

**Supplementary Table S1.** Identification of known miRNAs.

| Gene ID      | Length(nt) | Mature Sequence         | BC25T  | BC15T  |
|--------------|------------|-------------------------|--------|--------|
|              |            |                         | Count  | Count  |
| miR156       | 21         | CTGACAGAAGAGAGTGAGCAC   | 95     | 39     |
| miR156a      | 21         | TGACAGAAGAGAGTGAGCACA   | 33     | 20     |
| miR156a-5p   | 20         | TGACAGAAGAGAGTGAGCAC    | 1405   | 1328   |
| miR156b_2    | 21         | TGACAGAAGAGAGTGAGCATA   | 24     | 16     |
| miR156b-3p_7 | 22         | GCTCACTTCTCTCTGTGCACC   | 1      | 0      |
| miR156c-3p_2 | 22         | GCTCACTTCTCTCTGTGCAGC   | 0      | 8      |
| miR156f-3p_1 | 22         | GCTCACTTCTCTTCTGTGCAGC  | 40     | 106    |
| miR156f-3p_2 | 22         | GCTCACTGCTCTATCTGTGCAGC | 154    | 218    |
| miR156f-5p   | 20         | CTGACAGAAGAGAGTGAGCA    | 16     | 10     |
| miR156k_1    | 20         | TGACAGAAGAGAGGGAGCAC    | 0      | 1      |
| miR156q      | 21         | TGACAGAAGAGAGAGTGAGCACT | 3      | 4      |
| miR159a_1    | 21         | TTTGGATTGAAGGGAGCTCTA   | 43787  | 58067  |
| miR160       | 21         | TGGCATACAGGGAGGCCAGGCA  | 1243   | 1500   |
| miR160b_1    | 20         | TGCCTGGCTCCCTGTATGCC    | 36     | 89     |
| miR160f-5p   | 21         | TGCCTGGCTCCCTGAATGCCA   | 7      | 4      |
| miR162_1     | 21         | TCGATAAACCTCTGCATCCGG   | 281    | 179    |
| miR164a_2    | 21         | TGGAGAACGCAGGGCACTTGCT  | 1      | 1      |
| miR164a_4    | 21         | TGGAGAACGCAGGGCACGTGCA  | 12307  | 5689   |
| miR164b      | 20         | TGGAGAACGCAGGGCACGTGC   | 191    | 105    |
| miR166       | 22         | TCGGACCAGGCTTCATTCCCC   | 203    | 247    |
| miR166a      | 19         | TCGGACCAGGCTTCATTCC     | 843    | 646    |
| miR166a-3p   | 21         | TCGGACCAGGCTTCATTCCCC   | 221925 | 384731 |
| miR166d-5p_2 | 21         | GGAATGTTGTCTGGCTCGAGG   | 8749   | 5472   |
| miR166e      | 19         | GGACCAGGCTTCATTCCCC     | 491    | 418    |
| miR166e-3p   | 21         | CTCGGACCAGGCTTCATTCCC   | 365    | 667    |
| miR166g-3p   | 21         | TCGGACCAGGCTTCATTCTC    | 61121  | 79601  |
| miR166h-3p   | 20         | TCGGACCAGGCTTCATTCCC    | 36     | 138    |
| miR166h-3p_1 | 21         | TCTCGGACCAGGCTTCATTCC   | 3859   | 5317   |

|              |    |                         |       |       |
|--------------|----|-------------------------|-------|-------|
| miR166k      | 20 | TCGGACCAGGCTTCATTCCCT   | 1388  | 1825  |
| miR166m_2    | 20 | CGGACCAGGCTTCATTCCCC    | 1583  | 985   |
| miR167a_1    | 21 | TCAGATCATCTTGCAGCTTCA   | 13025 | 18990 |
| miR167a_2    | 22 | TGAAGCTGCCAGCATGATCTGA  | 0     | 1     |
| miR167a-5p   | 21 | TGAAGCTGCCAGCATGATCTA   | 176   | 690   |
| miR167b-3p_3 | 23 | GGTCATGCTCTGACAGCCTCACT | 20    | 43    |
| miR167d_1    | 20 | TGAAGCTGCCAGCATGATCT    | 36    | 225   |
| miR167d-5p   | 21 | TGAAGCTGCCAGCATGATCTG   | 203   | 66    |
| miR168       | 20 | TCGCTTGGTGCAGGTCGGGA    | 844   | 1005  |
| miR168-5p    | 22 | TCGCTTGGTGCAGGTCGGGAAC  | 114   | 132   |
| miR168a-3p_1 | 21 | CCTGCCTTGCATCAACTGAAT   | 460   | 1786  |
| miR168a-5p   | 21 | TCGCTTGGTGCAGGTCGGAA    | 19723 | 33949 |
| miR168b_1    | 19 | TCGCTTGGTGCAGGTCGGG     | 209   | 92    |
| miR169a-5p   | 21 | CAGCCAAGGATGACTTGCCGA   | 390   | 372   |
| miR169b-5p   | 21 | CAGCCAAGGATGACTTGCCGG   | 22    | 10    |
| miR169e_2    | 21 | TAGCCAAGGATGACTTGCCGG   | 28    | 727   |
| miR169e_3    | 20 | AGCCAAGGATGACTTGCCGG    | 83    | 4     |
| miR169m      | 20 | TAGCCAAGGATGACTTGCCG    | 878   | 39    |
| miR169v_1    | 19 | CAGCCAAGGATGACTTGCC     | 4     | 58    |
| miR171_2     | 21 | TTGAGCCCGCGTCAATATCTCC  | 1216  | 2212  |
| miR171a_3    | 20 | TGATTGAGCCGTGCCAATAT    | 0     | 1     |
| miR171a-3p_1 | 20 | TGATTGAGCCCGCGCCAATAT   | 44    | 112   |
| miR171b_1    | 21 | TTGAGCCCGCGCCAATATCAC   | 8949  | 1622  |
| miR171b_2    | 21 | TGATTGAGCCCGTGCCAATATC  | 63    | 11626 |
| miR171b-3p   | 20 | TTGAGCCCGTGCCAATATCAC   | 0     | 43    |
| miR171b-3p_3 | 21 | TTGAGCCCGTGCCAATATCACG  | 14200 | 33672 |
| miR171d_1    | 20 | TTGAGCCCGCGCCAATATCAC   | 22    | 4     |
| miR171i-5p   | 21 | AGGTATTGGCGTGCCTCAATC   | 5     | 18    |
| miR171l-5p   | 21 | TATTGGCGTGCCTCAATCCGA   | 9     | 12    |
| miR172a_3    | 21 | AGAACCTTGATGATGCTGCAT   | 4     | 2     |
| miR319_1     | 19 | TTGGACTGAAGGGAGCTCC     | 178   | 324   |
| miR319a      | 20 | CTTGGACTGAAGGGAGCTCC    | 215   | 68    |

|              |    |                        |       |       |
|--------------|----|------------------------|-------|-------|
| miR319a_1    | 21 | TTGGACTGAAGGGAGCTCCCT  | 282   | 260   |
| miR319a-3p   | 20 | TTGGACTGAAGGGAGCTCCC   | 257   | 173   |
| miR319a-5p_1 | 21 | AGAGCTTCCTTCAGTCCACTC  | 0     | 3     |
| miR319a-5p_4 | 20 | GAGCTCTCTTCAGTCCACTC   | 9612  | 18090 |
| miR319b-5p_1 | 21 | AGAGCTCTCTTCAGTCCACTC  | 19    | 69    |
| miR319c_1    | 20 | TTGGACTGAAGGGAGCTCCT   | 15    | 22    |
| miR319c_2    | 21 | CTTGGACTGAAGGGAGCTCCC  | 55    | 349   |
| miR319e_1    | 21 | TTTGGACTGAAGGGAGCTCCT  | 49    | 264   |
| miR319p      | 21 | TTTTGGACTGAAGGGAGCTCC  | 3     | 9     |
| miR393a-5p   | 22 | TCCAAAGGGATCGCATTGATCC | 1     | 16    |
| miR394a_1    | 20 | TTGGCATTCTGTCCACCTCC   | 45    | 62    |
| miR395i      | 21 | CTGAAGTGTGAGGAACTC     | 39    | 18    |
| miR395p-3p   | 20 | TGAAGTGTGAGGAACTC      | 41    | 1     |
| miR396e-5p   | 20 | TTCCACGGCTTCTTGAAC     | 1175  | 3397  |
| miR396f_1    | 21 | TTCCACGGCTTCTTGAAC     | 32538 | 35050 |
| miR408-3p_2  | 21 | ATGCACTGCCTCTTCCCTGGC  | 0     | 1     |
| miR408b_1    | 21 | TGCACTGCCTCTTCCCTGGC   | 1     | 7     |
| miR408d      | 20 | TGCACTGCCTCTTCCCTGGC   | 0     | 3     |
| miR4995      | 21 | AGGCAGTGGCTTGTTAAGGG   | 234   | 238   |
| miR5083      | 20 | AGACTACAATTATCTGATCA   | 0     | 4     |
| miR5139      | 19 | AAACCTGGCTCTGATACCA    | 81    | 73    |
| miR5179      | 21 | TTTGCTCAAGACCGCGAAC    | 6185  | 13822 |
| miR529-3p    | 21 | GCTGTACCCTCTCTCTTCTTC  | 540   | 390   |
| miR529a      | 20 | CTGTACCCTCTCTCTTCTTC   | 7     | 6     |
| miR5368      | 19 | GGACAGTCTCAGGTAGACA    | 1     | 2     |
| miR6173      | 20 | AGCCGTAAACGATGGATACT   | 116   | 103   |
| miR845       | 21 | TGCTCTGATACCAATTGTTGG  | 49    | 28    |