1 | FW: AGCGGAATCCTGCAAAGA |
| AHNAK1 | RV: GAGCCACTACCCTGCCAGT |
| OPA1 | FW: CCATATTCGTTTTGACCAAAGT |
| OPA1 | RV: TTGGGAAGAGCTTTCCTTCA |
| MFN1 | FW: AGAGCCAGAATATATGGAAGACGTA |
| MFN1 | RV: CTTCTAAAGCATTTACAACTTTGAGC |
| MFN2 | FW: TGCCTCAGAGCCCGAGTA |
| MFN2 | RV: CTGGTACAACGCTCCATGTG |
| DRP1 | FW: GAATTACCTTCAGCTGTATCACGA |
| DRP1 | RV: TTAACTTGCCATCAGCCTCA |
| FIS1 | FW: CTGAACGAGCTGGTGTCTGT |
| FIS1 | RV: GAGCCTGCTGCCTTCTCA |
| PGC1a | FW: ACCATATTCCAGGTCAAGATCAA |
| PGC1a | RV: GGCTTGACTCATAGTAATAGCAGGA |
| NRF1 | FW: CAGTCACTATGGCGCTTAACA |
| NRF1 | RV: ATCTGTCCCCCACCTTGTAA |
| NRF2A | FW: CAGCCTGAACTGGTTGCACAGAAA |
| NRF2A | RV: TCAACTCCGCTGCACTGTATCCAA |
| TFAM | FW: GAACAACTACCCATATTTAAAGCTCA |
| TFAM | RV: GAATCAGGAAGTTCCCTCCA |
| SIRT1 | FW: GACTCCAAGGCCACGGATAG |
| SIRT1 | RV: TGTTCGAGGATCTGTGCCAA |
| SIRT3 | FW: TGTTCGAGGATCTGTGCCAA |
| SIRT3 | RV: TCACGTCAGCCCGAATGTC |
| ND4 | FW: CCTATTTAGCTGTTCCCCAACC |
| ND4 | RV: TCACTGGATAAGTGGCGTTG |
| NDUFS1 | FW: AGAGCCTCAAGACAATGGC |
| NDUFS1 | RV: ATCTGCGGCAAAACTGGGAT |
| COX1 | FW: CCCTCCCTTAGCAGGGAAC |
| COX1 | RV: TGAAATTGATGGCCCCTAAG |
| COX5b | FW: AGGTTACTTCGCGGAGCTG |
| COX5b | RV: CATCAGTGGGAACACCACCT |
| ATP5b | FW: CAATGGACCTGCCTACTGC |
| ATP5b | RV: GTAGTCCGGGTGGAGACTGA |
| GAPDH | FW: GAAGGTGAAGGTCGGAGTCA |
| GAPDH | RV: AATGAAGGGGTCATTGATGG |
| HPRT | FW: CTTTGCTGACCTGCTGGATT |
| HPRT | RV: TATGTCCCCTGTTGACTGGT |
| Mouse | OPA1 | FW: ACCAGGAGAAGTAGACTGTGTCAA |
| OPA1 | RV: TCTTCAAATAAACGCAGAGGTG |
| MFN1 | FW: GAGGGCTCACATTTTGTTGAA |
| MFN1 | RV: AAGCTTGTTTCTGTAGCCCTGT |
| MFN2 | FW: CATTCTTGTGGTCGGAGGAG |
| MFN2 | RV: AAGGAGAGGGCGATGAGTCT |
| DRP1 | FW: TCTGCAGCTAGTCCACGTTTC |
| DRP1 | RV: ACCCCATTCTTCTGCTTCAA |
| FIS1 | FW: GAGACGAAGCTGCAAGGAAT |
| FIS1 | RV: GCATATTCAAATTGCGTGCT |
| GAPDH | FW: ATGGTGAAGGTCGGTGTGA |
| GAPDH | RV: AATCTCCACTTTGCCACTGC |
| HPRT | FW: GCTTTCCCTGGTTAAGCAGTACA |
| HPRT | RV: ACACTTCGAGAGGTCCTTTTCAC |

FW: forward primer; RV: reverse primer