SUPPLEMENTARY MATERIALS

EXPERIMENTAL PROCEDURES

Transfection of miR-182, miR-182 inhibitor, and siRNAs

Subconfluent glioma cells were transfected using Lipofectamine 2000 (Invitrogen, Carlsbad, CA) with 15 nM of synthetic premature human miR-182 (Ambion, Carlsbad, CA), or a human miR-control (Co-miR). The culture media were changed to fresh DMEM containing 10% FBS 24 hrs post-trasfection. The effects on the target genes were tested 48 hrs post transfection. The same protocol was followed for the transfection of 50-100 nM anti-miR-182 (Ambion, Carlsbad, CA) or anti-Co-miR. Glioma cell lines were transfected with pools of siRNAs against Bcl2L12 (Dharmacon, Pittsburgh, PA), c-Met (Dharmacon, Pittsburgh, PA) and HIF2A (Dharmacon, Pittsburgh, PA) using Lipofectamine 2000. The effects on target gene levels were tested 48 hrs post transfection.

Quantitative Real-time PCR

Total RNA was isolated from glioma cells and patient derived GICs using the miRVana RNA extraction kit (Ambion, Carlsbad, CA). Complementary DNA was synthesized from 500 ng of total RNA using Superscript III reverse transcriptase (Invitrogen, Carlsbad, CA) and oligo d(T) primers (Promega, Fitchburg, WI). Quantitative PCR was carried out with SYBR Green (ABI, Foster City, CA), or TaqMan Universal PCR Master Mix (ABI, Foster City, CA) on the Applied Biosystems 7500 cycler. The following Taqman probes were used: 18s (4333760), ZIC2 (Hs00600845), c-Met (Hs01565584), CDK1 (Hs00938777), CCNB1 (Hs00259126), WNT5A (Hs00998537), AURKB1 (Hs00945858), EPAS1 (Hs01026149_m1), CD44 (Hs01075861_m1), NANOG (Hs04260366_g1), PROM1 (Hs01009250_m1), POU5F1 (Hs04260367_gH), SOX2

(Hs01053049_s1), hsa-miR-182 (002334) and Z30 (001092). Specific primer sequences were used for Bcl2L12 (CCATCGACAGAGAAGGAAGC and GCTACAGAACAGCTCCACCA) and TATA-binding protein (TBP) (GGCTGTTTAACTTCGCTTCC and CCTAGAGCATCTCCAGCACA). Results were analyzed using the DDCt method ($\log_2$ change) ($\Delta\Delta Ct = \Delta Ct_{treated} - \Delta Ct_{untreated}$).

Western blotting

Protein lysates were extracted from adherent glioma cells and GICs using RIPA buffer (Boston Bioproducts, Ashland, MA) containing protease and phosphatase inhibitors. 20 µg of proteins were separated using 4-12% gradient SDS-PAGE, transferred to Hybond PVDF membrane (GE Healthcare, Cleveland, OH), blocked with 5% milk and incubated overnight with the following antibodies: anti-Bcl2L12 (anti-L12-1 rabbit serum Ref 1:1000 dilution, (Stegh et al., 2007)), cleaved caspase-3 (Cell Signaling, Danvers, MA, 1:1000 dilution), cleaved caspase-7 (Cell Signaling, Danvers, MA, 1:1000 dilution), c-Met (Cell Signaling, Danvers, MA, 1:1000 dilution), WNT5A (Cell Signaling, Danvers, MA, 1:1000), CCNB1 (Cell Singaling, Danvers, MA, 1:1000 dilution), CDK1 (Cell Signaling, Danvers, MA, 1:1000 dilution), AURKB1 (Cell Singaling, Danvers, MA, 1:1000), HIF2A (Cell Signaling, Danvers, MA, 1:1000 dilution), pAKT (Cell Signaling, Danvers, MA, 1:1000 dilution), AKT (Cell Signaling, Danvers, MA, 1:1000 dilution), CD44 (Cell Signaling, Danvers, MA, 1:2000 dilution), Nestin (Millipore, St. Charles, MO, 1:1000 dilution) and Hsp70 (BD Biosciences, San Jose, CA, 1:20000 dilution). After washing with 1xPBS+Tween (PBST), the membranes were incubated with a secondary goat anti-rabbit or goat anti-mouse antibody conjugated to horseradish-peroxidase (Santa Cruz, Dallas, TX, 1:2500 dilution) for 1 hr. The signal was detected using Enhanced Chemiluminescence kit (GE Healthcare, Cleveland, OH).

Luciferase Assays

The 3'UTR of *Bcl2L12*, *c-Met* and *HIF2A* were cloned downstream of the Luciferase gene in a pGL3 vector (gift of Dr. R. Awatramani, Northwestern University). The full-length 3'UTR of Bcl2L12 was cloned using XbaI (NEB, Ipswich, MA) restriction sites. Part of the 3'UTR of c-Met (position 1-239bp) containing the miR-182 target site (seed match position 91-98bp) and HIF2A (position 321-518pb) containig the miR-182 target site (seed match position 414-421pb) was cloned into pGL3 using XbaI restriction sites. The pGL3 Luciferase vector was transfected into 293T cells in combination with a Renilla reporter, and the synthetic premature miR-182 or Co-miR (200 nM). 24-48 hrs post transfection, cells were lysed using passive lysis buffer, and Firefly and Renilla luciferase activities were measured using the Dual-Luciferase Reporter Assay System (Promega, Madison, WI). For mutating the seed sequence in the *Bcl2L12* 3'UTR specific primers were utilized carrying the desired nucleotide alterations, 5'TTTCGGATAAATAAATTGTTTAAAACTTTTCTTAT 3'and 5'AACAGGTAGGGCAAC CACCACCCCACAGCCCTGAG 3'. The promoter area of miR-182 was cloned upstream of the Luciferase gene in a pGL3 vector using NheI and XhoI (NEB, Ipswich, MA) restriction sites.

Cell Death Assays

Activity of caspase -3 and -7 was detected by a fluorometric assay using the Caspase-Family Fluorometric Substrate Set Plus Kit (Biovision, Miltipas, CA) according to manufacturer's instructions. Annexin V positivity was measured by flow cytometric analysis, using the Annexin V-Cy5 Apoptosis Detection Kit (Biovision, Miltipas, CA). Briefly, glioma cells were transfected with 15 nM of synthetic pre-mature miR-182 or Co-miR for 24 hrs. Media were replaced, and cells were treated with 0.2 μM of staurosporine (Sigma, St. Louis, MI) for 24 hrs. Next, cells were collected and resuspended in 500 μl of 1x Annexin V Binding Buffer. Annexin V-Cy5 was

added to the cells for 5 min. The cells were counterstained with DAPI and analyzed by flow cytometry (LSR Fortessa, 20,000 counts).

Microarray Profiling

Patient-derived GICs were transduced with lentiviral particles containing either pLenti III-miR-182-GFP or pLenti III-Co-miR-GFP vector to stably overexpress hsa-miR-182. The overexpression of miR-182 was verified by RT-qPCR. Total RNA was extracted using the miRVana RNA extraction kit (Ambion, Carlsbad, CA). The quality of the RNA was evaluated by Bioanalyzer, and was further processed for whole genome profiling using the Illumina HumanHT-12 Beadchip expression technology (Illumina, San Diego, CA, USA). Cutoff conditions for significant gene changes were p<0.05 and Fold Change>2.

Proliferation assay

Subconfluent LNZ308 were transfected with synthetic miR-182/Co-miR (15 nM), anti-miR-182/anti-Co-miR (50 nM), or scramble/c-Met-targeting siRNAs (50 nM), alone and in combination with anti-miR-182 (100 nM). The next day, cells were trypsinized and plated in 96 wells ($7x10^3$ cells per well). Cells were synchronized for 6-8 hrs in DMEM, and subsequently treated with TGF-β1 (10 ng/ml) (Gibco, New York, NY) for 48 hrs. The effects on cellular proliferation were measured by the Cell Proliferation ELISA, BrdU colorimetric assay (Roche, Indianapolis, IN), following manufacturer's instructions. Briefly, cells were labeled with BrdU for 4 hrs, fixed and incubated with an anti-BrdU antibody conjugated to peroxidase. After addition of substrate, the absorbance was measured at 370 nm.

Cell growth Assay

Subconfluent LNZ308 cells were transfected with miR-182/Co-miR (15 nM) for 24 hrs. The next day, cells were trypsinized and plated in 96 wells (7×10^3 cells per well). Cells were synchronized for 6-8 hrs in DMEM, and subsequently treated with 10% FBS. The cells were placed in an IncuCyte ZOOM (Essen BioScience), where images were taken every 3 hrs. The effects on cell growth are presented as percent confluence.

Oligonucleotide synthesis

RNA oligonucleotides were synthesized with TOM-RNA reagents (Glen Research) on a MerMade 6 (Bioautomation, for small scale studies), or an ÄKTA Oligopilot (GE Healthcare, for large scale studies) according to manufacturer-recommended cleavage and deprotection protocols. Oligonucleotides were purified by reverse-phase high performance liquid chromatography (RP-HPLC) on a Varian Microsorb 300-10 C_{18} column with 0.05 M triethylammonium acetate (TEAA) at pH 7 with 1%/min gradient of 100% CH_3CN, while monitoring the UV signal of the nucleic acids at 254 nm. The aqueous buffer was treated with 0.1% diethylpyrocarbonate (DEPC, Sigma) and autoclaved to inactivate RNase enzymes. After purification, the oligonucleotides were lyophilized and stored at -80°C until further use. Sequence information for the miR182 and nonsense duplexes are shown in Figure 3B. Note that the sense strands are terminated with a propylthiol to mediate attachment to AuNPs.

miRNA-Mimic Spherical Nucleic Acid Synthesis and Characterization

Citrate stabilized gold nanoparticles (AuNPs, 13 ± 1 nm) were prepared using the Frens method (*1*), treated with 0.1% DEPC, and autoclaved to inactivate RNases. RNA duplexes were hybridized and added to RNase-free AuNPs in a solution containing 150 mM NaCl and 0.2% Tween-20 (2 nmol duplex per mL AuNP), where they could chemisorb via a thiol-gold bond. To prevent duplex dehybridization, the NaCl concentration was slowly increased to 350 mM over

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12-24 h. RNA-coated AuNPs were then treated with 10 µM mPEG-SH (5 kDa, Laysan Bio, Inc.) for 2-4 hrs, purified by transflow filtration (50 kDa mPES filters, Spectrum Laboratories, Inc.), and suspended in sterile, RNase-free phosphate-buffered saline (PBS) to the desired concentration for the intended application. To generate fluorescent SNAs, Cy5.5 phosphoramidite (Glen Research) was manually coupled to the 5' end of the sense strands prior to duplex hybridization, or alternatively, Cy5.5-NHS (GE Healthcare) was attached via a 5 kDa SH-PEG-NH$_2$ (Laysan Bio., Inc.) backfill.

Dynamic light scattering, zeta potential measurements, and an OliGreen assay were performed to confirm and quantify the presence of miRNA on AuNPs. In the OliGreen assay, 5 nM SNAs diluted in 8M urea were heated to 45°C for 20 min to dehybridize the antisense strands from the sense strands, which remain on the AuNP. The sense-loaded AuNPs were pelleted by centrifugation (30 min, 21000 x g), and the supernatant containing the antisense strands was collected and incubated with components of the Quant-iT OliGreen Assay (Invitrogen™) for 5 min. Standards of known antisense RNA concentration were also incubated with OliGreen reagents to create a standard curve, and fluorescence was measured using a BioTek® Synergy Multiplate reader with excitation/emission at 485 nm/520 nm. These analyses revealed that both the miR182-mimic and nonsense SNAs contain ~30 antisense strands per AuNP (for complete characterization see Figure 5C).

Pharmacokinetic Analysis

Female CD1 mice (n=3 per time point) were intravenously injected with 182-SNAs at a dose of 200 µg RNA/kg of body weight. Blood was collected prior to administration as well as at 5, 30 min and 4, 24, 48 and 72 hrs after 182-SNA administration. In addition, liver, spleen, kidney, lung, heart and brain were collected at the same time points. Gold contect was analyzed by ICP-

MS. A two-compartment model using non-linear regression analysis was followed to calculate the pharmacokinetic parameters. According to this model, particle transportation between central and peripheral compartments follows first-order kinetics and particle elimination from central compartment follows again first-order kinetics and by using the equation SNA = Ae $^{-\alpha t}$ + Be $^{-\beta t}$, where SNA is the particle concentration in the blood, A and B are hybrid coefficients and α and β are rate constants for the distribution and elimination process, respectively and t is the time.

In vitro **evaluation of miR-182-based SNAs.**

 To assess the uptake of SNAs *in vitro***,** Cy5.5-SNAs were added to subconfluent U87MG cells or GICs in the absence of FBS, supplement and growth factors for 24 hrs at a concentration of 1 nM. The cells were then counterstained with Hoechst dye (Molecular probes, Eugene, OR) for 30 min to visualize the nuclei. To measure the effect of scavenger receptor inhibition on SNA uptake, cells were pre-treated with PolyI (250 μg/mL) for 24 hrs pre SNA administration. Cy5.5-SNAs (1 nM) were then added for 24 hrs, and cellular uptake was measured by confocal fluorescence microscopy. To assess the functionality of SNAs *in vitro*, 182-SNAs or Co-SNAs (5-15 nM) were added to sub-confluent U87MG cells for 48h, and the effects on Bcl2L12 and c-Met protein levels were evaluated by Western blotting. Glioma cells were treated with 182-SNAs or Co-SNAs for 48 hrs, and cultured in the presence of STS for the indicated periods of time. The effects on cleaved caspase -3 and -7 were determined by Western blotting. Furthermore, U87MG and LNZ308 cells were treated with 182-SNAs or Co-SNAs, and their proliferative response to 10% FBS and TGF-β1 (10ng/ml) was determined by BrdU colorimetric assay (Roche, Indianapolis, IN).

In vivo **evaluation of SNA in a GBM xenograft model**

All animals used were under an approved protocol of the Institutional Animal Care and Use Committee of Northwestern University. For intracranial cell inocculation, U87MG cells or GICs were suspended in Hank's Balanced Salt Solution at a concentration of $1x10^5$ and $5x10^5$ per 5 □er respectively. Anesthetized female CB17 SCID mice (6-8 weeks) (Taconic Farms) were placed in a stereotaxic frame, and the surgical area was cleaned with Betadine®. An incision was made, and a 0.7 mm Burr hole was created in the skull with a microsurgical drill, 2 mm lateral right of the sagital suture and 0.5 mm posterior of bregma. Glioma cells were administered through a Hamilton syringe, which was inserted 3.5 mm into the brain. Cells were injected over a period of 5 min. To assess therapeutic efficacy, 500 nM 182- or Co- SNAs were administered via the tail vein at a volume that allowed for 1.4 mg/kg (RNA/mouse weight) per injection, with injections performed every other day. The mice received 7 injections, for a total 182- or Co-SNA dose of 10 mg/kg. To assess the effects of SNA treatment on tumor growth, mice were imaged before the initiation of the systemic SNA delivery and on a weekly basis by IVIS analysis.

Evaluation of miRNA-Mimic SNA Delivery to Intracranial Glioma

U87MG tumors ($1x10^5$ cells in 5 μL medium) were grown in the right cerebrum of CB17 SCID mice for 13 days, during which the mice were fed a reduced alfalfa diet to lower background tissue fluorescence. Control animals received a sham surgery in which medium (without cells) was injected. Isoflurane-anesthetized mice were imaged with a Caliper Life Sciences IVIS Spectrum using 675 nm/720 nm excitation/emission filters to establish baseline autofluorescence, and then received 100 μl Cy5.5-SNAs (450 nM) or saline via tail vein injection. Mice were imaged at 1, 2, and 22 hrs post-injection, and then the brains were excised for *ex vivo* imaging to determine the extent of SNA dissemination throughout intracranial tumors following systemic delivery.

Toxicology Studies

Sprague-Dawley adult rats (n=3) were intravenously treated with PBS or 182-SNAs as a single dose on day 1 (10mg/kg; RNA/body weight). Animals were under observation on a daily basis one day before the treatment and daily afterwards. Body weights were recorded on day 1 and day 14. On day 1 and 14 blood samples were collected and the animals were sacrified. Major organs were weighed and processed for immunohistochemical analysis. Blood samples were sent to Charles River Laboratories for further analysis (blood chemistry and CBC).

Inductively coupled plasma mass spectrometry (ICP-MS)

U87MG, GIC-20, -23 amd -387 tumor tissue was dried in a 50 °C oven overnight, weighted, and digested with 1 mL concentrated HCL: HNO_3 (3:1) at room temperature overnight. After adding 5 μL of 1 ppm indium (internal standard) and 5 mL of matrix solution (2% HCl and 2% HNO_3), the Au-197 content of the resultant solution was measured by an iCAP™ Q ICP-MS (ThermoFisher) after subtracting the background gold content of untreated cells. Reported values represent ± SD from the average of three or more independent experiments.

Immunohistochemistry and Silver Staining

U87MG and GIC-20 tumors were grown intracranially, followed by systemic delivery of 100 μl of 500 nM SNAs. After 24 hrs, the brains were excised, fixed in 10% formalin, paraffin-embedded, and sectioned. Silver staining was carried out to amplify the size of the SNAs via the deposition of silver on gold and allow their visualization by light microscopy. Briefly, tissue sections were deparaffinized in xylene (10 min) and hydrated through a series of ethanol (100%, 90%, 70%, 50%; 3 min each) and water (3 min x 3 rinses). Silver enhancement was then performed for 10 min using a commercial kit (Ted Pella, Inc). Samples were counterstained with

Mayer's Hematoxylin, mounted with Vectamount AQ aqueous mounting medium, coverslipped, and imaged. Adjacent tissue sections were treated in a similar way and stained for the endothelial marker CD31/PECAM1 (Santa Cruz, Dallas, TX, 1:1000 dilution). The sections were counterstained with Mayer's Hematoxylin and further imaged.

Mouse cytokine study

Female CB17 SCID mouse (6-8 weeks) (Taconic Farm) received 7 injections of SNAs (total of ~10 mg/kg; RNA/body weight), and blood samples were collected on day 21. Serum was separated, and analyzed using Milliplex® MAP technology (Millipore, St. Charles, MO, USA), a bead-based suspension array, using fluorescent-coded beads conjugated with cytokine antibodies.

Cell Line	Position	Description
GIC-16	Null	Deletion
GIC-20	73 C>G	missense
GIC-23	197 G>A	novel
GIC-387	97 C>G, 38 A>G	novel
LN229	176 C>T	missense
LNZ308	Null	Deletion
SF767	WT	
U87MG	WT	

UP				
Symbol	**miR-182**	**Co-miR**	**Log2ratio**	**p-value**
KIAA1199	4192.633	96.255	5.445	0.016
RARRES2	3980.756	91.870	5.437	0.014
HLA-A29.1	3690.833	106.554	5.114	0.031
A2M	2285.761	87.437	4.708	0.017
KRT17	2268.762	96.833	4.550	0.005
IER3	3394.907	146.362	4.536	0.041
LGALS7B	1922.359	87.676	4.455	0.000
TPM2	3199.069	148.325	4.431	0.021
COL22A1	2121.007	103.768	4.353	0.021
LPHN2	1348.671	88.623	3.928	0.028
APOE	1762.114	121.852	3.854	0.047
LPL	1363.866	100.510	3.762	0.031
CHI3L1	4471.837	344.023	3.700	0.013
CMYA5	1169.671	93.983	3.638	0.007
ARHGDIB	1383.957	114.069	3.601	0.010
IGSF1	1090.188	89.889	3.600	0.038
LPPR4	1176.693	98.201	3.583	0.014
EGR2	2384.552	204.803	3.541	0.015
LGALS7	1109.113	95.608	3.536	0.004
FAT1	995.526	92.400	3.430	0.010
QPCT	1072.209	107.855	3.313	0.012
MTAP	926.470	94.813	3.289	0.011
LOC728910	924.541	94.964	3.283	0.000
LOC653499	850.356	88.857	3.259	0.000
VCX	801.910	86.865	3.207	0.001
S100A4	12500.843	1371.653	3.188	0.001
COL6A1	4854.119	533.386	3.186	0.019
PDPN	1759.519	196.074	3.166	0.001
GPM6B	2810.805	320.287	3.134	0.011
FLJ30058	796.994	91.298	3.126	0.048
VCX-C	801.460	91.852	3.125	0.002
S100A9	852.573	105.143	3.019	0.000
THBS4	897.234	112.955	2.990	0.002
TYRO3	1440.967	185.205	2.960	0.014
CYBA	755.710	97.494	2.954	0.007
CELSR2	1584.641	208.657	2.925	0.029
EFHD1	1304.506	173.767	2.908	0.004
KRT17P3	741.882	99.650	2.896	0.007
ALCAM	2691.750	364.522	2.884	0.030
PTPRF	1589.600	217.115	2.872	0.014
LOC642362	641.530	91.761	2.806	0.042
CHRNA9	699.918	102.283	2.775	0.021
RPL37A	5148.129	765.858	2.749	0.005

IGFBP3	1972.410	304.157	2.697	0.014
LOC653192	589.065	94.464	2.641	0.050
PDZK1P1	580.332	93.115	2.640	0.024
MGC18216	849.323	140.484	2.596	0.007
S100A8	727.025	121.278	2.584	0.002
HS.538259	1053.113	175.737	2.583	0.021
NOV	590.802	98.828	2.580	0.012
MT1F	915.211	154.073	2.570	0.006
SULF1	556.954	96.041	2.536	0.007
CH25H	579.523	99.953	2.536	0.024
MT1E	2238.895	387.326	2.531	0.004
RBP1	3567.580	618.958	2.527	0.010
CDKN2A	500.656	92.174	2.441	0.001
MX1	3244.922	605.860	2.421	0.009
VSNL1	1305.676	247.483	2.399	0.041
CTHRC1	981.220	186.623	2.394	0.011
CPE	603.836	114.968	2.393	0.008
FLRT2	514.909	98.419	2.387	0.008
SEMA6A	817.514	156.663	2.384	0.000
PNPO	2885.409	557.408	2.372	0.028
PAGE2B	481.455	94.360	2.351	0.005
COL6A2	1013.982	199.397	2.346	0.007
IL8	696.873	138.418	2.332	0.013
PCSK1	677.124	137.155	2.304	0.010
PAGE5	452.243	91.715	2.302	0.004
JMJD8	1064.105	219.406	2.278	0.001
KRT16	436.909	91.290	2.259	0.019
RAB40B	963.733	201.989	2.254	0.018
CSAG1	448.504	94.536	2.246	0.005
PAGE2	422.049	89.188	2.242	0.006
SEL1L3	1641.580	347.428	2.240	0.009
LIPG	1043.344	220.923	2.240	0.025
MCOLN2	505.788	109.065	2.213	0.008
SLC4A11	607.247	131.027	2.212	0.005
HS.12876	915.457	199.899	2.195	0.002
PDZK1	428.298	94.384	2.182	0.020
SLC10A4	440.220	97.170	2.180	0.032
CKB	4995.714	1120.678	2.156	0.003
PPAP2B	1004.748	228.353	2.137	0.000
FRMD8	1168.892	266.918	2.131	0.026
LOC284293	418.207	95.658	2.128	0.043
HS6ST2	789.491	180.944	2.125	0.041
DUSP23	1291.631	297.702	2.117	0.018
CDKN2B	408.948	94.699	2.110	0.003
TRIP12	555.586	129.752	2.098	0.010
ACPL2	660.899	154.401	2.098	0.006
CADM3	428.562	100.580	2.091	0.020

CCDC23	1827.344	429.690	2.088	0.008
GPR37	425.868	100.274	2.086	0.032
DARC	387.801	91.689	2.080	0.041
UAP1	1025.181	245.083	2.065	0.017
NPB	408.305	97.745	2.063	0.003
RASL12	399.677	95.863	2.060	0.023
SORL1	576.885	139.499	2.048	0.001
LLGL1	912.390	224.443	2.023	0.007
COL7A1	570.645	141.562	2.011	0.040
GPR126	391.059	98.118	1.995	0.018
KIAA1522	570.245	143.683	1.989	0.006
DPYSL4	654.214	166.524	1.974	0.034
SOX4	692.632	179.883	1.945	0.005
NAB1	761.983	198.367	1.942	0.027
USP11	933.812	243.537	1.939	0.040
C6orf117	534.131	139.656	1.935	0.016
GSPT2	1867.537	489.515	1.932	0.001
TSHZ2	671.270	176.377	1.928	0.006
SLFN11	366.877	96.467	1.927	0.017
KIAA1598	2508.967	660.940	1.925	0.012
SOX3	5330.731	1406.283	1.922	0.033
MT1G	698.473	184.490	1.921	0.001
C9orf95	660.734	176.021	1.908	0.015
IMPA2	820.569	218.782	1.907	0.039
GALNTL4	513.468	137.614	1.900	0.040
GSTM1	1536.799	413.726	1.893	0.002
KIAA0513	696.932	187.969	1.891	0.029
HLA-C	369.475	100.031	1.885	0.015
VCX3A	336.958	91.407	1.882	0.002
AOF2	2146.912	582.476	1.882	0.015
MTMR11	854.583	232.605	1.877	0.020
LOC653506	439.078	119.717	1.875	0.006
HS.578401	342.090	93.376	1.873	0.024
C9orf24	359.833	98.287	1.872	0.018
HS.505676	559.303	153.575	1.865	0.017
SOD2	966.161	266.986	1.855	0.023
PLXNB1	320.263	88.836	1.850	0.029
COL17A1	398.350	111.048	1.843	0.009
ADAMTS1	326.506	91.227	1.840	0.005
SOX13	1317.498	368.886	1.837	0.003
SORT1	1206.885	339.788	1.829	0.015
SHROOM2	405.426	115.064	1.817	0.031
C20orf108	2802.413	798.892	1.811	0.043
CYB5R2	1013.664	289.903	1.806	0.002
MAGEA6	320.683	93.051	1.785	0.011
BTBD6	1109.720	322.643	1.782	0.014
ARHGEF4	391.535	113.978	1.780	0.013

ZNF436	478.152	139.629	1.776	0.019
HS.537002	311.188	91.803	1.761	0.009
PRRX2	360.850	107.374	1.749	0.013
SERPINA1	312.189	93.167	1.745	0.017
WWC3	641.142	193.446	1.729	0.005
C20orf127	599.722	181.053	1.728	0.002
SPON1	445.850	135.388	1.719	0.029
ST8SIA2	454.284	138.774	1.711	0.032
EFNA1	1459.793	447.653	1.705	0.005
GTPBP6	1203.997	369.374	1.705	0.000
VANGL2	293.880	90.403	1.701	0.040
SIPA1L2	775.592	238.797	1.700	0.003
APOBEC3G	679.062	212.727	1.675	0.032
RAB7B	1035.033	326.502	1.665	0.038
SNAI2	501.274	158.183	1.664	0.017
EPHB4	871.764	275.725	1.661	0.018
CXCL1	315.798	99.949	1.660	0.005
LOC653419	307.236	98.946	1.635	0.003
GPC1	820.440	264.923	1.631	0.024
CCDC136	648.400	210.500	1.623	0.000
NUDT11	575.643	187.865	1.615	0.022
EFCAB4A	368.120	120.366	1.613	0.042
MRPS6	11763.760	3870.352	1.604	0.000
ZBTB42	453.095	149.262	1.602	0.014
ITGAV	2355.318	777.094	1.600	0.021
RHOD	448.268	148.148	1.597	0.033
KCNMB4	281.942	93.522	1.592	0.030
LRRC8D	520.730	173.093	1.589	0.007
EVL	1882.422	629.528	1.580	0.009
CSAG3B	268.639	90.217	1.574	0.016
MAGEA12	272.276	91.598	1.572	0.004
OLFML2A	780.034	262.600	1.571	0.000
RASSF7	708.210	238.982	1.567	0.000
ADRA1B	427.368	144.520	1.564	0.017
NOTCH3	311.465	105.342	1.564	0.028
LEPREL1	461.595	157.451	1.552	0.005
NBL1	1235.045	424.751	1.540	0.001
PTK2B	333.949	115.705	1.529	0.015
CHIC2	1202.674	418.808	1.522	0.047
MT1M	272.507	94.913	1.522	0.021
PLIN2	328.926	115.235	1.513	0.009
CENPV	297.719	104.487	1.511	0.008
C11orf74	490.041	172.110	1.510	0.009
FGFRL1	656.732	232.664	1.497	0.039
UGCGL2	366.017	130.054	1.493	0.011
LOC728431	372.659	132.586	1.491	0.011
OSTF1	2083.561	747.507	1.479	0.008

TRIB1	749.290	270.564	1.470	0.019
C20orf45	790.948	285.623	1.469	0.005
HS.444785	277.575	100.332	1.468	0.046
RAC2	248.951	90.228	1.464	0.015
MAP7	292.230	106.469	1.457	0.003
IGFBP7	4590.103	1674.043	1.455	0.013
STARD10	376.268	138.020	1.447	0.046
UCA1	265.467	97.592	1.444	0.046
CA5B	526.672	194.072	1.440	0.022
PDGFRB	494.215	182.201	1.440	0.046
KIAA0247	1062.333	391.969	1.438	0.044
RND2	428.373	158.119	1.438	0.000
UCHL1	1688.432	623.234	1.438	0.028
LOC730098	293.550	108.406	1.437	0.023
ZNF589	281.334	104.331	1.431	0.005
PTN	803.883	298.273	1.430	0.036
GSTT2B	271.478	100.739	1.430	0.001
UBA1	4557.546	1695.751	1.426	0.011
LOC650517	250.095	93.115	1.425	0.006
PQLC1	923.104	344.098	1.424	0.000
HS.4892	490.653	183.151	1.422	0.028
GFOD1	441.140	165.771	1.412	0.005
HS.538962	631.669	237.514	1.411	0.025
MTE	714.936	269.398	1.408	0.000
FLJ22536	264.753	99.939	1.406	0.020
CASK	620.945	234.591	1.404	0.005
CXCR4	387.428	146.950	1.399	0.001
COL4A6	411.921	156.916	1.392	0.011
GSTM2	1383.943	527.503	1.392	0.006
DDAH2	418.404	159.834	1.388	0.037
ZNF518B	253.724	97.239	1.384	0.004
CYB5A	337.330	129.333	1.383	0.003
LOC648638	751.367	288.163	1.383	0.039
HS.50125	324.344	124.936	1.376	0.014
RCN1	1992.942	773.448	1.366	0.040
CD1D	255.083	99.014	1.365	0.014
PPFIA1	571.329	222.634	1.360	0.002
INTS3	649.775	254.095	1.355	0.016
GRM8	242.890	95.006	1.354	0.019
LMO4	2862.670	1122.286	1.351	0.047
AXL	809.357	317.585	1.350	0.019
FN3KRP	1299.232	509.911	1.349	0.027
PTOV1	2249.495	883.697	1.348	0.013
MED28	567.554	223.255	1.346	0.000
MFGE8	3935.878	1548.993	1.345	0.019
XPR1	1081.159	425.575	1.345	0.016
PIPOX	452.327	178.392	1.342	0.038

PURB	1821.861	720.062	1.339	0.001
PTGS2	231.069	91.435	1.338	0.024
SEPN1	1608.859	639.604	1.331	0.012
ST6GALNAC5	213.143	85.278	1.322	0.016
CLIP3	1134.811	456.349	1.314	0.021
C20orf27	772.740	311.276	1.312	0.017
UBE1	1828.287	736.620	1.312	0.041
ZNF362	390.112	157.252	1.311	0.017
ITPR1	485.862	196.121	1.309	0.033
ACAA2	499.334	201.788	1.307	0.003
FAM89A	496.371	200.661	1.307	0.019
POMGNT1	2023.266	818.826	1.305	0.010
FHL3	300.339	122.029	1.299	0.020
C1orf86	521.087	211.948	1.298	0.000
NXT1	1016.467	413.533	1.297	0.002
GSTM4	316.797	128.907	1.297	0.004
GSTT2	250.277	102.068	1.294	0.000
PGM2L1	724.165	295.525	1.293	0.015
LOC285556	250.794	102.662	1.289	0.033
HS.127310	2013.877	824.584	1.288	0.011
COL4A5	1003.378	411.254	1.287	0.037
TNKS1BP1	462.710	189.655	1.287	0.010
C1orf198	589.314	241.592	1.286	0.004
BGN	324.751	133.196	1.286	0.034
ISG15	983.223	403.371	1.285	0.024
FNBP1	897.614	368.849	1.283	0.000
C1orf115	448.649	185.016	1.278	0.035
LHFPL2	1611.304	665.469	1.276	0.001
LOC731954	231.566	95.657	1.275	0.033
IFI16	1310.548	541.582	1.275	0.019
TSPAN7	998.948	413.652	1.272	0.007
EDG4	301.602	124.985	1.271	0.003
KCNK13	232.386	96.312	1.271	0.008
LOC644743	286.549	118.887	1.269	0.025
LEPRE1	797.616	331.054	1.269	0.017
FRAS1	227.642	94.564	1.267	0.007
LOC647037	584.026	242.943	1.265	0.040
LARGE	430.404	179.546	1.261	0.015
SLC39A14	727.569	303.841	1.260	0.002
YPEL2	259.615	108.951	1.253	0.009
FGD1	449.764	188.780	1.252	0.018
TGFB3	313.130	131.504	1.252	0.008
B3GALT6	473.794	199.051	1.251	0.013
LUZP1	1386.553	584.102	1.247	0.018
TMEM16A	220.766	93.024	1.247	0.015
ATP9A	766.782	324.244	1.242	0.003
MAGEC2	222.893	94.315	1.241	0.011

TPD52L1	1208.014	512.159	1.238	0.009
RERE	498.134	211.329	1.237	0.013
LOC654096	416.156	176.725	1.236	0.009
PKD2	709.688	301.648	1.234	0.037
KRT8	355.469	151.400	1.231	0.004
OSBPL10	400.836	171.038	1.229	0.030
PMP22	1182.366	506.357	1.223	0.022
CNN2	534.028	229.205	1.220	0.000
GSTA4	701.784	301.861	1.217	0.025
NQO2	799.007	343.738	1.217	0.009
SCD5	439.148	189.238	1.215	0.026
ROPN1	222.520	95.899	1.214	0.020
COL3A1	213.003	91.920	1.212	0.002
SVEP1	222.747	96.356	1.209	0.041
DSCR8	214.624	92.857	1.209	0.016
PDGFRA	220.193	95.327	1.208	0.001
STRA13	1725.826	749.313	1.204	0.004
BTG3	1567.391	682.132	1.200	0.012
SLC9A1	604.392	263.257	1.199	0.000
DAB2	322.688	141.155	1.193	0.044
C11orf75	583.761	255.807	1.190	0.006
PECI	1646.100	723.331	1.186	0.001
NID2	234.970	103.281	1.186	0.044
SWAP70	773.161	342.159	1.176	0.019
C7orf41	479.238	212.304	1.175	0.040
LOC10013386(	301.936	133.936	1.173	0.024
SERINC2	287.018	127.489	1.171	0.010
COL11A1	205.672	91.671	1.166	0.020
IFNGR1	921.107	411.566	1.162	0.038
LOC730278	5031.871	2264.088	1.152	0.048
POLA1	510.810	230.532	1.148	0.033
BAT5	636.375	288.321	1.142	0.047
PPCS	1312.782	597.116	1.137	0.016
MAF	307.346	139.854	1.136	0.007
LOC10013280!	224.589	102.503	1.132	0.018
IL18	4152.369	1897.357	1.130	0.005
PFKP	2489.004	1139.198	1.128	0.011
LOC440359	1204.319	552.210	1.125	0.000
PDE8B	210.720	96.665	1.124	0.012
SESN3	255.785	117.529	1.122	0.005
HES4	1480.247	680.548	1.121	0.000
PELI2	310.489	142.945	1.119	0.023
FAM50B	193.943	89.341	1.118	0.015
DNAJB2	974.070	448.895	1.118	0.041
SARS	1215.410	561.552	1.114	0.025
FAM108C1	688.608	318.403	1.113	0.019
MAP3K6	650.995	301.068	1.113	0.023

ZNF324	234.606	108.584	1.111	0.014
CITED4	203.881	94.401	1.111	0.015
USP1	394.780	183.542	1.105	0.013
CHD9	746.491	347.320	1.104	0.008
FANCE	326.077	152.108	1.100	0.003
STX3	382.688	178.640	1.099	0.019
VGLL4	1151.743	539.345	1.095	0.020
S100A11	2041.144	957.791	1.092	0.025
IQGAP2	223.973	105.263	1.089	0.009
SLC38A2	1589.026	747.678	1.088	0.011
AADAT	219.575	103.383	1.087	0.034
ADO	845.758	398.214	1.087	0.004
ACP2	438.342	206.438	1.086	0.002
LOC651064	1345.184	633.869	1.086	0.042
LFNG	204.727	96.713	1.082	0.005
PDLIM1	499.149	235.822	1.082	0.033
ACTA2	449.094	212.502	1.080	0.049
CALB1	199.222	94.275	1.079	0.039
BACE1	282.619	133.743	1.079	0.018
IRF7	244.383	115.736	1.078	0.021
CCDC58	487.097	230.702	1.078	0.043
PCOLCE	236.146	112.029	1.076	0.046
PAQR4	578.882	274.788	1.075	0.033
CYP4V2	345.076	164.311	1.070	0.042
NT5DC2	603.138	287.536	1.069	0.014
FNTB	431.234	205.946	1.066	0.030
SPG3A	570.127	272.825	1.063	0.015
SFN	199.386	95.419	1.063	0.042
HDC	191.751	92.009	1.059	0.020
LDB2	779.317	374.377	1.058	0.015
ISOC2	1026.831	494.414	1.054	0.009
CDK5	505.285	243.306	1.054	0.000
ZBED1	703.798	338.999	1.054	0.001
ANK1	195.695	94.548	1.049	0.020
CASZ1	198.339	95.871	1.049	0.001
PXMP2	426.426	206.579	1.046	0.019
ATAD3A	473.842	229.713	1.045	0.025
HS.193406	471.779	228.744	1.044	0.009
GLCE	539.219	261.570	1.044	0.003
C20orf11	1198.563	581.773	1.043	0.008
KIF2A	555.551	269.858	1.042	0.033
RND3	459.578	223.516	1.040	0.005
GAD2	189.293	92.123	1.039	0.047
CNKSR3	847.772	412.713	1.039	0.031
ENDOD1	1251.878	610.619	1.036	0.048
LEF1	236.376	115.539	1.033	0.001
TIMP3	252.687	123.561	1.032	0.005

CLSTN1	1311.205	641.449	1.031	0.017
LOC151162	881.582	431.373	1.031	0.040
LOC400657	208.806	102.455	1.027	0.017
TMEM62	399.581	196.069	1.027	0.010
MIR886	341.533	167.590	1.027	0.001
PLEKHG3	290.738	143.097	1.023	0.015
TMEM39B	532.306	262.125	1.022	0.001
ANKRD57	525.049	258.740	1.021	0.049
MYL9	239.488	118.223	1.018	0.004
NXN	211.169	104.288	1.018	0.001
WDR8	469.689	232.127	1.017	0.039
RASD2	214.388	106.288	1.012	0.021
CNDP2	2091.190	1036.829	1.012	0.038
FURIN	334.128	166.505	1.005	0.007
CMTM8	1363.676	679.895	1.004	0.025

Table S2

DOWN				
Symbol	**miR-182**	**Co-miR**	**Log2ratio**	**p-value**
RAPGEF5	168.392	336.853	-1.000	0.022
MAMDC2	163.887	328.312	-1.002	0.000
MRPS27	508.866	1020.020	-1.003	0.001
LOC387882	370.557	742.807	-1.003	0.010
TTC1	250.907	503.740	-1.006	0.001
TRAPPC5	512.933	1030.754	-1.007	0.004
HS.356079	176.039	353.800	-1.007	0.005
PRICKLE2	411.715	827.781	-1.008	0.000
QDPR	619.917	1247.746	-1.009	0.010
DSE	109.080	219.817	-1.011	0.000
C10orf141	94.264	189.981	-1.011	0.003
PCYOX1L	114.621	231.077	-1.012	0.002
SLC7A5	550.389	1109.592	-1.012	0.010
MRPL22	846.536	1709.454	-1.014	0.000
NUSAP1	486.722	983.495	-1.015	0.030
ZMAT2	418.887	847.271	-1.016	0.001
TNFAIP8L3	101.449	205.434	-1.018	0.001
ASTN1	90.181	182.657	-1.018	0.000
TJP2	95.866	194.446	-1.020	0.002
TNFRSF1A	677.815	1374.908	-1.020	0.001
PBK	386.854	785.366	-1.022	0.017
LOC644934	1332.076	2705.211	-1.022	0.017
CISD1	1448.818	2943.479	-1.023	0.004
BST2	412.123	838.904	-1.025	0.003
SMOX	242.507	493.786	-1.026	0.009
EEF2	3404.565	6933.629	-1.026	0.001
UBE2N	378.976	772.707	-1.028	0.005
MED27	257.577	525.228	-1.028	0.000
DLGAP5	301.793	615.610	-1.028	0.007
VGF	106.303	216.916	-1.029	0.000
PHCA	347.172	708.632	-1.029	0.023
CAPN5	289.401	590.843	-1.030	0.011
GMPR2	247.524	505.482	-1.030	0.018
SH3GLB2	824.627	1686.281	-1.032	0.006
PPP2R2B	244.886	501.400	-1.034	0.013
LPAR1	93.558	191.612	-1.034	0.002
CCNA1	182.245	373.281	-1.034	0.006
C9orf167	106.737	218.767	-1.035	0.011
PIP4K2A	542.028	1111.391	-1.036	0.003
CENPM	176.952	362.981	-1.037	0.001
LOC441089	569.115	1167.753	-1.037	0.000
KCNJ2	89.367	183.528	-1.038	0.002
CDKN2C	101.068	207.635	-1.039	0.000

LOC284998	116.128	238.813	-1.040	0.001
CDC25C	121.862	251.055	-1.043	0.003
ADAM19	415.908	857.393	-1.044	0.001
FAM96B	808.404	1667.236	-1.044	0.003
HMGCR	976.828	2014.705	-1.044	0.017
CDC20	1507.431	3112.031	-1.046	0.004
FAM70B	96.011	198.355	-1.047	0.001
GTSE1	126.078	260.921	-1.049	0.003
LYRM5	314.935	652.824	-1.052	0.015
TLN1	226.638	469.836	-1.052	0.001
RPS26	662.953	1375.792	-1.053	0.014
SRPX	3573.827	7422.042	-1.054	0.020
HS.57079	929.084	1929.910	-1.055	0.001
PMAIP1	131.009	272.162	-1.055	0.003
EMP3	1537.696	3195.470	-1.055	0.001
PLS1	156.691	325.672	-1.055	0.007
CYB5R3	1220.446	2537.006	-1.056	0.000
HS.25318	288.316	599.993	-1.057	0.000
BCAS4	169.008	351.768	-1.058	0.002
COMT	275.407	573.687	-1.059	0.001
KIAA0367	668.748	1393.041	-1.059	0.014
SNORD32A	100.404	209.244	-1.059	0.000
CCNH	210.631	440.479	-1.064	0.000
UBE2T	887.151	1859.430	-1.068	0.000
MPP1	239.526	502.437	-1.069	0.001
SLC7A1	668.450	1404.641	-1.071	0.000
GMDS	301.402	633.643	-1.072	0.000
SIRPA	94.230	198.398	-1.074	0.013
PARP3	186.323	392.348	-1.074	0.001
HLA-DRB3	389.024	820.753	-1.077	0.000
PTHLH	133.056	280.901	-1.078	0.001
LOC399804	1020.407	2154.248	-1.078	0.011
MBNL2	126.180	266.396	-1.078	0.001
CPNE1	251.484	531.030	-1.078	0.000
LOC642342	104.051	219.732	-1.078	0.006
TRIP13	356.304	753.315	-1.080	0.005
BCL2L12	179.847	381.703	-1.086	0.003
GPN1	565.965	1202.504	-1.087	0.002
DNAJB1	405.489	862.452	-1.089	0.002
EPDR1	862.038	1835.033	-1.090	0.005
HRASLS	95.811	204.144	-1.091	0.005
KIAA1539	187.369	399.251	-1.091	0.000
AK3L1	104.272	222.295	-1.092	0.010
PLK1	113.323	242.067	-1.095	0.001
PRKAA1	253.265	541.263	-1.096	0.004
MAFB	89.904	192.223	-1.096	0.005
C20orf199	548.899	1173.604	-1.096	0.005

C18orf10	362.509	775.598	-1.097	0.006
C2orf32	89.277	191.073	-1.098	0.004
KCNMA1	103.874	222.494	-1.099	0.030
PAPPA	222.199	477.271	-1.103	0.001
IQCG	144.621	311.147	-1.105	0.002
KARS	302.516	651.287	-1.106	0.013
PLD1	128.770	277.534	-1.108	0.014
APRT	440.947	950.763	-1.108	0.005
WNT5A	112.966	243.791	-1.110	0.018
SLC16A9	86.722	187.205	-1.110	0.024
JAKMIP2	92.856	200.608	-1.111	0.028
C19orf62	334.317	722.474	-1.112	0.001
TANC1	298.912	645.991	-1.112	0.029
THBS2	93.499	202.418	-1.114	0.011
C10orf11	88.873	192.469	-1.115	0.011
UHRF2	144.810	313.625	-1.115	0.021
FAM84B	424.643	921.380	-1.118	0.003
RP11-529I10.4	202.735	439.903	-1.118	0.022
CKAP2L	240.738	522.537	-1.118	0.001
LOC645166	132.519	287.727	-1.118	0.007
IGF2BP3	373.168	810.377	-1.119	0.025
GFPT2	669.473	1456.391	-1.121	0.014
TCEA3	169.067	367.818	-1.121	0.000
PRR7	227.222	494.557	-1.122	0.005
SYT11	972.543	2117.779	-1.123	0.001
FAM64A	372.768	812.050	-1.123	0.006
PREX1	154.218	336.879	-1.127	0.000
NMU	191.406	418.249	-1.128	0.045
KIF14	191.686	420.639	-1.134	0.011
AURKB	281.198	618.349	-1.137	0.002
MRPL54	510.387	1123.498	-1.138	0.005
RAI14	724.196	1599.462	-1.143	0.001
CDK7	519.619	1148.030	-1.144	0.001
TKT	4324.259	9554.574	-1.144	0.003
SEPX1	850.370	1882.591	-1.147	0.003
EMP1	2572.895	5702.936	-1.148	0.018
TPX2	338.427	750.419	-1.149	0.001
PCOLCE2	108.477	241.292	-1.153	0.000
RHOU	89.262	198.735	-1.155	0.003
NRIP3	127.686	284.419	-1.155	0.000
ANLN	401.342	894.296	-1.156	0.005
PREPL	137.855	307.346	-1.157	0.007
POLDIP3	205.854	458.971	-1.157	0.000
ETFB	445.723	996.104	-1.160	0.000
CKAP2	163.870	366.260	-1.160	0.003
NUDT7	261.380	584.504	-1.161	0.001
FAM176A	89.356	199.876	-1.161	0.013

LOC88523	139.221	311.540	-1.162	0.000
ENC1	679.576	1520.777	-1.162	0.029
CPS1	92.846	207.911	-1.163	0.000
SMAD3	379.924	852.623	-1.166	0.001
CLDN23	100.188	224.860	-1.166	0.004
SOX9	311.445	699.869	-1.168	0.026
HMGB2	517.093	1163.409	-1.170	0.021
CDCA3	175.889	396.320	-1.172	0.002
NQO1	539.458	1217.418	-1.174	0.004
D4S234E	110.368	249.236	-1.175	0.027
GPX3	217.905	492.776	-1.177	0.003
NUDT1	243.227	550.201	-1.178	0.000
PCCA	172.130	390.142	-1.181	0.009
DHX29	326.385	739.930	-1.181	0.020
ODZ4	85.929	195.070	-1.183	0.010
ID3	125.193	284.651	-1.185	0.021
B4GALT5	1619.203	3682.184	-1.185	0.001
DECR1	1291.246	2938.615	-1.186	0.004
DNAJC25	172.971	393.871	-1.187	0.003
C14orf78	367.690	837.761	-1.188	0.037
C5orf32	531.251	1211.049	-1.189	0.001
LTA4H	692.275	1578.724	-1.189	0.003
RPL13L	160.272	366.215	-1.192	0.004
C5orf39	120.210	274.677	-1.192	0.027
PFDN1	587.489	1347.226	-1.197	0.007
LOC646849	779.649	1789.133	-1.198	0.005
CCL26	105.527	242.482	-1.200	0.000
NME5	89.050	204.658	-1.201	0.021
GLRX	760.686	1749.175	-1.201	0.001
LPXN	196.866	452.709	-1.201	0.015
TROAP	173.648	399.519	-1.202	0.008
CDH2	780.126	1799.180	-1.206	0.001
BEX5	113.225	261.168	-1.206	0.002
BTN3A2	116.606	269.097	-1.206	0.001
SRI	237.791	548.797	-1.207	0.001
CHPT1	342.690	792.242	-1.209	0.000
KIF20B	219.007	506.525	-1.210	0.021
LOC388796	272.973	632.177	-1.212	0.000
LEPROT	298.791	692.884	-1.213	0.006
NDUFS4	1614.923	3748.058	-1.215	0.001
ITGA11	119.238	276.765	-1.215	0.000
NFIX	905.859	2105.509	-1.217	0.005
SERPINB1	278.188	646.974	-1.218	0.017
LOC729217	181.852	423.990	-1.221	0.000
LOC653658	2208.794	5153.418	-1.222	0.004
AADACL1	228.743	533.790	-1.223	0.001
KIF5C	106.638	250.450	-1.232	0.001

C21orf7	105.992	249.852	-1.237	0.004
PROCR	152.775	360.225	-1.237	0.001
RPL39L	432.825	1023.787	-1.242	0.002
LACTB2	114.392	271.533	-1.247	0.006
SASH1	263.007	626.399	-1.252	0.002
CMTM7	413.930	986.006	-1.252	0.004
CUTC	248.227	592.109	-1.254	0.003
TNFRSF21	1254.059	2995.652	-1.256	0.008
MT3	132.995	317.749	-1.257	0.005
CCK	100.838	241.080	-1.257	0.004
TMEM55A	152.536	365.206	-1.260	0.002
MOXD1	245.581	588.062	-1.260	0.000
HS.25892	189.008	452.782	-1.260	0.006
HS.537004	204.028	488.815	-1.261	0.004
CDCP1	92.397	221.443	-1.261	0.007
PCSK1N	118.550	284.522	-1.263	0.000
NUP210	105.069	252.346	-1.264	0.000
CCDC99	164.052	394.635	-1.266	0.022
LOC642956	101.759	244.847	-1.267	0.006
CORO1C	334.080	804.948	-1.269	0.019
CXCL14	95.678	230.714	-1.270	0.023
GOLT1A	99.128	239.518	-1.273	0.003
DENND2A	257.801	623.728	-1.275	0.001
PROS1	172.852	419.037	-1.278	0.002
CDKN3	672.427	1634.240	-1.281	0.003
CHST15	102.527	249.886	-1.285	0.012
CLDND1	551.357	1349.197	-1.291	0.001
LOC729926	809.945	1986.725	-1.294	0.001
HS.413494	95.154	233.453	-1.295	0.001
PRKCH	106.964	262.887	-1.297	0.005
MET	522.427	1284.510	-1.298	0.025
SPRED2	191.596	471.838	-1.300	0.007
TSC22D1	593.888	1463.045	-1.301	0.008
LGALS1	5065.786	12484.367	-1.301	0.000
C7orf40	197.279	487.615	-1.306	0.000
APOBEC3B	142.345	352.068	-1.306	0.003
RNF112	99.599	246.544	-1.308	0.001
CCNA2	339.450	840.731	-1.308	0.006
CDC2	270.624	670.358	-1.309	0.001
PHF16	125.983	312.540	-1.311	0.000
COL4A1	253.143	628.137	-1.311	0.002
C8orf13	112.455	279.303	-1.312	0.001
LMCD1	191.808	476.632	-1.313	0.017
FAF1	187.225	465.315	-1.313	0.000
FAM69A	154.599	384.468	-1.314	0.000
SKAP2	147.040	366.652	-1.318	0.001
CXXC5	669.383	1669.709	-1.319	0.008

SLC1A1	93.909	234.359	-1.319	0.009
RGMA	125.575	313.415	-1.320	0.000
PSMB10	699.934	1750.550	-1.323	0.002
SLC9A7	119.001	299.564	-1.332	0.013
BEX2	310.234	783.180	-1.336	0.030
CSRP2	940.443	2378.087	-1.338	0.001
LRIG1	559.941	1416.757	-1.339	0.000
LQK1	120.703	305.546	-1.340	0.000
LOC100132564	218.927	557.805	-1.349	0.004
NCAPD2	239.530	611.665	-1.353	0.000
DNAL4	221.877	566.691	-1.353	0.012
APCDD1	114.033	291.649	-1.355	0.046
CD68	203.852	523.396	-1.360	0.001
NFE2L3	160.931	414.482	-1.365	0.000
SPRY1	292.167	754.946	-1.370	0.001
NHP2L1	359.003	927.652	-1.370	0.001
C20orf100	267.027	701.537	-1.394	0.005
TUBB4	106.779	280.615	-1.394	0.000
RARRES3	449.936	1182.906	-1.395	0.017
TUBB6	189.129	497.358	-1.395	0.005
ALDOC	507.913	1336.505	-1.396	0.023
ARHGEF2	507.079	1334.806	-1.396	0.015
CNRIP1	92.371	244.102	-1.402	0.006
STAMBPL1	96.027	254.817	-1.408	0.008
LOC642073	86.717	231.240	-1.415	0.001
RBPMS2	133.218	356.375	-1.420	0.000
TMEM71	116.567	312.267	-1.422	0.000
HS.575038	180.078	482.830	-1.423	0.011
LOC399942	735.356	1975.587	-1.426	0.002
FAM102B	103.871	279.083	-1.426	0.001
SNHG6	745.816	2006.069	-1.427	0.019
NT5E	353.394	954.988	-1.434	0.009
RCAN2	532.898	1440.741	-1.435	0.015
SPC24	154.765	418.615	-1.436	0.002
HNRNPA2B1	497.442	1347.537	-1.438	0.012
RPL29	239.539	653.212	-1.447	0.003
DDIT4	869.147	2375.063	-1.450	0.010
MGST1	134.335	368.170	-1.455	0.000
SEMA4D	90.552	248.263	-1.455	0.000
HS.181245	187.235	515.145	-1.460	0.006
EBPL	239.213	658.296	-1.460	0.002
CCNB2	601.643	1661.950	-1.466	0.020
IL1A	124.863	346.130	-1.471	0.043
GYG1	535.615	1491.708	-1.478	0.000
LYN	120.159	334.915	-1.479	0.008
HACL1	291.471	812.839	-1.480	0.000
GPR56	459.848	1283.757	-1.481	0.039

TBC1D8	161.114	450.588	-1.484	0.001
POLE4	898.890	2517.166	-1.486	0.004
SUSD2	130.275	364.868	-1.486	0.000
CEP55	335.864	941.543	-1.487	0.015
PAM	1169.838	3283.981	-1.489	0.000
C6orf173	221.427	623.243	-1.493	0.000
BUB1	243.866	687.242	-1.495	0.001
HS.91389	291.705	825.070	-1.500	0.002
REEP2	140.815	398.432	-1.501	0.000
TIGA1	479.474	1359.792	-1.504	0.007
BCL3	303.826	864.052	-1.508	0.001
STX1A	251.857	716.407	-1.508	0.036
CCNB1	249.523	710.307	-1.509	0.002
VAT1L	168.842	482.699	-1.515	0.008
LOC100130506	223.921	642.155	-1.520	0.013
GCNT1	114.962	330.755	-1.525	0.009
GALNT10	108.594	315.506	-1.539	0.000
SKP1A	355.494	1033.646	-1.540	0.001
FABP5	109.915	319.832	-1.541	0.003
COX7A1	91.699	267.755	-1.546	0.004
NRCAM	547.792	1609.440	-1.555	0.006
ISG20	185.061	545.032	-1.558	0.002
FDFT1	1591.382	4703.518	-1.563	0.008
ECT2	284.057	840.036	-1.564	0.000
NCRNA00219	392.997	1163.328	-1.566	0.008
PDZD2	109.208	323.663	-1.567	0.005
LOC401115	458.412	1367.679	-1.577	0.001
RNF145	652.511	1954.476	-1.583	0.001
TMSB15A	85.869	257.563	-1.585	0.004
CKS2	1545.036	4672.081	-1.596	0.005
RGS10	123.037	372.142	-1.597	0.007
SLC9A3R1	588.017	1783.546	-1.601	0.002
ERI1	337.246	1026.809	-1.606	0.000
FOSL1	209.300	641.723	-1.616	0.002
MAP4K4	167.956	515.598	-1.618	0.011
SCG2	2119.558	6509.936	-1.619	0.013
MYADM	212.964	654.827	-1.621	0.022
STOM	198.634	613.989	-1.628	0.001
RPL13	234.097	725.932	-1.633	0.001
SLC44A2	232.427	722.261	-1.636	0.000
CA9	262.618	816.471	-1.636	0.008
PCBD1	143.865	449.095	-1.642	0.004
HLA-DQB1	88.976	278.287	-1.645	0.000
DMBT1	88.886	279.507	-1.653	0.003
HS.383564	97.204	305.929	-1.654	0.010
CLIC6	89.578	282.055	-1.655	0.013
SOX15	96.252	304.618	-1.662	0.022

CENPF	325.894	1033.069	-1.664	0.010
FAM167A	116.562	372.825	-1.677	0.000
DOCK10	98.222	315.972	-1.686	0.007
MSRB2	321.009	1037.367	-1.692	0.000
LOC649143	94.852	306.879	-1.694	0.003
FAM83D	246.726	801.518	-1.700	0.000
LYSMD2	156.112	507.954	-1.702	0.010
FAM3C	183.932	601.307	-1.709	0.008
PTPRG	89.959	294.996	-1.713	0.012
DPYSL3	1204.613	3956.631	-1.716	0.004
BIRC5	175.638	577.708	-1.718	0.000
HBEGF	191.302	629.415	-1.718	0.033
HLA-DMB	240.097	794.211	-1.726	0.013
HMGCS1	839.346	2779.934	-1.728	0.006
HS.66187	120.920	400.815	-1.729	0.012
COBL	120.742	401.000	-1.732	0.000
DKK3	364.902	1215.004	-1.735	0.001
GMPR	100.814	335.699	-1.735	0.000
BAIAP2L1	159.181	530.210	-1.736	0.004
HS3ST3A1	121.118	404.969	-1.741	0.000
AK3	322.391	1084.357	-1.750	0.000
NAV2	112.319	379.212	-1.755	0.004
C5orf62	114.237	388.527	-1.766	0.001
CTSH	105.687	361.562	-1.774	0.000
SDSL	213.975	740.834	-1.792	0.003
ADA	225.256	784.739	-1.801	0.006
C10orf35	89.802	315.736	-1.814	0.000
HJURP	174.353	613.040	-1.814	0.001
FAM129A	92.689	327.904	-1.823	0.016
MSX1	245.979	870.288	-1.823	0.007
PRDM8	88.499	314.672	-1.830	0.011
MVP	258.996	930.786	-1.846	0.000
DNAJC15	105.081	380.135	-1.855	0.020
TFPI	97.856	355.932	-1.863	0.000
SPARC	2564.723	9350.666	-1.866	0.000
OLFM1	92.574	341.993	-1.885	0.005
LAPTM4B	443.938	1640.428	-1.886	0.004
HAS3	105.632	391.304	-1.889	0.035
AIF1L	109.788	408.048	-1.894	0.023
LOC730525	238.196	886.582	-1.896	0.006
BCL2L12	284.773	1064.790	-1.903	0.001
CHST1	101.847	381.417	-1.905	0.001
ARHGEF6	316.109	1185.369	-1.907	0.002
IRX3	944.270	3551.790	-1.911	0.007
HLA-DOA	88.994	334.878	-1.912	0.000
HLA-DQA1	86.483	328.901	-1.927	0.002
HS.193557	190.610	728.122	-1.934	0.000

HTRA1	1869.256	7199.382	-1.945	0.000
HMMR	259.375	1004.544	-1.953	0.000
HMGA1	261.306	1018.281	-1.962	0.004
ATOX1	1040.349	4149.038	-1.996	0.000
ANTXR2	144.826	579.948	-2.002	0.037
BCAT1	171.259	688.039	-2.006	0.012
ECM1	113.266	460.851	-2.025	0.000
ALPK2	94.919	387.389	-2.029	0.000
TWIST1	96.918	395.715	-2.030	0.002
FAM20C	113.576	471.735	-2.054	0.003
ALDH1A3	86.540	359.921	-2.056	0.013
GSTT1	90.785	380.991	-2.069	0.001
PTTG1	1140.150	4890.812	-2.101	0.004
IGFBP5	227.956	980.906	-2.105	0.001
LOC644936	362.593	1593.355	-2.136	0.023
COL13A1	93.270	412.557	-2.145	0.001
TMEM166	88.600	392.729	-2.148	0.012
BAG3	555.479	2504.784	-2.173	0.004
PRSS23	375.781	1730.524	-2.203	0.004
COMMD7	349.916	1631.683	-2.221	0.003
KHDRBS3	387.761	1827.330	-2.236	0.002
RTN1	89.519	424.365	-2.245	0.008
PTTG3P	938.315	4491.758	-2.259	0.001
LOC100133678	92.984	460.803	-2.309	0.008
SNORD13	135.788	704.142	-2.375	0.003
CECR1	140.901	739.244	-2.391	0.000
C1orf54	140.696	738.391	-2.392	0.002
GABBR2	491.190	2658.950	-2.437	0.001
SCG5	144.315	790.216	-2.453	0.002
TGFA	99.674	546.684	-2.455	0.021
FEZ1	106.224	585.473	-2.462	0.001
GYPC	93.489	524.672	-2.489	0.000
KIF20A	257.041	1457.144	-2.503	0.000
ACOX2	406.674	2325.742	-2.516	0.000
EPAS1	134.712	773.474	-2.521	0.006
LOC100133583	89.792	534.455	-2.573	0.003
GNG11	372.564	2246.799	-2.592	0.009
FABP5L2	155.382	975.546	-2.650	0.004
HS.10862	95.743	621.328	-2.698	0.024
DHRS3	107.005	702.334	-2.714	0.013
RFTN1	88.904	598.997	-2.752	0.003
SPOCK1	105.510	742.749	-2.815	0.002
CA12	308.611	2191.443	-2.828	0.001
COTL1	119.194	857.092	-2.846	0.005
TRIP6	213.160	1647.685	-2.950	0.001
ZIC2	97.969	765.566	-2.966	0.004
CD74	89.281	709.861	-2.991	0.005

DUSP1	294.069	2580.992	-3.134	0.004
SPOCK2	112.470	1011.866	-3.169	0.010
FAM107A	138.849	1282.503	-3.207	0.000
HLA-DRB4	100.641	990.175	-3.298	0.005
HLA-DMA	137.247	1385.862	-3.336	0.000
EEF1A2	103.839	1067.782	-3.362	0.001
FOXD1	87.624	950.199	-3.439	0.003
C1orf24	98.090	1086.666	-3.470	0.020
SLC22A18AS	119.789	1401.916	-3.549	0.007
GLDC	89.698	1112.487	-3.633	0.002
HLA-DRB6	92.353	1260.775	-3.771	0.004
TM4SF1	237.159	3394.820	-3.839	0.001
IFITM2	214.761	3320.278	-3.950	0.011
LOC730415	90.892	1871.675	-4.364	0.004
IFITM3	181.025	4856.074	-4.746	0.001
HLA-DPA1	100.252	3176.688	-4.986	0.002
HLA-DRA	121.548	6249.570	-5.684	0.002

Symbol	miR-182	Co-miR	Log2ratio
RCOR1	87.241	91.044	-0.062
NOTCH1	247.035	148.465	0.735
TUBB3	1687.998	846.955	0.995
FUT9	90.765	91.289	-0.008
ASCL1	91.261	93.168	-0.030
OLIG2	92.800	103.482	-0.157
NEUROD1	92.646	91.321	0.021
PROM1	97.948	91.340	0.101
DCX	95.443	91.730	0.057
NKX2-2	89.378	99.432	-0.154
SOX11	94.331	89.345	0.078
BMI1	576.456	453.619	0.346
SLC1A1	93.909	234.359	-1.319
SOX10	92.114	94.816	-0.042
SOX2	284.773	1064.790	-1.903
PAX6	140.561	162.816	-0.212
NES	2906.197	1389.669	1.064
HES1	158.748	297.511	-0.906
SOX9	311.445	699.870	-1.168
FABP7	2914.769	4245.449	-0.543
GFAP	88.044	90.486	-0.039
SLC1A2	95.696	104.362	-0.125
SLC1A3	855.077	694.679	0.300
NEUROD2	91.642	94.123	-0.039
TBR1	89.557	93.747	-0.066
PAX9	93.984	97.321	-0.050
HAND1	97.566	136.806	-0.488
PAX2	91.003	94.645	-0.057
ASCL2	88.592	91.348	-0.044
SOX1	84.836	90.990	-0.101
CD44	3003.175	3340.058	-0.153
REST	98.919	98.718	0.003
VIM	9049.822	12087.890	-0.418
GCM1	97.393	100.574	-0.046

	Female (PBS)	Female (SNAs)	Female (PBS)	Female (SNAs)	Normal value range (female)	Male (PBS)	Male (SNAs)	Male (PBS)	Male (SNAs)	Normal value range (male)
	24 hours		**14 days**			**24 hours**		**14 days**		
Initial Weight (g)	217.7 ±7.4	209.3 ± 11.9	205.1 ± 3.5	194.6 ± 2.4		259.0 ± 3.4	248.0 ± 5.8	258.0 ± 4.4	252.1 ± 6.3	
Terminal BW (g)	216.7 ± 7.8	213.7 ± 9.5	242.5 ± 3.7	246.4 ± 3.9		268.5 ± 2.8	251.6 ± 5.4	376.1 ± 15.5	345.5 ± 8.7	
CHOL (mg/dL)	80.3 ± 10.3	133.7 ± 4.9	64.0 ± 1.7	78.7 ± 4.7	60 - 152	62.0 ± 7.8	164.0 ± 30.8	74.0 ± 3.6	63.7 ± 2.2	64 – 158
TRIG (mg/dL)	129.0 ± 18.1	96.7 ± 37.71	70.0 ± 8.08	75.3 ± 11.7	41 - 330	62.3 ± 4.3	59.0 ± 13.3	143.7 ± 39.7	131.7 ± 36.8	48 – 418
AST (U/L)	117.7 ± 2.3	100.3 ± 11.3	114.7 ± 6.4	110 ± 7.5	52 - 310	127.7 ± 19.3	125.3 ± 35.3	179.0 ± 49.7	141.7 ± 31.8	64 – 386
ALT (U/L)	46.0 ± 5.6	31.7 ± 4.1	41.7 ± 3.7	49 ± 5.9	32 - 93	34 ± 1.5	52.3 ± 5.9	57.0 ± 6.0	48.0 ± 7.6	37 – 178
ALK (U/L)	335.0 ± 23.3	160.3 ± 30.3	231.7 ± 53.4	175.3 ± 34.3	61 - 359	191.7 ± 47.5	329 ± 39.9	386.0 ± 23.4	228 ± 31.2	134 – 588
GLU (mg/dL)	176.3 ± 13.7	203 ± 8.5	170 ± 12.5	173 ± 8.8	122 - 456	165 ± 5.5	176.7 ± 9.2	164.3 ± 20.9	184.7 ± 12.2	110 – 456
Ca (mg/dL)	9.9 ± 0.5	11.3 ± 0.1	9.9 ± 0.4	10.7 ± 0.2	10.4 - 14.2	10.1 ± 0.15	11.0 ± 0.15	10.4 ± 0.1	10.2 ± 0.1	10.3 - 14.3
PHOS (mg/dL)	8.1 ± 0.8	8.4 ± 0.8	6.3 ± 0.5	7.2 ± 0.4	7.1 - 14.6	7.8 ± 0.2	9.1 ± 0.6	7.8 ± 0.2	9.1 ± 0.5	7.9 - 16.6
TBIL (mg/dL)	0.1 ± 0.0	0.3 ± 0.0	0.1 ± 0.03	0.1 ± 0.0	0.1 -0.3	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 - 0.4
CREAT (mg/dL)	0.3 ± 0.03	0.2 ± 0.0	0.4 ± 0.03	0.4 ± 0.00	0.3 - 0.6	0.37 ± 0.03	0.2 ± 0.0	0.3 ± 0.0	0.3 ± 0.0	0.3 - 0.7
BUN (mg/dL)	13 ± 0.0	14.7 ± 0.3	17.3 ± 0.9	16.7 ± 1.2	22-Jul	15.67± 0.3	14.0 ± 1.5	16.3 ± 0.3	16.7 ± 0.3	23-Jul
TP (g/dL)	4.8 ± 0.3	5.4 ± 0.2	5.4 ± 0.3	5.97 ± 0.12	6.2 - 8.5	5.4 ± 0.2	4.7 ± 0.1	5.3 ± 0.1	5.1 ± 0.09	6.0 - 8.2
ALB (g/dL)	2.8 ± 0.1	3.7 ± 0.2	3.2 ± 0.1	3.5 ± 0.1	3.3 - 4.7	3.1 ± 0.09	3.3 ± 0.12	3.1 ± 0.1	3.0 ± 0.03	3.2 - 4.4
Na (mEq/L)	131.5 ± 4.0	139.0 ± 0.8	136.6 ± 1.3	139.6 ± 1	137.7 - 169.7	132.0 ± 1.6	135.9 ± 0.6	132.0 ± 1.6	135.9 ± 2.1	138.3 - 171.3
K (mEq/L)	4.7 ± 0.2	4.2 ± 0.2	3.85 ± 0.23	4.11 ± 0.09	5.58 - 10.73	4.27 ± 0.27	4.98 ± 0.24	4.3 ± 0.3	4.98 ± 0.24	5.98 - 11.90
Cl (mEq/L)	92.7 ± 2.2	99.4 ± 1.5	101.0 ± 0.9	101.2 ± 0.4	96.7 - 119.7	93.8 ± 2.1	98.2 ± 0.8	93.8 ± 2.1	98.2 ± 0.8	95.8 - 120.3
WBC (x10³ cells/μL)	10.2 ± 0.4	6.8 ± 0.5	6.24 ± 1.76	11.71 ± 1.71	2.40 - 17.68	5.83 ± 0.1	9.62 ± 0.85	5.83 ± 0.1	9.62 ± 0.85	4.01 - 18.02
# NEUTS (x10³ cells/μL)	1.6 ± 0.25	1.0 ± 0.1	1.34 ± 0.48	1.64 ± 0.56	0.68 - 5.85	0.81 ± 0.07	1.18 ± 0.15	0.81 ± 0.07	1.18 ± 0.15	0.98 - 6.73
# LYMPHS (x10³ cells/μL)	8.1 ± 0.2	5.3 ± 0.5	4.46 ± 1.4	9.69 ± 1.07	1.49 - 11.54	4.73 ± 0.04	7.85 ± 0.8	4.73 ± 0.04	7.85 ± 0.88	2.21 - 12.00
# MONOS (x10³ cells/μL)	0.17 ± 0.01	0.3 ± 0.04	0.11 ± 0.04	0.17 ± 0.03	0.11 - 1.21	0.08 ± 0.02	0.39 ± 0.03	0.08 ± 0.02	0.39 ± 0.03	0.18 - 1.43
# EOS (x10³ cells/μL)	0.23 ± 0.13	0.24 ± 0.11	0.09 ± 0.02	0.12 ± 0.05	0.01 - 0.48	0.18 ± 0.04	0.1 ± 0.02	0.18 ± 0.04	0.10 ± 0.02	0.01 - 0.50
# BASOS (x10³ cells/μL)	0.03 ± 0.01	0.05 ± 0.01	0.01 ± 0.01	0.04 ± 0.01	0.00 - 0.16	0.01 ± 0.0	0.08 ± 0.03	0.01 ± 0.00	0.08 ± 0.03	0.00 - 0.17
# LUC (x10³ cells/μL)	0.03 ± 0.01	0.05 ± 0.01	0.02 ± 0.01	0.07 ± 0.02		0.01 ± 0.0	0.08 ± 0.03	0.01 ± 0.00	0.08 ± 0.03	
% NEUT	15.4 ± 1.8	15.0 ± 1.7	21.5 ± 4.2	13.3 ± 2.6	13.75 - 54.79	13.9 ± 0.99	12.5 ± 1.99	13.9 ± 1.0	12.5 ± 2.0	16.01 - 53.86
% LYM	80.3 ± 2.3	77.1 ± 2.8	74.7 ± 4.6	83.5 ± 2.9	37.04 - 81.16	81.13 ± 1.4	81.3 ± 2.4	81.1 ± 1.4	81.3 ± 2.4	37.76 - 78.86
% MONO	1.7 ± 0.2	4.4 ± 0.5	1.6 ± 0.3	1.4 ± 0.1	2.8 - 11.0	1.5 ± 0.3	4.1 ± 0.06	1.5 ± 0.3	4.1 ± 0.06	3.13 - 10.74
% EOS	2.1 ± 0.6	2.5 ± 0.8	1.7 ± 0.3	0.93 ± 0.23	0.16 - 4.77	3.1 ± 0.6	1.1 ± 0.3	3.13 ± 0.6	1.1 ± 0.3	0.14 - 4.31
% BASO	0.23 ± 0.03	0.20 ± 0.00	0.17 ± 0.03	0.37 ± 0.03	0.00 - 1.56	0.2 ± 0.0	0.2 ± 0.0	0.2 ± 0.0	0.2 ± 0.0	0.00 - 1.67
% LUC	0.3 ± 0.1	0.7 ± 0.2	0.33 ± 0.07	0.60 ± 0.1		0.2 ± 0.06	0.8 ± 0.3	0.2 ± 0.06	0.8 ± 0.3	
RBC (x10⁶ cells/μL)	6.66 ± 0.1	6.8 ± 0.17	7.06 ± 0.1	7.39 ± 0.30	5.53 - 9.83	6.96 ± 0.13	6.57 ± 0.09	6.96 ± 0.13	6.57 ± 0.09	5.84 - 9.96
HGB (g/dL)	13.5 ± 0.2	17.6 ± 0.3	14.1 ± 0.3	14.4 ± 0.3	12.6 - 22.2	13.8 ± 0.2	17.2 ± 0.4	13.8 ± 0.2	17.2 ± 0.4	13.1 - 23.1
HCT (%)	42.3 ± 0.8	41.4 ± 1.2	42.2 ± 0.92	43.1 ± 0.7	37.1 - 63.5	41.6 ± 0.6	42.9 ± 1.0	41.60 ± 0.59	42.9 ± 1.0	38.8 - 68.7
MCV (fL)	63.6 ± 1.3	60.9 ± 1.3	59.8 ± 1.2	58.5 ± 1.2	57.8 - 75.4	59.7 ± 0.5	65.4 ± 1.7	59.7 ± 0.5	65.4 ± 1.8	57.5 - 76.6
MCH (PG)	20.3 ± 0.3	25.9 ± 0.2	20.0 ± 0.3	19.5 ± 0.5	17.8 - 25.1	19.9 ± 0.1	26.3 ± 0.4	19.9 ± 0.1	26.3 ± 0.4	16.9 - 25.1
MCHC (pg)	32 ± 0.2	42.5 ± 0.9	33.4 ± 0.2	33.3 ± 0.1	26.5 - 37.9	33.2 ± 0.1	40.3 ± 0.1	33.2 ± 0.1	40.3 ± 0.1	26.8 - 37.7
RDW (%)	13.4 ± 0.35	11.3 ± 0.2	11.3 ± 0.2	11.1 ± 0.2	13.1 - 16.9	11.5 ± 0.1	14.3 ± 0.7	11.5 ± 0.09	14.3 ± 0.7	14.2 - 18.0
PLT (x10³ cells/μL)	981 ± 230	902 ± 7.2	935 ± 35	1241 ± 52	751 - 2390	860 ± 19.1	780 ± 100.5	860 ± 19.1	780 ± 100.5	771 - 2618
MPV (fL)	7.6 ± 0.3	7.1 ± 0.2	7.5 ± 0.3	6.9 ± 0.2	5.8 - 9.6	7.2 ± 0.2	7.6 ± 0.35	7.2 ± 0.2	7.6 ± 0.4	5.8 - 238.0

	Saline (21d) n=4	Co-SNA (21d) n=4	182-SNA (21d) n=4
G-CSF	252.2	159.4	135.7
Eotaxin	839.5	899.5	524.2
GM-CSF	21.8	16.2	12.5
IFN gamma	<4.42	<4.42	<4.42
IL-1 alpha	570	554.3	421.5
IL-2	11.1	14.1	14.4
IL-5	34.6	8.4	10
IL-6	5.1	5	9.8
IL-7	<3.64	<3.64	<3.64
IL-10	6.6	5.9	4.9
IL-12 (p70)	8.4	8.8	8.6
IL-12 (p40)	15.3	16.3	13.7
IL-13	109.6	98.8	72.9
LIX	12605	11637	10414
IL-15	42.6	56.9	45.2
IL-17	<3.43	3.8	3.8
IP-10	230.2	181.4	132.5
KC	158.7	133.2	107.6
MCP-1	35.5	34.7	33.8
MLP-1 alpha	76.1	74.3	72.5
MIP-1 beta	57.1	64.3	71.4
M-CSF	17.7	15.1	12.6
MIP-2	87	67.4	47.9
MIG	10.3	15.9	21.5
TNF alpha	7.2	5.7	6.4

	Saline (21d) n=4	Co-SNA (21d) n=4	182-SNA (21d) n=4