

SUPPLEMENTARY TABLES

Transgenic expression of human C19MC miRNAs impacts placental morphogenesis

Jean-Francois Mouillet , Julie Goff, Elena Sadovsky, Huijie Sun, Tony Parks, Tianjiao Chu

Yoel Sadovsky

Supplementary Table 1: A list of the primer sequences used in this study.

| Name | Direction | Sequence |
|----------------|-----------|-----------------------------|
| <i>Acot4</i> | Forward | CCCAAAGAGCTCAACGTCAT |
| | Reverse | GAAAGACCCAGAAGCCCAAT |
| <i>Amz1</i> | Forward | TTCAGGCTCCTGGAGAGGTA |
| | Reverse | AGGTGTCCTCCGACACAGAT |
| <i>Dll1</i> | Forward | CAGCAAACGTGACACCAAGT |
| | Reverse | TCTGGCCTTTTTCTGTCAGG |
| <i>Dnajb11</i> | Forward | ACGCAGGAAATTTTGTGGAA |
| | Reverse | TTCTCATCTCTTGCCGACAG |
| <i>Mmp1a</i> | Forward | GATGCTGCTGTTTGTGAGGA |
| | Reverse | GGGATAACCTGGATCCATAGAC |
| <i>Mrap2</i> | Forward | ATCGGACCAGTTTCCTTTGA |
| | Reverse | TTCGTCAGCAAAGTCAGCAC |
| <i>Pard6g</i> | Forward | TGACGACA ACTTCTGCAAGG |
| | Reverse | GCTCCGAAGCTGTAATGGTC |
| <i>Prl5a1</i> | Forward | AAA ACTCACTAAAAATCTGCAGAACA |
| | Reverse | TGACCAGGCAGGGTAGTCTT |
| <i>Psrl1</i> | Forward | TGGACGAGACCTTGGACTTC |
| | Reverse | CCGT CGAAGTGGTTTCTCTG |
| <i>Tdkkh</i> | Forward | TCAGTGAGATGACCCAGCAC |
| | Reverse | GCTCGATACCAGGAACCATT |
| <i>Sry</i> | Forward | GTTCAGCCCTACAGCCACAT |
| | Reverse | ATCTCTGTGCCTCCTGGAAA |

Supplementary Table 2. Top molecular and cellular functions based on miRNA targets

| Name | P-value | #Molecules |
|--|---------------------|------------|
| Cell-to-cell signaling and interaction | 3.02E-03 - 1.02E-07 | 271 |
| Cellular function and maintenance | 3.19E-03 - 6.25E-07 | 400 |
| Cellular development | 3.19E-03 - 1.02E-06 | 265 |
| Cellular growth and proliferation | 3.19E-03 - 1.02E-06 | 247 |
| Cell morphology | 2.69E-03 - 5.00E-06 | 291 |

Supplementary Table 3. C19MC miRNA seeds in the 3'UTR of putative mouse target genes.

| | Bambi | Cadm1 | Foxf1 | Foxl2 | Nr4a2 | Ntn4 | Olr1 | Pbx3 | Rnd3 |
|-----------------|---------|---------|-------|---------|---------|---------|---------|---------|---------|
| hsa-miR-519a-3p | NA | AAGUGCA | NA | NA | NA | NA | AAGUGCA | NA | NA |
| hsa-miR-519b-3p | NA | AAGUGCA | NA | NA | NA | NA | AAGUGCA | NA | NA |
| hsa-miR-519c-3p | NA | AAGUGCA | NA | NA | NA | NA | AAGUGCA | NA | NA |
| hsa-miR-519d-3p | AAAGUGC | NA | NA | AAAGUGC | AAAGUGC | AAAGUGC | AAAGUGC | AAAGUGC | NA |
| hsa-miR-520a-3p | AAGUGCU | AAGUGCU | NA | AAGUGCU | AAGUGCU | AAGUGCU | NA | AAGUGCU | NA |
| hsa-miR-520b | AAGUGCU | AAGUGCU | NA | AAGUGCU | AAGUGCU | AAGUGCU | NA | AAGUGCU | NA |
| hsa-miR-520c-3p | AAGUGCU | AAGUGCU | NA | AAGUGCU | AAGUGCU | AAGUGCU | NA | AAGUGCU | NA |
| hsa-miR-520d-3p | AAGUGCU | AAGUGCU | NA | AAGUGCU | AAGUGCU | AAGUGCU | NA | AAGUGCU | NA |
| hsa-miR-520e | AAGUGCU | AAGUGCU | NA | AAGUGCU | AAGUGCU | AAGUGCU | NA | AAGUGCU | NA |
| hsa-miR-520f-3p | NA | NA | NA | NA | NA | AGUGCUU | NA | AGUGCUU | AGUGCUU |
| hsa-miR-526b-3p | AAAGUGC | NA | NA | AAAGUGC | AAAGUGC | AAAGUGC | AAAGUGC | AAAGUGC | NA |