Supplementary Tables
Supplementary Table S1

| miRID | $\Delta \Delta C_{T}$ | Adj.p-value | miRID | $\Delta \Delta C_{T}$ | Adj.p-value | miRID | $\Delta \Delta C_{T}$ | Adj.p-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| miR-15b | 8.62 | $6.2 \times 10^{-11}$ | miR-146a | 6.45 | $2.8 \times 10^{-6}$ | miR-29a | 4.98 | $1.7 \times 10^{-5}$ |
| miR-142-3p | 8.55 | $1.6 \times 10^{-9}$ | miR-10b | 6.37 | $3.1 \times 10^{-6}$ | miR-539 | 4.88 | 0.001 |
| miR-103 | 7.89 | $8.3 \times 10^{-10}$ | miR-17 | 6.36 | $1.2 \times 10^{-5}$ | miR-221 | 4.84 | $3.4 \times 10^{-4}$ |
| miR-16 | 7.65 | $4.4 \times 10^{-8}$ | miR-106a | 6.26 | $1.4 \times 10^{-5}$ | miR-92a | 4.80 | $3.4 \times 10^{-4}$ |
| miR-660 | 7.59 | $1.6 \times 10^{-9}$ | miR-708 | 6.17 | $3.3 \times 10^{-6}$ | miR-574-3p | 4.73 | $2.2 \times 10^{-4}$ |
| miR-138 | 7.58 | $1.9 \times 10^{-8}$ | miR-339-5p | 6.10 | $4.1 \times 10^{-9}$ | miR-500 | 4.71 | $2.3 \times 10^{-5}$ |
| miR-148a | 7.49 | $1.8 \times 10^{-8}$ | let-7b | 6.10 | $9.7 \times 10^{-6}$ | miR-342-3p | 4.70 | $1.6 \times 10^{-4}$ |
| miR-200a | 7.48 | $4.1 \times 10^{-8}$ | miR-185 | 6.01 | $1.6 \times 10^{-8}$ | miR-181a | 4.67 | $2.5 \times 10^{-5}$ |
| miR-132 | 7.45 | $2.6 \times 10^{-8}$ | miR-23b | 6.01 | $3.4 \times 10^{-6}$ | miR-29c | 4.66 | $8.4 \times 10^{-7}$ |
| miR-374b | 7.43 | $2.2 \times 10^{-8}$ | miR-34a | 5.98 | $2.5 \times 10^{-5}$ | miR-193a-3p | 4.64 | $2.1 \times 10^{-5}$ |
| miR-374a | 7.39 | $1.1 \times 10^{-9}$ | miR-125a-5p | 5.95 | $7.3 \times 10^{-7}$ | miR-126 | 4.64 | $8.5 \times 10^{-5}$ |
| miR-9 | 7.39 | $2.4 \times 10^{-7}$ | miR-452 | 5.94 | $1.3 \times 10^{-6}$ | miR-214 | 4.60 | $7.0 \times 10^{-4}$ |
| miR-335 | 7.37 | $1.6 \times 10^{-9}$ | let-7g | 5.92 | $1.5 \times 10^{-6}$ | let-7e | 4.58 | $5.6 \times 10^{-6}$ |
| miR-130b | 7.35 | $1.1 \times 10^{-9}$ | let-7d | 5.91 | $4.1 \times 10^{-8}$ | miR-205 | 4.58 | 0.001 |
| miR-143 | 7.33 | $2.5 \times 10^{-8}$ | miR-199a-3p | 5.84 | $1.1 \times 10^{-5}$ | miR-146b-5p | 4.57 | $1.2 \times 10^{-5}$ |
| miR-429 | 7.20 | $5.3 \times 10^{-8}$ | miR-210 | 5.83 | $1.2 \times 10^{-5}$ | miR-31 | 4.48 | 0.015 |
| miR-29b | 7.16 | $2.5 \times 10^{-9}$ | miR-455-5p | 5.78 | $3.6 \times 10^{-7}$ | miR-212 | 4.46 | $7.4 \times 10^{-5}$ |
| miR-301a | 7.14 | $1.4 \times 10^{-8}$ | let-7f | 5.64 | $4.4 \times 10^{-6}$ | miR-425 | 4.44 | $1.4 \times 10^{-5}$ |
| miR-20a | 7.01 | $8.2 \times 10^{-7}$ | miR-222 | 5.55 | $2.8 \times 10^{-4}$ | miR-200c | 4.43 | 0.002 |
| miR-18a | 6.99 | $1.4 \times 10^{-8}$ | miR-25 | 5.50 | $2.7 \times 10^{-6}$ | miR-411 | 4.39 | $3.5 \times 10^{-4}$ |
| miR-28-5p | 6.97 | $1.0 \times 10^{-8}$ | miR-26b | 5.46 | $2.1 \times 10^{-8}$ | miR-652 | 4.38 | $8.8 \times 10^{-5}$ |
| miR-218 | 6.96 | $4.4 \times 10^{-8}$ | let-7a | 5.46 | $5.6 \times 10^{-6}$ | miR-424 | 4.34 | 0.001 |
| miR-19a | 6.94 | $6.1 \times 10^{-8}$ | miR-27b | 5.45 | $5.6 \times 10^{-6}$ | miR-193a-5p | 4.32 | $3.8 \times 10^{-4}$ |
| miR-21 | 6.92 | $7.3 \times 10^{-9}$ | miR-223 | 5.45 | $9.6 \times 10^{-4}$ | miR-200b | 4.30 | $5.2 \times 10^{-5}$ |
| miR-590-5p | 6.92 | $1.9 \times 10^{-8}$ | miR-93 | 5.42 | $4.0 \times 10^{-5}$ | miR-454 | 4.30 | $1.4 \times 10^{-4}$ |
| miR-532-5p | 6.86 | $2.3 \times 10^{-8}$ | miR-106b | 5.36 | $7.1 \times 10^{-6}$ | miR-203 | 4.26 | 0.015 |
| miR-141 | 6.82 | $7.3 \times 10^{-9}$ | miR-423-5p | 5.34 | $1.1 \times 10^{-6}$ | miR-199a-5p | 4.19 | 0.008 |
| miR-340 | 6.79 | $7.3 \times 10^{-9}$ | miR-365 | 5.34 | $2.6 \times 10^{-5}$ | miR-20b | 4.15 | $2.2 \times 10^{-4}$ |
| miR-598 | 6.69 | $1.3 \times 10^{-8}$ | miR-495 | 5.32 | $1.5 \times 10^{-5}$ | miR-484 | 4.10 | 0.002 |
| miR-451 | 6.69 | $5.2 \times 10^{-5}$ | miR-99a | 5.23 | $1.6 \times 10^{-4}$ | miR-152 | 4.01 | $6.3 \times 10^{-5}$ |
| miR-101 | 6.63 | $1.6 \times 10^{-9}$ | miR-140-5p | 5.22 | $2.0 \times 10^{-5}$ | miR-324-5p | 3.99 | $6.2 \times 10^{-4}$ |
| miR-19b | 6.59 | $6.1 \times 10^{-8}$ | miR-130a | 5.20 | $1.9 \times 10^{-6}$ | miR-125b | 3.98 | 0.001 |
| miR-195 | 6.58 | $2.1 \times 10^{-8}$ | miR-100 | 5.20 | $5.3 \times 10^{-5}$ | miR-502-3p | 3.94 | $1.5 \times 10^{-4}$ |
| miR-135b | 6.52 | $1.3 \times 10^{-7}$ | miR-628-5p | 5.10 | $6.0 \times 10^{-7}$ | miR-361-5p | 3.93 | $3.9 \times 10^{-4}$ |
| miR-224 | 6.52 | $2.2 \times 10^{-5}$ | miR-301b | 5.07 | $5.2 \times 10^{-6}$ | miR-98 | 3.91 | $3.1 \times 10^{-4}$ |
| miR-148b | 6.46 | $4.1 \times 10^{-9}$ | miR-10a | 5.02 | $1.3 \times 10^{-4}$ | miR-32 | 3.89 | $2.8 \times 10^{-4}$ |


| miRID | $\Delta \Delta C_{T}$ | Adj.p-value | miRID | $\Delta \Delta C_{T}$ | Adj.p-value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| miR-150 | 3.84 | 0.003 | miR-491-5p | 3.25 | 0.004 |
| miR-95 | 3.81 | $2.8 \times 10^{-4}$ | miR-96 | 3.20 | 0.012 |
| miR-186 | 3.73 | $2.2 \times 10^{-5}$ | miR-545 | 3.19 | 0.012 |
| miR-27a | 3.65 | $7.6 \times 10^{-5}$ | miR-99b | 3.12 | $3.9 \times 10^{-4}$ |
| miR-128 | 3.62 | 0.002 | miR-345 | 3.09 | 0.009 |
| miR-24 | 3.60 | $7.6 \times 10^{-5}$ | miR-625 | 3.02 | $3.4 \times 10^{-4}$ |
| miR-671-3p | 3.60 | 0.002 | miR-485-3p | 2.98 | 0.021 |
| miR-582-5p | 3.59 | 0.005 | miR-296-5p | 2.96 | 0.020 |
| miR-135a | 3.58 | 0.002 | miR-744 | 2.95 | 0.007 |
| miR-655 | 3.57 | 0.004 | let-7c | 2.95 | 0.008 |
| miR-30b | 3.56 | $4.8 \times 10^{-5}$ | miR-23a | 2.83 | 0.036 |
| miR-328 | 3.50 | 0.015 | miR-15a | 2.80 | 0.022 |
| miR-339-3p | 3.46 | 0.001 | miR-320 | 2.77 | 0.034 |
| miR-487b | 3.45 | 0.012 | miR-579 | 2.75 | 0.021 |
| miR-30c | 3.42 | $5.2 \times 10^{-5}$ | miR-192 | 2.68 | 0.023 |
| miR-26a | 3.39 | $4.2 \times 10^{-4}$ | miR-145 | 2.57 | 0.012 |
| miR-376c | 3.36 | 0.007 | miR-502-5p | 2.41 | 0.022 |
| miR-197 | 3.32 | 0.003 | miR-422a | 2.38 | 0.039 |
| miR-193b | 3.32 | 0.017 | miR-455-3p | 2.35 | 0.010 |
| miR-142-5p | 3.30 | 0.004 | miR-532-3p | 2.31 | 0.033 |
| miR-182 | 3.29 | 0.003 | miR-362-3p | 2.20 | 0.024 |
| RNU48 | 3.29 | 0.027 | miR-501-5p | 2.15 | 0.039 |
| miR-597 | 3.28 | 0.003 | miR-331-3p | 1.84 | 0.021 |
| miR-491-5p | 3.25 | 0.004 |  |  |  |

Supplementary Table S2

| miRID | $\Delta \Delta C_{T}$ | Adj.p-value | miRID | $\Delta \Delta C_{T}$ | Adj.p-value | miRID | $\Delta \Delta C_{T}$ | Adj.p-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| miR-124 | -9.27 | $2.0 \times 10^{-7}$ | miR-215 | -3.37 | 0.017 | miR-521 | -2.92 | 0.015 |
| miR-512-5p | -6.06 | $2.2 \times 10^{-4}$ | miR-885-3p | -3.36 | 0.006 | miR-373 | -2.91 | 0.015 |
| miR-298 | -5.97 | $1.5 \times 10^{-4}$ | ath-miR159a | -3.34 | 0.006 | miR-380 | -2.91 | 0.015 |
| miR-216a | -5.88 | $5.6 \times 10^{-4}$ | miR-570 | -3.31 | 0.012 | miR-516a-5p | -2.90 | 0.015 |
| miR-346 | -5.78 | $1.9 \times 10^{-4}$ | miR-490-3p | -3.24 | 0.012 | miR-654-5p | -2.88 | 0.015 |
| miR-139-3p | -5.73 | $1.8 \times 10^{-4}$ | miR-548a-5p | -3.21 | 0.009 | miR-450b-3p | -2.88 | 0.017 |
| miR-33b | -5.69 | $2.2 \times 10^{-4}$ | miR-872 | -3.05 | 0.013 | miR-499-3p | -2.83 | 0.019 |
| miR-154 | -5.59 | $6.9 \times 10^{-4}$ | miR-487a | -3.03 | 0.025 | miR-509-3-5p | -2.81 | 0.021 |
| miR-507 | -5.42 | $3.9 \times 10^{-4}$ | miR-494 | -3.02 | 0.048 | miR-376b | -2.79 | 0.019 |
| miR-216b | -5.19 | 0.003 | miR-129-5p | -2.93 | 0.015 | miR-448 | -2.77 | 0.021 |
| miR-220c | -5.18 | $2.7 \times 10^{-4}$ | miR-302c | -2.93 | 0.015 | miR-188-3p | -2.76 | 0.024 |
| miR-127-5p | -4.39 | $7.9 \times 10^{-4}$ | miR-453 | -2.93 | 0.015 | miR-147 | -2.76 | 0.035 |
| miR-519c-3p | -4.92 | 0.004 | miR-485-5p | -2.93 | 0.015 | miR-208 | -2.73 | 0.032 |
| miR-548c-3p | -4.89 | $3.6 \times 10^{-4}$ | miR-508-5p | -2.93 | 0.015 | miR-876-5p | -2.73 | 0.044 |
| miR-523 | -4.88 | $5.7 \times 10^{-4}$ | miR-518a-5p | -2.93 | 0.015 | miR-520a-5p | -2.71 | 0.027 |
| miR-220b | -4.78 | $2.9 \times 10^{-4}$ | miR-520d-5p | -2.93 | 0.015 | miR-412 | -2.69 | 0.030 |
| miR-219-2-3p | -4.73 | $4.2 \times 10^{-4}$ | miR-524-5p | -2.93 | 0.015 | miR-526b | -2.69 | 0.030 |
| miR-518d-3p | -4.70 | $4.9 \times 10^{-4}$ | miR-544 | -2.93 | 0.015 | miR-541 | -2.67 | 0.026 |
| miR-136 | -4.67 | $6.0 \times 10^{-4}$ | miR-548b-3p | -2.93 | 0.015 | miR-371-3p | -2.64 | 0.039 |
| miR-525-5p | -4.53 | $5.7 \times 10^{-4}$ | miR-556-3p | -2.93 | 0.015 | miR-873 | -2.63 | 0.032 |
| miR-217 | -4.50 | $4.2 \times 10^{-4}$ | miR-556-5p | -2.93 | 0.015 | miR-302a | -2.63 | 0.036 |
| miR-208b | -4.46 | 0.002 | miR-561 | -2.93 | 0.015 | miR-548c-5p | -2.62 | 0.029 |
| miR-518d-5p | -4.42 | 0.001 | miR-615-5p | -2.93 | 0.015 | miR-520a-3p | -2.62 | 0.031 |
| miR-219-1-3p | -4.23 | 0.004 | miR-616 | -2.93 | 0.015 | miR-496 | -2.62 | 0.046 |
| miR-381 | -4.19 | 0.011 | miR-624 | -2.93 | 0.015 | miR-672 | -2.61 | 0.047 |
| miR-377 | -4.18 | 0.004 | miR-674 | -2.93 | 0.015 | miR-520f | -2.59 | 0.031 |
| miR-329 | -4.13 | 0.003 | miR-871 | -2.93 | 0.015 | miR-548a-3p | -2.59 | 0.033 |
| miR-506 | -4.09 | 0.004 | miR-875-3p | -2.93 | 0.015 | miR-501-3p | -2.59 | 0.034 |
| miR-509-5p | -4.07 | 0.019 | miR-890 | -2.93 | 0.015 | miR-491-3p | -2.56 | 0.048 |
| miR-105 | -3.98 | 0.020 | miR-891b | -2.93 | 0.015 | miR-367 | -2.48 | 0.045 |
| miR-520b | -3.87 | 0.003 | miR-892a | -2.93 | 0.015 |  |  |  |
| miR-510 | -3.86 | 0.004 | miR-220 | -2.93 | 0.015 |  |  |  |
| miR-887 | -3.73 | 0.003 | miR-325 | -2.93 | 0.015 |  |  |  |
| miR-299-3p | -3.60 | 0.015 | miR-384 | -2.93 | 0.015 |  |  |  |
| miR-888 | -3.50 | 0.017 | miR-520e | -2.93 | 0.015 |  |  |  |
| miR-515-3p | -3.43 | 0.007 | miR-513-5p | -2.92 | 0.015 |  |  |  |

## Supplementary Table S3

| miRBase <br> Family ID | Family Members on microarray | Upregulated | Downregulated | microRNAs |
| :---: | :---: | :---: | :---: | :---: |
| MIPF5000001 | 8 | 7 | 0 | miR-20a, miR-18a, miR-17, miR-106a, miR-93, miR-106b, miR-20b, miR-18b |
| MIPF0000002 | 8 | 8 | 0 | let-7b, let-7g, let-7d, let-7f, let-7a, let-7e, miR-98, let-7c |
| MIPF5000005 | 2 | 2 | 0 | miR-30b, miR-30c |
| MIPF5000006 | 4 | 4 | 0 | miR-15b, miR-16, miR-195, miR-15a |
| MIPFF0000007 | 2 | 1 | 0 | miR-181a |
| MIPFF0000009 | 3 | 3 | 0 | miR-29b, miR-29a, miR-29c |
| MIPF5000011 | 2 | 2 | 0 | miR-19a, miR-19b |
| MIPF0000013 | 2 | 2 | 0 | miR-25, miR-92a |
| MIPF0000017 | 3 | 2 | 0 | miR-125a-5p, miR-125b |
| MIPF5000018 | 15 | 3 | 6 | miR-154, miR-539, miR-381, miR-377, miR-655, miR-487b, miR-487a, miR-494, miR-496 |
| MIPF5000019 | 5 | 5 | 0 | miR-200a, miR-429, miR-141, miR-200c, miR-200b |
| MIPF5000020 | 33 | 0 | 18 | miR-519c-3p, miR-523, miR-518d-3p, miR-518d-5p, miR-525-5p, miR-525-3p, miR-520b, miR$518 \mathrm{a}-5 \mathrm{p}$, miR-520d-5p, miR-524-5p, miR-520e, miR-521, miR516a-5p, miR-520a-5p, miR-520a3p, miR-526b, miR-520f, miR-519e |
| MIPFF0000024 | 2 | 1 | 0 | miR-103 |
| MIPF5000025 | 3 | 3 | 0 | miR-99a, miR-100, miR-99b |
| MIPF0000027 | 2 | 2 | 0 | miR-23b, miR-23a |
| MIPFF0000028 | 2 | 2 | 0 | miR-135b, miR-135a |
| MIPFF0000033 | 2 | 2 | 0 | miR-10b, miR-10a |
| MIPF0000034 | 4 | 4 | 0 | miR-130b, miR-301a, miR-130a, miR-301b |
| MIPF5000036 | 2 | 2 | 0 | miR-27b, miR-27a |
| MIPF0000039 | 2 | 1 | 0 | miR-34a |
| MIPF5000040 | 3 | 2 | 0 | miR-199a-3p, miR-199a-5p |
| MIPFF0000043 | 2 | 2 | 0 | miR-26b, miR-26a |
| MIPFF0000044 | 3 | 0 | 2 | miR-219-2-3p, miR-219-1-3p |
| MIPF5000051 | 2 | 2 | 0 | miR-222, miR-221 |
| MIPF5000054 | 2 | 0 | 2 | miR-216a, miR-216b |
| MIPF5000056 | 3 | 3 | 0 | miR-148a, miR-148b, miR-152 |
| MIPF5000057 | 2 | 1 | 0 | miR-28-5p |
| MIPFF0000063 | 2 | 1 | 1 | miR-215, miR-192 |
| MIPFF0000065 | 2 | 2 | 0 | miR-132, miR-212 |
| MIPF5000068 | 2 | 0 | 1 | miR-371-3p |
| MIPF5000071 | 3 | 0 | 2 | miR-302c, miR-302a |
| MIPF5000073 | 2 | 0 | 1 | miR-129-5p |
| MIPF0000080 | 2 | 0 | 1 | miR-127-5b |
| MIPF0000082 | 3 | 3 | 0 | miR-193a-3p, miR-193a-5p, miR-193b |
| MIPF0000084 | 2 | 2 | 0 | miR-142-3p, miR-142-5p |
| MIPF0000085 | 2 | 1 | 0 | miR-140-5p |
| MIPF0000091 | 3 | 1 | 1 | miR-376c, miR-376b |
| MIPF0000098 | 2 | 2 | 0 | miR-95, miR-545 |
| MIPF0000103 | 3 | 2 | 0 | miR-146a, miR-146b-5p |
| MIPF0000105 | 2 | 0 | 1 | miR-147 |
| MIPF0000110 | 2 | 1 | 1 | miR-495, miR-329 |
| MIPF0000113 | 4 | 3 | 1 | miR-660, miR-532-5p, miR-532-3p, miR-188-3p |
| MIPF0000117 | 2 | 0 | 1 | miR-139-3p |
| MIPF0000126 | 4 | 1 | 1 | miR-411, miR-380 |
| MIPF0000128 | 3 | 0 | 1 | miR-450b-3p |
| MIPF0000129 | 2 | 2 | 0 | miR-455-5p, miR-455-3p |
| MIPF0000130 | 11 | 0 | 8 | miR-512-5p, miR-512-3p, miR-507, miR-506, miR-509-5p, miR-509-3-5p, miR-510, miR-508-3p, miR-508-5p, miR-513-5p, miR-511 |
| MIPF0000139 | 5 | 4 | 1 | miR-500, miR-502-3p, miR-502-5p, miR-501-3p, miR-501-5p |
| MIPF0000159 | 2 | 1 | 0 | miR-296-5p |
| MIPF0000165 | 2 | 1 | 0 | miR-324-5p |
| MIPF0000173 | 2 | 0 | 1 | miR-499-3p |
| MIPF0000178 | 2 | 0 | 2 | miR-208b, miR-208 |
| MIPF0000186 | 2 | 0 | 1 | miR-299-3p |
| MIPF0000190 | 2 | 1 | 0 | miR-342-3p |
| MIPF0000193 | 2 | 2 | 0 | miR-339-5p, miR-339-3p |
| MIPF0000199 | 2 | 1 | 0 | miR-331-5p |
| MIPF0000201 | 2 | 1 | 1 | miR-485-3p, miR-485-5p |
| MIPF0000209 | 2 | 1 | 0 | miR-362-3p |
| MIPF0000288 | 2 | 2 | 0 | miR-374b, miR-374a |
| MIPF0000317 | 10 | 1 | 6 | miR-548c-3p, miR-548c-5p, miR-570, miR-548a-5p, miR-548a-3p, miR-548b-3p, miR-579 |
| MIPF0000319 | 2 | 1 | 1 | miR-491-5p, miR-491-3p |
| MIPF0000342 | 2 | 0 | 1 | miR-615-5p |
| MIPF0000386 | 3 | 0 | 3 | miR-888, miR-890, miR-892a |
| MIPF0000409 | 2 | 0 | 1 | miR-654-5p |
| MIPF0000417 | 2 | 1 | 0 | miR-582-5p |
| MIPF0000420 | 2 | 0 | 1 | miR-891b |
| MIPF0000430 | 2 | 0 | 1 | miR-876-5p |
| MIPF0000475 | 2 | 0 | 2 | miR-556-3p, miR-556-5p |
| MIPF0000532 | 2 | 0 | 1 | miR-885-3p |

