

**Table S4. List of 23 differentially expressed mRNAs in the top 3 pathways and the differentially expressed miRNAs that were predicted to target them.**

| Pathway  | Gene           | Differentially expressed miRNAs predicted to target gene  |
|--|----------------|---|
| Proliferation and differentiation related pathways | <i>Abl1</i>    | miR-101a, -101b, -128, -132, -15a, -15b, -16, -195, -203, -212, -30a, -30b, -30d, -30e, -378, -7a, -7b  |
|  | <i>Axin2</i>   | miR-107, -15b, -15a, -16, -195, -221, -222, -290-5p, -374, -495   |
|  | <i>E2f2</i>    | miR-106a, -106b, -17, -20a, -20b, -21, -221, -222, -301b, -302a, -335-5p, -721, -495, -93   |
|  | <i>Fgfr1</i>   | miR-15b, -15a, -16, -195, -214, -22, -328, -342-3p, -376b, -339-5p, -495  |
|  | <i>Igf1r</i>   | let-7a, let-7b, let-7d, let-7f, let-7g, let-7i, miR-30a, -30b, -30d, -30e, -376b, -488, -98   |
|  | <i>Ikbkb</i>   | miR-130b, -15b, -15a, -16, -17, -190, -195, -20a, -20b, -214, -218, -29a, -29b, -29c, -301b, -33, -721, -93   |
|  | <i>Itgb1</i>   | miR-214, -29a, -29b, -29c   |
|  | <i>Kit</i>     | miR-107, -128, -137, -15a, -15b, -16, -185, -19a, -19b, -195, -218, -221, -222, -301b, -361, -410, -431, -542-3p, -721, -882  |
|  | <i>Prkcb</i>   | miR-129-5p, -203, -326, -433, -495, -873  |
| Cell adhesion molecules                            | <i>Ptgs2</i>   | miR-101b, -101a, -107, -129-5p, -132, -15a, -15b, -16, -195, -212, -33, -342-3p, -338-3p, -374, -381, -410, -411, -433, -7a, -7b, -873  |
|  | <i>Ralgds</i>  | miR-124, -185, -214, -302a, -374, -882, -9  |
|  | <i>Cdh4</i>    | miR-124, -129-5p, -132, -148b, -149, -212, -33  |
|  | <i>Cntn1</i>   | miR-106a, -106b, -124, -129-5p, -136, -146b-5p, -153, -17, -191, -20a, -20b, -203, -204, -218, -25, -300, -326, -33, -361, -363-5p, -374, -376a, -376b, -377, -381, -410, -411, -488, -495, -873, -93 |
|  | <i>F11r</i>    | miR-125b-5p, -214, -290-5p, -338-3p, -342-3p, -377, -410  |
|  | <i>Ncam1</i>   | miR-128, -204, -290-5p, -377, -411, -431, -542-3p   |
|  | <i>Negr1</i>   | miR-101a, -101b, -124, -129-5p, -135b, -136, -203, -21, -329, -362-3p, -377, -382, -7a, -7b, -9   |
|  | <i>Nrxn1</i>   | miR-128, -129-5p, -137, -142-3p, -190, -208b, -218, -290-5p, -329, -335-5p, -338-3p, -339-5p, -342-3p, -374, -377, -495   |
|  | <i>Nrxn3</i>   | miR-129-5p, -185, -214, -218, -495, -882  |
| Neurotrophin signaling pathway                     | <i>Camk2d</i>  | miR-106a, -106b, -129-5p, -130b, -135b, -136, -17, -185, -191, -20a, -20b, -203, -214, -30a, -30b, -30d, -30e, -361, -377, -381, -382, -495, -873, -882, -93  |
|  | <i>Ntrk2</i>   | miR-101b, -101a, -124, -138, -329, -33, -431, -873  |
|  | <i>Rapgef1</i> | miR-124, -138, -149, -203, -411, -488, -495, -542-3p, -873  |
|  | <i>Sh2b3</i>   | let-7b, let-7d, let-7f, let-7g, let-7i, -218, -30a, -30b, -30d, -30e, -326, -542-3p, -98  |
|  | <i>Sort1</i>   | miR-135b, -142-3p, -146b, -149, -15b, -190, -195, -324-5p, -361, -542-3p, -9  |