

## SUPPLEMENTARY TABLES

**Supplementary Table 1. Sequences.**

| Name                       | Sequence   |
|----------------------------|--|
| Mouse PEG11as F            | 5'TGATCCTGGGGAGCTACGAA3'                               |
| Mouse PEG11as R            | 5'TTGAGCAACTTCCACGCTCA3'                               |
| Mouse PEG11as shRNA1       | TAGGATGAAGTGAACAATGTT                                  |
| Mouse PEG11as shRNA2       | GAGGTTTCATAAGGTTCTTGTT                                 |
| Mouse PEG11as shRNA3       | CAGGTAGATTTCTTGCCAGTT                                  |
| Mouse negative-shRNA       | TTCTCCGAACGTGTCACGT                                    |
| Mouse ATG16L1-shRNA1       | 5'GAAUGAUAGUCAACUACAATT3'<br>5'UUGUAGUUGACUAUCAUUCTT3' |
| Mouse ATG16L1-shRNA2       | 5'CCAAGUCCUGCUGGACAATT3'<br>5'UUGUCCAGCAGGAACUUGGTT3'  |
| Mouse ATG16L1-shRNA3       | 5'GAGAUAAAUGUGAAUUCAATT3'<br>5'UUGAAUUCACAUUUAUCUCTT3' |
| Mouse miR-847-3p mimic     | 5'CUGCCCUGGCCCGAGGGACCGA3'                             |
| Mouse miR-847-3p inhibitor | UCGGUCCUCGGGCCAGGGCAG                                  |
| Mouse NC mimic             | 5'UUGUACUACACAAAAGUACUG3'                              |
| Mouse inhibitor mimic      | 5'CAGUACUUUUGUGUAGUACAA3'                              |

**Supplementary Table 2. Partially differentially expressed lncRNAs.**

| Gene               | Sham        | I/R         | log <sub>2</sub> FoldChange | p-value    |
|--------------------|-------------|-------------|-----------------------------|------------|
| fantom3_7330403C04 | 3.681696667 | 83.2402     | 4.498837758                 | 2.22E-16   |
| fantom3_F730006E08 | 0.115788367 | 2.350246667 | 4.343249963                 | 2.22E-16   |
| fantom3_D830013O18 | 1.052845333 | 4.797543333 | 2.188002323                 | 0          |
| fantom3_D330015J21 | 0.506524    | 2.072308333 | 2.032536141                 | 0          |
| fantom3_A230063K01 | 0.481251333 | 1.527642    | 1.666444047                 | 6.85E-12   |
| fantom3_9530008I07 | 0.396179333 | 1.223912667 | 1.627275088                 | 2.22E-16   |
| C030018K13Rik      | 0.397606333 | 1.15321     | 1.53624261                  | 8.89E-05   |
| fantom3_D930039P20 | 0.372825333 | 1.068771667 | 1.519381868                 | 2.33E-09   |
| PEG11as            | 3.613243333 | 10.04659    | 1.475339586                 | 0          |
| fantom3_6430411K18 | 3.613243333 | 10.04659    | 1.475339586                 | 0          |
| fantom3_5330411G14 | 2.27501     | 6.192653333 | 1.444684799                 | 0          |
| fantom3_0610011H19 | 0.525776533 | 1.391748333 | 1.404376698                 | 0.00011997 |
| fantom3_F630301H07 | 1.357556667 | 3.464893333 | 1.35179852                  | 0          |
| fantom3_C230053O12 | 0.500025    | 1.22446     | 1.292073513                 | 9.22E-12   |
| fantom3_9430062P13 | 0.421794667 | 1.021389667 | 1.27592061                  | 1.79E-07   |
| fantom3_3830422K02 | 0.577392    | 1.392575667 | 1.270132696                 | 1.28E-11   |
| fantom3_C330024I08 | 0.578894333 | 1.374666667 | 1.247709892                 | 5.32E-10   |
| fantom3_B930049N16 | 0.681532333 | 1.613326667 | 1.243184577                 | 2.56E-07   |
| fantom3_1700037N05 | 0.529379667 | 1.228629667 | 1.214675437                 | 6.22E-06   |

|                    |             |             |              |          |
|--------------------|-------------|-------------|--------------|----------|
| fantom3_A630050J02 | 0.635355333 | 1.45032     | 1.190735678  | 9.83E-11 |
| fantom3_B230216K14 | 0.601096667 | 1.362237667 | 1.180309504  | 0        |
| fantom3_6530425O17 | 0.654239    | 1.47754     | 1.17530752   | 4.86E-06 |
| fantom3_4932703K07 | 1.18434     | 2.624186667 | 1.147787038  | 1.36E-10 |
| fantom3_B230208E11 | 0.468363    | 1.021311333 | 1.124723705  | 5.69E-06 |
| fantom3_F930050L08 | 1.075358667 | 2.339916667 | 1.121639226  | 0        |
| fantom3_B930059N03 | 0.564166667 | 1.225846667 | 1.1195852    | 6.62E-09 |
| fantom3_A130068E22 | 1.338923333 | 2.900306667 | 1.115132099  | 0        |
| fantom3_1520401O13 | 0.998430667 | 2.151556667 | 1.107646686  | 1.66E-08 |
| fantom3_2210010H06 | 0.711999    | 1.533926667 | 1.107282393  | 7.69E-07 |
| fantom3_4732477A13 | 0.546897333 | 1.170616667 | 1.097926792  | 5.05E-10 |
| fantom3_6030408D07 | 0.517050667 | 1.089982333 | 1.075927187  | 2.64E-07 |
| fantom3_C130034A22 | 1.155198333 | 2.404213333 | 1.057424351  | 0        |
| fantom3_C130012C18 | 0.498973    | 1.036618    | 1.054850693  | 3.04E-06 |
| fantom3_D330050J08 | 0.611742333 | 1.26245     | 1.045230229  | 3.50E-07 |
| fantom3_D030040M07 | 1.359993333 | 2.804133333 | 1.04395537   | 0        |
| fantom3_D930015A08 | 0.604673333 | 1.245877    | 1.042933783  | 5.38E-08 |
| fantom3_5330416G15 | 0.55117     | 1.131821333 | 1.038076966  | 3.84E-05 |
| fantom3_9030205G03 | 0.830252667 | 1.686163333 | 1.022121936  | 1.94E-06 |
| fantom3_A930017D03 | 0.675015333 | 1.360651    | 1.011304891  | 1.33E-06 |
| Gm11627            | 3.21384     | 1.464252333 | -1.134133913 | 6.42E-08 |

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