

miR1	Functional classes (downregulated):										
		p-value	1.03E-17	1.47E-14	2.64E-13	7.26E-11	1.30E-09	1.04E-09	2.62E-09	3.36E-08	3.47E-08
Target gene name	miRNA sites	Fold change	transcription, negative reg,	cell cycle regulation	apoptosis	DNA damage response	ubiquitination/proteolysis	chromatin organization/modification	cytoskeleton organization	cell motility	protein modification
											Other
Total: 22			8	7	6	5	4	4	4	3	3
ACTR3	1	-2,04							X	X	
ARHGEF3	1	-18,49			X						
BAG4	1	-2,50		X							
CAND1	1	-3,36	X			X		X			
CCND1	1	-120,05		X		X					X
COPA	1	-2,47									X
DNMT1	1	-1,84	X			X		X	X		X
EP300	1	-2,47	X	X	X			X			X
ETS1	1	-8,26	X	X	X					X	
HLTF	1	-4,51	X				X	X			
JUB	1	-7,19		X						X	
KCNIP3	1	-8,61	X	X							
NEDD9	1	-7,29		X					X		
NXT2	1	-5,69									X
ORC6L	1	-11,48				X					
PIK3C2A	1	-2,51									X
RAD18	1	-5,18				X	X				
RAD54B	1	-8,93		X		X					
RYBP	1	-5,09	X	X							
SMC4	1	-25,31		X				X			
TFE3	1	-3,35	X								
TGFB1I1	1	-2,32				X					
Target gene description											
ARP3 actin-related protein 3 homolog (yeast) (ACTR3), mRNA											
Rho guanine nucleotide exchange factor (GEF) 3 (ARHGEF3), mRNA											
BCL2-associated athanogene 4 (BAG4), mRNA											
cullin-associated and neddylation-dissociated 1 (CAND1), mRNA											
cyclin D1 (CCND1), mRNA											
coatamer protein complex, subunit alpha (COPA), mRNA											
DNA (cytosine-5-)-methyltransferase 1 (DNMT1), mRNA											
E1A binding protein p300 (EP300), mRNA											
v-ets erythroblastosis virus E26 oncogene homolog 1 (avian) (ETS1), mRNA											
helicase-like transcription factor (HLTF), transcript variant 1, mRNA											
jub, ajuba homolog (Xenopus laevis) (JUB), transcript variant 1, mRNA											
Kv channel interacting protein 3, calsenilin (KCNIP3), transcript variant 1, mRNA											
neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), transcript variant 1, mRNA											
nuclear transport factor 2-like export factor 2 (NXT2), mRNA											
origin recognition complex, subunit 6 like (yeast) (ORC6L), mRNA											
phosphoinositide-3-kinase, class 2, alpha polypeptide (PIK3C2A), mRNA											
RAD18 homolog (S. cerevisiae) (RAD18), mRNA											
RAD54 homolog B (S. cerevisiae) (RAD54B), mRNA											
RING1 and YY1 binding protein (RYBP), mRNA											
structural maintenance of chromosomes 4 (SMC4), transcript variant 1, mRNA											
transcription factor binding to IGHM enhancer 3 (TFE3), mRNA											
transforming growth factor beta 1 induced transcript 1 (TGFB1I1), transcript variant 1, mRNA											

miR21	Functional classes (downregulated):														
Target gene name	miRNA sites	Fold change	p-value	1.44E-21	1.00E-15	1.97E-13	4.32E-11	1.03E-12	8.19E-12	6.47E-12	1.42E-12	2.13E-10	7.64E-08		Gene description
Total: 30				12	8	7	6	6	6	5	5	5	4	4	
ACP2	1	-2,02			X										acid phosphatase 2, lysosomal (ACP2), mRNA
AKAP7	1	-18,75	X												A kinase (PRKA) anchor protein 7 (AKAP7), transcript variant gamma, mRNA
ARHGEF3	1	-18,49							X						Rho guanine nucleotide exchange factor (GEF) 3 (ARHGEF3), mRNA
CANX	1	-4,04	X												calnexin (CANX), transcript variant 1, mRNA
CENPA	1	-190,22	X			X	X					X			centromere protein A (CENPA), transcript variant 1, mRNA
CENPH	1	-59,49				X	X					X			centromere protein H (CENPH), mRNA
CPNE3	1	-2,64	X												copine III (CPNE3), mRNA
CREBL2	1	-8,75				X									cAMP responsive element binding protein-like 2 (CREBL2), mRNA
EXT2	2	-3,51												X	exostosins (multiple) 2 (EXT2), transcript variant 1, mRNA
GADD45B	1	-10,68			X	X		X							growth arrest and DNA-damage-inducible, beta (GADD45B), mRNA
GJA1	1	-5,09	X						X	X	X	X	X		gap junction protein, alpha 1, 43kDa (connexin 43) (GJA1), mRNA
GNS	1	-2,01												X	glucosamine (N-acetyl)-6-sulfatase (Sanfilippo disease IIID) (GNS), mRNA
HP1BP3	1	-3,58					X					X			heterochromatin protein 1, binding protein 3 (HP1BP3), mRNA
MCFD2	1	-5,31	X												multiple coagulation factor deficiency 2 (MCFD2), mRNA
MXD4	2	-6,68		X											MAX dimerization protein 4 (MXD4), mRNA
NEDD4	1	-26,59	X	X						X	X		X		neural precursor cell expressed, developmentally down-regulated 4 (NEDD4), transcript variant 2, mRNA
NF2	1	-3,91		X	X					X	X				neurofibromin 2 (bilateral acoustic neuroma) (NF2), transcript variant 13, mRNA
PIK3R3	1	-2,70			X										phosphoinositide-3-kinase, regulatory subunit 3 (p55, gamma) (PIK3R3), mRNA
PLDN	1	-2,04	X												pallidin homolog (mouse) (PLDN), mRNA
PRKDC	1	-4,33		X	X		X	X					X		protein kinase, DNA-activated, catalytic polypeptide (PRKDC), mRNA
PROCR	1	-57,25												X	protein C receptor, endothelial (EPCR) (PROCR), mRNA
PSMD5	1	-2,81		X	X	X				X					proteasome (prosome, macropain) 26S subunit, non-ATPase, 5 (PSMD5), mRNA
RAB31	1	-4,72	X												RAB31, member RAS oncogene family (RAB31), mRNA
SEC22C	1	-3,73	X												SEC22 vesicle trafficking protein homolog C (S. cerevisiae) (SEC22C), transcript variant 2, mRNA
SH3RF1	2	-3,12							X		X				SH3 domain containing ring finger 1 (SH3RF1), mRNA
SLBP	1	-3,44												X	stem-loop (histone) binding protein (SLBP), mRNA
SMARCA5	1	-2,40		X			X					X			SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5 (SMARCA5), mRNA
SUZ12	1	-3,31		X			X								suppressor of zeste 12 homolog (Drosophila) (SUZ12), mRNA
SYTL4	1	-6,79	X												synaptotagmin-like 4 (granuphilin-a) (SYTL4), mRNA
THBS1	1	-73,21	X	X	X	X			X	X	X		X		thrombospondin 1 (THBS1), mRNA

miR24	Functional classes (downregulated):											
		p-value	3.70E-23	4.05E-21	1.53E-19	2.04E-19	1.07E-18	2.53E-18	1.18E-16	1.15E-16	1.72E-13	3.49E-13
Target gene name	miRNA sites	Fold change	DNA damage response	transport/localization	cell cycle regulation	reg. of kinase activity	transcription, negative reg.	apoptosis	phosphorylation	NF-kB	ubiquitination/proteolysis	protein complex assembly
											RNA splicing	chromatin organization/modification
												Other
Total: 72			16	15	14	13	12	12	10	8	8	7
ADCY7	2	-5,47			X							
ALG2	1	-2,36	X									
ANPEP	1	-168,98								X		
AP2B1	1	-3,31	X									
AQR	1	-2,17									X	
ATP2B1	1	-35,02										X
AXL	1	-145,37						X				
B3GNT5	1	-52,18										X
BCL10	1	-3,26			X	X			X	X		
CANX	2	-4,04	X									
CAPZA1	1	-4,63								X		
CASC3	1	-2,95	X						X	X		
CCNF	1	-10,36		X								
CDC25A	1	-7,43	X	X	X			X				
CHIT1	1	-13,47							X			
CIT	1	-14,52		X			X					
CPA4	1	-9,67							X		X	
CREBL2	2	-8,75		X								
DBF4	1	-10,20	X	X								
DBF4B	1	-4,01		X								
DCBLD2	1	-8,98										X
DOCK1	2	-3,85	X			X						
DTL	1	-36,20	X						X			
EGFR	1	-7,16	X	X	X	X	X	X	X			
EIF4H	1	-2,44										X
ENTPD2	1	-1,94										X
FANCC	1	-4,09	X							X		
FBXL2	1	-9,22								X		
H3F3B	1	-4,69								X	X	
HEMK1	1	-2,82	X									
HEY1	1	-4,60				X						
HIF1A	1	-3,61	X		X	X			X			
HPS4	2	-4,37	X									
IGFBP4	1	-10,42	X									
ILF3	1	-3,85		X	X							
IRAK4	1	-7,64						X				
KCNIP3	2	-8,61				X	X					
KRAS	1	-3,58	X	X	X	X	X	X				
MAP3K14	1	-13,92						X				
MBD2	2	-1,74				X			X	X		
MECP2	1	-3,52				X						
MGAT1	1	-6,66										X
MPDU1	1	-4,86										X
MSH2	1	-2,22	X	X	X	X	X	X				X
MXD4	2	-6,68				X						
NADK	1	-3,61						X				
NBN	1	-4,00	X	X								X
NEDD9	2	-7,29		X								
NEK11	1	-3,51	X	X				X				
NGFR	2	-325,61	X	X		X	X		X			
PTPLAD1	1	-7,08	X		X			X	X			
RAB1B	1	-1,56	X									
RAB5C	1	-2,43	X									
RBM15B	1	-3,07	X		X						X	
RFX5	1	-7,36				X						
RHOBTB3	2	-2,54	X									
SFRS7	1	-6,90									X	
SFRS9	1	-2,62							X	X		
SLBP	1	-3,44									X	
SMARCA5	1	-2,40				X				X	X	
SMC1A	1	-3,82	X	X						X	X	
SNAP23	1	-2,56	X									
SON	2	-2,12				X						
SPRY4	1	-3,32			X							
SSR1	1	-3,14	X									
THY1	1	-18,39			X							

TLX2	1	-6,43														T-cell leukemia homeobox 2 (TLX2), mRNA
TOP2A	1	-463,68	X				X								X	topoisomerase (DNA) II alpha 170kDa (TOP2A), mRNA
TRAF7	1	-2,60			X	X	X	X								TNF receptor-associated factor 7 (TRAF7), transcript variant 1, mRNA
TWSG1	1	-3,49						X								twisted gastrulation homolog 1 (Drosophila) (TWSG1), mRNA
VAV2	1	-2,84			X	X										vav 2 oncogene (VAV2), mRNA
YWHAB	1	-1,98	X	X	X	X				X						tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB), tra

miR26a	Functional classes (downregulated):															
Target gene name	miRNA sites	Fold change	p-value	cell cycle regulation	transport/localization	apoptosis	DNA damage response	protein modification	phosphorylation	protein complex assembly	reg. of kinase activity	M-phase	nucleotide biosynthesis	RNA splicing	Other	Gene description
Total: 20				6	5	4	3	3	3	3	3	2	2	2	2	
AP2B1	2	-3,31		X												adaptor-related protein complex 2, beta 1 subunit (AP2B1), transcript variant 1, mRNA
ARPC3	1	-3,20												X		actin related protein 2/3 complex, subunit 3, 21kDa (ARPC3), mRNA
CNP	1	-2,26											X			2',3'-cyclic nucleotide 3' phosphodiesterase (CNP), mRNA
CUL4B	1	-9,63	X			X										cullin 4B (CUL4B), mRNA
DBF4B	1	-4,01	X													DBF4 homolog B (S. cerevisiae) (DBF4B), transcript variant 2, mRNA
DHFR	1	-22,32											X			dihydrofolate reductase (DHFR), mRNA
EFCAB4B	1	-4,14	X													EF-hand calcium binding domain 4B (EFCAB4B), mRNA
FANCA	1	-16,65	X			X			X		X					Fanconi anemia, complementation group A (FANCA), transcript variant 1, mRNA
FSD1	1	-5,26	X													fibronectin type III and SPRY domain containing 1 (FSD1), mRNA
HIP1	1	-11,44	X	X					X	X						huntingtin interacting protein 1 (HIP1), mRNA
PPM1M	1	-2,66						X								protein phosphatase 1M (PP2C domain containing) (PPM1M), mRNA
PRKCD	1	-3,22					X	X		X						protein kinase C, delta (PRKCD), transcript variant 1, mRNA
QKI	1	-2,48	X			X								X		quaking homolog, KH domain RNA binding (mouse) (QKI), transcript variant 1, mRNA
RAB1B	1	-1,56	X													RAB1B, member RAS oncogene family (RAB1B), mRNA
RAD51	1	-42,86	X			X			X		X					RAD51 homolog (RecA homolog, E. coli) (S. cerevisiae) (RAD51), transcript variant 1, mRNA
RYBP	1	-5,09		X												RING1 and YY1 binding protein (RYBP), mRNA
STK39	1	-14,71						X								serine threonine kinase 39 (STE20/SPS1 homolog, yeast) (STK39), mRNA
SUMO3	1	-3,94												X		SMT3 suppressor of mif two 3 homolog 3 (S. cerevisiae) (SUMO3), mRNA
TARDBP	1	-1,59	X	X									X			TAR DNA binding protein (TARDBP), mRNA
TLR4	1	-18,67		X	X	X			X							toll-like receptor 4 (TLR4), mRNA

miR27a	Functional classes (downregulated):														
Target gene name	miRNA sites	Fold change	p-value	Functional classes (downregulated):											
				transport/localization	apoptosis	reg. of kinase activity	protein complex assembly	cytoskeleton organization	DNA damage response	transcription, negative reg.	cell cycle regulation	cell motility	nucleotide biosynthesis	phosphorylation	Other
Total: 89				23	20	19	14	13	12	12	11	9	8	7	10
ACP2	1	-2,02		X											acid phosphatase 2, lysosomal (ACP2), mRNA
ADCY7	1	-5,47		X								X			adenylate cyclase 7 (ADCY7), mRNA
ADRB2	1	-36,72	X	X	X	X		X	X						adrenergic, beta-2-, receptor, surface (ADRB2), mRNA
ALG1	1	-2,63											X		asparagine-linked glycosylation 1 homolog (S. cerevisiae, beta-1,4-mannosyltransferase) (ALG1), mRNA
AMPD2	1	-2,27										X			adenosine monophosphate deaminase 2 (isoform L) (AMPD2), transcript variant 1, mRNA
AMPH	1	-5,38	X												amphiphysin (Stiff-Man syndrome with breast cancer 128kDa autoantigen) (AMPH), transcript variant 1, mRNA
ANXA5	1	-2,89		X	X	X									annexin A5 (ANXA5), mRNA
AQP2	1	-2,63						X							aquaporin 2 (collecting duct) (AQP2), mRNA
ARF3	1	-6,21	X												ADP-ribosylation factor 3 (ARF3), mRNA
ARFIP2	1	-2,60					X			X					ADP-ribosylation factor interacting protein 2 (arfaptin 2) (ARFIP2), mRNA
ARHGAP26	1	-3,38				X									Rho GTPase activating protein 26 (ARHGAP26), mRNA
ATP11C	1	-9,45										X			ATPase, Class VI, type 11C (ATP11C), transcript variant 2, mRNA
ATP2B1	1	-35,02										X			ATPase, Ca++ transporting, plasma membrane 1 (ATP2B1), transcript variant 2, mRNA
ATP2B4	1	-5,46										X			ATPase, Ca++ transporting, plasma membrane 4 (ATP2B4), transcript variant 1, mRNA
ATP8A2	1	-5,90										X			ATPase, aminophospholipid transporter-like, Class I, type 8A, member 2 (ATP8A2), mRNA
BAG5	1	-1,99		X											BCL2-associated athanogene 5 (BAG5), transcript variant 1, mRNA
BUB1B	1	-493,74		X			X	X	X	X					BUB1 budding uninhibited by benzimidazoles 1 homolog beta (yeast) (BUB1B), mRNA
CALR	1	-4,96	X	X	X	X	X	X	X						calreticulin (CALR), mRNA
CAPZA1	1	-4,63				X	X				X				capping protein (actin filament) muscle Z-line, alpha 1 (CAPZA1), mRNA
CASC3	1	-2,95	X												cancer susceptibility candidate 3 (CASC3), mRNA
CDC6	1	-9,90			X			X	X	X					cell division cycle 6 homolog (S. cerevisiae) (CDC6), mRNA
CKS1B	1	-24,96			X					X					CDC28 protein kinase regulatory subunit 1B (CKS1B), mRNA
CLOCK	1	-1,68						X	X						clock homolog (mouse) (CLOCK), mRNA
CSE1L	1	-2,58	X	X		X									CSE1 chromosome segregation 1-like (yeast) (CSE1L), mRNA
CTNNB1	1	-8,78	X	X	X	X	X		X	X					catenin (cadherin-associated protein), beta 1, 88kDa (CTNNB1), mRNA
EPHA2	1	-8,22											X		EPH receptor A2 (EPHA2), mRNA
ETS1	2	-8,26		X					X	X	X				v-ets erythroblastosis virus E26 oncogene homolog 1 (avian) (ETS1), mRNA
FANCC	1	-4,09				X		X							Fanconi anemia, complementation group C (FANCC), mRNA
FZD1	1	-79,02							X						frizzled homolog 1 (Drosophila) (FZD1), mRNA
GCA	1	-7,82		X											grancalcin, EF-hand calcium binding protein (GCA), mRNA
GM2A	1	-4,39			X										GM2 ganglioside activator (GM2A), mRNA
GNS	1	-2,01										X			glucosamine (N-acetyl)-6-sulfatase (Sanfilippo disease IIID) (GNS), mRNA
H2AFZ	1	-4,61				X									H2A histone family, member Z (H2AFZ), mRNA
HP1BP3	1	-3,58				X									heterochromatin protein 1, binding protein 3 (HP1BP3), mRNA
HSP90AA1	1	-2,29		X		X	X								heat shock protein 90kDa alpha (cytosolic), class A member 1 (HSP90AA1), transcript variant 2, mRNA
HSPD1	1	-2,36		X	X	X		X							heat shock 60kDa protein 1 (chaperonin) (HSPD1), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA
IGF2BP3	1	-3,22							X						insulin-like growth factor 2 mRNA binding protein 3 (IGF2BP3), mRNA
IGFBP4	1	-10,42						X							insulin-like growth factor binding protein 4 (IGFBP4), mRNA
ING5	1	-2,15							X						inhibitor of growth family, member 5 (ING5), mRNA
KRAS	1	-3,58		X	X	X		X	X						v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog (KRAS), transcript variant a, mRNA
LASP1	1	-13,02						X							LIM and SH3 protein 1 (LASP1), mRNA
LY86	1	-2,00		X											lymphocyte antigen 86 (LY86), mRNA
MAN2A1	1	-40,58											X		mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA
MAP3K14	1	-13,92												X	mitogen-activated protein kinase kinase kinase 14 (MAP3K14), mRNA
MET	1	-3,40				X					X	X			met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
MYD88	1	-7,46		X	X										myeloid differentiation primary response gene (88) (MYD88), mRNA
MYH10	1	-2,95		X				X		X	X				myosin, heavy chain 10, non-muscle (MYH10), mRNA
NADK	1	-3,61									X	X			NAD kinase (NADK), mRNA
NGFR	1	-325,61		X			X	X		X	X				nerve growth factor receptor (TNFR superfamily, member 16) (NGFR), mRNA
NOLC1	1	-1,92								X					nucleolar and coiled-body phosphoprotein 1 (NOLC1), mRNA
NUDT21	2	-4,18											X		nudix (nucleoside diphosphate linked moiety X)-type motif 21 (NUDT21), mRNA
NXT2	1	-5,69		X											nuclear transport factor 2-like export factor 2 (NXT2), mRNA
OSBPL5	1	-6,32		X											oxysterol binding protein-like 5 (OSBPL5), transcript variant 1, mRNA
PIK3R3	1	-2,70				X									phosphoinositide-3-kinase, regulatory subunit 3 (p55, gamma) (PIK3R3), mRNA
PLDN	1	-2,04		X											pallidin homolog (mouse) (PLDN), mRNA
PMM2	1	-2,30										X			phosphomannomutase 2 (PMM2), mRNA
POLR2L	1	-2,77					X								polymerase (RNA) II (DNA directed) polypeptide L, 7.6kDa (POLR2L), mRNA
POM121	1	-3,83		X											POM121 membrane glycoprotein (rat) (POM121), mRNA
PPAP2B	1	-15,34									X				phosphatidic acid phosphatase type 2B (PPAP2B), transcript variant 1, mRNA
PRPF38A	1	-5,34											X		PRP38 pre-mRNA processing factor 38 (yeast) domain containing A (PRPF38A), transcript variant 1, mRNA
PTPN9	1	-6,10										X			protein tyrosine phosphatase, non-receptor type 9 (PTPN9), mRNA
PUS7L	1	-1,82											X		pseudouridylate synthase 7 homolog (S. cerevisiae)-like (PUS7L), mRNA
RAB8A	1	-3,01		X											RAB8A, member RAS oncogene family (RAB8A), mRNA
RBM15B	3	-3,07		X					X						RNA binding motif protein 15B (RBM15B), mRNA
ROBO4	1	-37,10											X		roundabout homolog 4, magic roundabout (Drosophila) (ROBO4), mRNA
RYBP	2	-5,09		X					X						RING1 and YY1 binding protein (RYBP), mRNA
SDC1	1	-10,82				X									syndecan 1 (SDC1), transcript variant 1, mRNA
SEC22A	2	-1,77		X											SEC22 vesicle trafficking protein homolog A (S. cerevisiae) (SEC22A), mRNA
SH3GL1	1	-11,32		X											SH3-domain GRB2-like 1 (SH3GL1), mRNA

SIM2	1	-2,55					X				single-minded homolog 2 (Drosophila) (SIM2), transcript variant SIM2, mRNA
SLC1A3	1	-39,30	X				X			X	solute carrier family 1 (glial high affinity glutamate transporter), member 3 (SLC1A3), mRNA
SLC22A4	1	-9,49								X	solute carrier family 22 (organic cation transporter), member 4 (SLC22A4), mRNA
SLC23A2	1	-2,33	X								solute carrier family 23 (nucleobase transporters), member 2 (SLC23A2), transcript variant 2, mRNA
STK35	1	-1,61								X	serine/threonine kinase 35 (STK35), mRNA
STXBP4	1	-7,21	X	X							syntaxin binding protein 4 (STXBP4), mRNA
TACC1	1	-6,34						X			transforming, acidic coiled-coil containing protein 1 (TACC1), mRNA
THY1	1	-18,39		X	X						Thy-1 cell surface antigen (THY1), mRNA
TLX2	1	-6,43			X						T-cell leukemia homeobox 2 (TLX2), mRNA
TMEM102	1	-2,50	X	X							transmembrane protein 102 (TMEM102), mRNA
TNFSF12	1	-5,47	X					X			tumor necrosis factor (ligand) superfamily, member 12 (TNFSF12), mRNA
TPX2	1	-113,94						X			TPX2, microtubule-associated, homolog (Xenopus laevis) (TPX2), mRNA
TRAF7	1	-2,60	X	X							TNF receptor-associated factor 7 (TRAF7), transcript variant 1, mRNA
TRIM4	1	-5,16			X						tripartite motif-containing 4 (TRIM4), transcript variant alpha, mRNA
TRIO	1	-1,98	X							X	triple functional domain (PTPRF interacting) (TRIO), mRNA
TTLL3	1	-2,57			X	X					tubulin tyrosine ligase-like family, member 3 (TTLL3), transcript variant 2, mRNA
UBE2L6	1	-4,27								X	ubiquitin-conjugating enzyme E2L 6 (UBE2L6), transcript variant 2, mRNA
VCL	1	-2,85							X		vinculin (VCL), transcript variant 1, mRNA
YWHAZ	1	-4,72	X	X							tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide (YWHAZ), tran
ZNF443	1	-2,16	X								zinc finger protein 443 (ZNF443), mRNA

miR30c	Functional classes (downregulated):													
		p-value	3.75E-21	1.02E-17	5.17E-14	4.18E-14	1.05E-15	6.82E-15	9.06E-12	2.56E-12	6.03E-10	5.06E-10		
Target gene name	miRNA sites	Fold change	phosphorylation	reg. of kinase activity	cell cycle regulation	transport/localization	cytoskeleton organization	ubiquitination/proteolysis	DNA damage response	apoptosis	cell motility	nucleotide biosynthesis	Other	Gene description
Total: 66			13	12	10	10	10	9	8	8	5	5	9	
ANKRD27	1	-2,21				X								ankyrin repeat domain 27 (VPS9 domain) (ANKRD27), mRNA
ARFIP2	1	-2,60					X				X			ADP-ribosylation factor interacting protein 2 (arfaptin 2) (ARFIP2), mRNA
ARL3	1	-5,12			X									ADP-ribosylation factor-like 3 (ARL3), mRNA
ATP2B1	1	-35,02										X		ATPase, Ca++ transporting, plasma membrane 1 (ATP2B1), transcript variant 2, mRNA
ATP9B	1	-3,84										X		ATPase, Class II, type 9B (ATP9B), mRNA
B3GNT5	1	-52,18										X		UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5 (B3GNT5), mRNA
C1RL	1	-4,54						X						complement component 1, r subcomponent-like (C1RL), mRNA
C5	1	-7,83	X	X				X		X				complement component 5 (C5), mRNA
CALM3	1	-4,02		X	X									calmodulin 3 (phosphorylase kinase, delta) (CALM3), mRNA
CAV2	1	-5,42	X	X	X	X	X				X			caveolin 2 (CAV2), transcript variant 1, mRNA
CDCA5	1	-75,45			X	X								cell division cycle associated 5 (CDCA5), mRNA
CNP	1	-2,26					X					X		2',3'-cyclic nucleotide 3' phosphodiesterase (CNP), mRNA
CNTN2	1	-5,30									X			contactin 2 (axonal) (CNTN2), mRNA
COG8	1	-2,30				X								component of oligomeric golgi complex 8 (COG8), mRNA
CORO1C	1	-12,43				X								coronin, actin binding protein, 1C (CORO1C), mRNA
CTSC	1	-9,37		X				X						cathepsin C (CTSC), transcript variant 1, mRNA
DCTD	1	-2,23										X		dCMP deaminase (DCTD), transcript variant 1, mRNA
DDIT4	2	-11,46								X				DNA-damage-inducible transcript 4 (DDIT4), mRNA
DOCK7	1	-2,73		X			X							dedicator of cytokinesis 7 (DOCK7), mRNA
DTL	1	-36,20						X	X					denticleless homolog (Drosophila) (DTL), mRNA
EIF4H	1	-2,44										X		eukaryotic translation initiation factor 4H (EIF4H), transcript variant 1, mRNA
FBXO5	1	-20,02		X	X		X	X						F-box protein 5 (FBXO5), mRNA
FMOD	1	-5,76											X	fibromodulin (FMOD), mRNA
GADD45B	1	-10,68	X	X	X					X				growth arrest and DNA-damage-inducible, beta (GADD45B), mRNA
GAS2L1	1	-5,69			X									growth arrest-specific 2 like 1 (GAS2L1), transcript variant 2, mRNA
GAS8	1	-3,15									X			growth arrest-specific 8 (GAS8), mRNA
GCA	1	-7,82				X								grancalcin, EF-hand calcium binding protein (GCA), mRNA
GGCX	1	-15,63											X	gamma-glutamyl carboxylase (GGCX), mRNA
GNA12	1	-1,87											X	guanine nucleotide binding protein (G protein) alpha 12 (GNA12), mRNA
GNAI2	1	-8,61	X	X										guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2 (GNAI2), mRNA
GOSR1	1	-2,86				X								golgi SNAP receptor complex member 1 (GOSR1), transcript variant 1, mRNA
HEMK1	2	-2,82							X					HemK methyltransferase family member 1 (HEMK1), mRNA
HPS4	1	-4,37				X								Hermansky-Pudlak syndrome 4 (HPS4), transcript variant 1, mRNA
LASP1	1	-13,02					X							LIM and SH3 protein 1 (LASP1), mRNA
LRPAP1	1	-2,94				X								low density lipoprotein receptor-related protein associated protein 1 (LRPAP1), mRNA
LTBR	1	-3,18									X			lymphotoxin beta receptor (TNFR superfamily, member 3) (LTBR), mRNA
MDFIC	1	-3,57	X	X					X					MyoD family inhibitor domain containing (MDFIC), mRNA
MICB	2	-5,04							X	X				MHC class I polypeptide-related sequence B (MICB), mRNA
MX1	1	-71,01									X			myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse) (MX1), mRNA
MXD4	1	-6,68												MAX dimerization protein 4 (MXD4), mRNA
NEDD9	1	-7,29			X		X							neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), transcript variant 1, mRNA
NUDT21	1	-4,18											X	nudix (nucleoside diphosphate linked moiety X)-type motif 21 (NUDT21), mRNA
PAN3	1	-3,00	X					X						PAN3 polyA specific ribonuclease subunit homolog (S. cerevisiae) (PAN3), mRNA
PIK3R3	2	-2,70		X										phosphoinositide-3-kinase, regulatory subunit 3 (p55, gamma) (PIK3R3), mRNA
PLS3	1	-5,94					X							plastin 3 (T isoform) (PLS3), mRNA
PNRC2	1	-2,72						X						proline-rich nuclear receptor coactivator 2 (PNRC2), mRNA
PPIA	1	-5,63							X					peptidylprolyl isomerase A (cyclophilin A) (PPIA), mRNA
PPM1F	1	-5,82	X								X			protein phosphatase 1F (PP2C domain containing) (PPM1F), mRNA
PPM1M	1	-2,66	X											protein phosphatase 1M (PP2C domain containing) (PPM1M), mRNA
PRKAA1	1	-1,93	X	X			X							protein kinase, AMP-activated, alpha 1 catalytic subunit (PRKAA1), transcript variant 2, mRNA
PRPF4B	1	-2,12	X											PRP4 pre-mRNA processing factor 4 homolog B (yeast) (PRPF4B), mRNA
PTTG1IP	1	-28,68				X								pituitary tumor-transforming 1 interacting protein (PTTG1IP), mRNA
RAD18	1	-5,18						X	X					RAD18 homolog (S. cerevisiae) (RAD18), mRNA
ROBO4	1	-37,10											X	roundabout homolog 4, magic roundabout (Drosophila) (ROBO4), mRNA
SDC1	1	-10,82		X										syndecan 1 (SDC1), transcript variant 1, mRNA
SEN1	1	-6,09						X						SUMO1/sentrin specific peptidase 1 (SEN1), mRNA
SNAI2	1	-63,66								X				snail homolog 2 (Drosophila) (SNAI2), mRNA
SS18	1	-6,34					X							synovial sarcoma translocation, chromosome 18 (SS18), transcript variant 1, mRNA
SSH3	1	-3,46	X											slingshot homolog 3 (Drosophila) (SSH3), mRNA
STK35	1	-1,61	X											serine/threonine kinase 35 (STK35), mRNA
TRIM4	1	-5,16											X	tripartite motif-containing 4 (TRIM4), transcript variant alpha, mRNA
TRRAP	1	-2,11			X				X					transformation/transcription domain-associated protein (TRRAP), mRNA
TWIST1	1	-43,09								X	X			twist homolog 1 (acrocephalosyndactyly 3; Saethre-Chotzen syndrome) (Drosophila) (TWIST1), mRNA
TWSG1	2	-3,49											X	twisted gastrulation homolog 1 (Drosophila) (TWSG1), mRNA
UHMK1	1	-5,11	X	X										U2AF homology motif (UHM) kinase 1 (UHMK1), mRNA
UMPS	1	-11,38										X		uridine monophosphate synthetase (orotate phosphoribosyl transferase and orotidine-5'-decarboxylase) (UMPS)

miR128b		Functional classes (downregulated):										
Target gene name	miRNA sites	p-value	Fold change									
				DNA damage response	transport/localization	cytoskeleton organization	cell cycle regulation	ubiquitination/proteolysis	apoptosis	cell motility	protein modification	phosphorylation
				3.30E-17	2.76E-15	1.18E-13	7.47E-11	3.47E-09	1.46E-08	1.42E-08	1.49E-08	1.75E-07
												4.21E-07
												7.30E-07
												Other
Total: 37				11	10	8	7	5	5	4	4	4
AQP2	1	-2,63	X									
ARFIP2	1	-2,60		X					X			
ARHGAP26	1	-3,38	X									
ARPC4	1	-1,97		X								
AXL	1	-145,37									X	
BUB1B	1	-493,74	X	X	X	X	X	X	X	X	X	
CAV1	1	-29,48	X	X	X					X	X	X
CDCA5	1	-75,45		X	X							
CEP76	1	-2,67			X	X						
CLOCK	1	-1,68	X								X	
DTYMK	1	-21,07				X						
EHD1	1	-5,43		X								
ELMOD1	1	-17,05	X									
EML4	1	-8,63			X	X						
EPHA2	1	-8,22									X	
GCA	1	-7,82		X								
IGFBP4	1	-10,42	X									
ING5	2	-2,15	X									
NAGPA	1	-3,15		X								
NCAPD2	1	-24,05				X						
NGFR	1	-325,61	X	X	X	X	X	X	X			
PARP3	1	-2,93	X									
PROCR	1	-57,25										X
PTPN9	1	-6,10									X	
PXDN	1	-9,44	X									
QKI	1	-2,48		X						X		
QTRTD1	1	-3,54										X
RBM15B	2	-3,07		X							X	
RFC2	1	-2,07	X									
SLC1A3	1	-39,30	X	X								
STK35	1	-1,61									X	
TRAF7	2	-2,60				X	X					X
USP33	1	-3,27				X						
USP4	1	-1,66				X						
VAV2	2	-2,84					X	X				X
VEGFC	1	-3,73					X	X		X		
YWHAZ	1	-4,72	X				X					

Gene description

miR133a	Functional classes (downregulated):											
		p-value	3.60E-16	5.30E-06	1.42E-06	8.06E-07	1.39E-06	3.86E-04	1.96E-04	2.22E-04		
Target gene name	miRNA sites	Fold change	transport/localization	DNA damage response	phosphorylation	RNA splicing	ubiquitination/proteolysis	cell cycle regulation	transcription, negative reg.	apoptosis	Other	Gene description
Total: 19			9	3	3	3	3	2	2	2	2	
BTBD12	1	-4,11	X			X						BTB (POZ) domain containing 12 (BTBD12), mRNA
CASC3	1	-2,95	X			X	X					cancer susceptibility candidate 3 (CASC3), mRNA
CLTA	1	-4,20	X									clathrin, light chain (Lca) (CLTA), transcript variant 2, mRNA
EPHA2	1	-8,22		X								EPH receptor A2 (EPHA2), mRNA
HIP1	1	-11,44	X							X		huntingtin interacting protein 1 (HIP1), mRNA
LASP1	1	-13,02									X	LIM and SH3 protein 1 (LASP1), mRNA
LIN7C	1	-2,41	X									lin-7 homolog C (C. elegans) (LIN7C), mRNA
MDC1	1	-3,79		X				X				mediator of DNA damage checkpoint 1 (MDC1), mRNA
PRPF38A	2	-5,34				X						PRP38 pre-mRNA processing factor 38 (yeast) domain containing A (PRPF38A), transcript variant 1, mRNA
PTPN18	2	-3,43			X							protein tyrosine phosphatase, non-receptor type 18 (brain-derived) (PTPN18), mRNA
RBM15B	1	-3,07	X			X			X			RNA binding motif protein 15B (RBM15B), mRNA
RPA1	1	-5,27		X			X	X				replication protein A1, 70kDa (RPA1), mRNA
SCLT1	1	-1,85	X									sodium channel and clathrin linker 1 (SCLT1), mRNA
SNX6	1	-3,25	X						X			sorting nexin 6 (SNX6), transcript variant 1, mRNA
SON	1	-2,12								X		SON DNA binding protein (SON), transcript variant b, mRNA
SSR2	1	-5,81	X									signal sequence receptor, beta (translocon-associated protein beta) (SSR2), mRNA
SYNPO	1	-28,34									X	synaptopodin (SYNPO), mRNA
SYTL3	1	-6,86	X									synaptotagmin-like 3 (SYTL3), mRNA
VRK3	1	-2,21			X							vaccinia related kinase 3 (VRK3), transcript variant 1, mRNA

miR133b	Functional classes (downregulated):											
		p-value	9.50E-12	3.28E-06	2.30E-06	1.02E-06	7.23E-05	4.96E-05	7.14E-05			
Target gene name	miRNA sites	Fold change	transport/localization	cell cycle regulation	DNA damage response	cytoskeleton organization	phosphorylation	RNA splicing	ubiquitination/proteolysis	Other		Gene description
Total: 16			6	3	3	3	2	2	2	2		
BTBD12	1	-4,11		X					X			BTB (POZ) domain containing 12 (BTBD12), mRNA
CLTA	1	-4,20	X									clathrin, light chain (Lca) (CLTA), transcript variant 2, mRNA
EPHA2	1	-8,22					X					EPH receptor A2 (EPHA2), mRNA
LASP1	1	-13,02				X						LIM and SH3 protein 1 (LASP1), mRNA
MDC1	1	-3,79	X	X								mediator of DNA damage checkpoint 1 (MDC1), mRNA
MTPN	1	-3,28								X		myotrophin (MTPN), mRNA
NEDD9	1	-7,29	X		X							neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), transcript variant 1, mRNA
PRPF38A	1	-5,34						X				PRP38 pre-mRNA processing factor 38 (yeast) domain containing A (PRPF38A), transcript variant 1, mRNA
RBM15B	1	-3,07	X					X				RNA binding motif protein 15B (RBM15B), mRNA
RPA1	1	-5,27	X	X					X			replication protein A1, 70kDa (RPA1), mRNA
SNX6	1	-3,25	X									sorting nexin 6 (SNX6), transcript variant 1, mRNA
SON	1	-2,12								X		SON DNA binding protein (SON), transcript variant b, mRNA
SSR2	1	-5,81	X									signal sequence receptor, beta (translocon-associated protein beta) (SSR2), mRNA
SYTL3	1	-6,86	X									synaptotagmin-like 3 (SYTL3), mRNA
TLN2	1	-2,95	X			X						talin 2 (TLN2), mRNA
VRK3	1	-2,21					X					vaccinia related kinase 3 (VRK3), transcript variant 1, mRNA

miR204	Functional classes (upregulated):									
		p-value	1.62E-06	1.24E-06	4.59E-06	2.00E-05	5.01E-05	3.52E-05	7.68E-06	
Target gene name	miRNA sites	Fold change	transcription regulation	transcription, pos, reg	ubiquitination/proteolysis	cellular respiration	transport/localization	apoptosis	cytoskeleton organization	Other
Total: 14			5	4	4	3	3	3	3	0
ABCD1	1	4,31				X				ATP-binding cassette, sub-family D (ALD), member 1 (ABCD1), mRNA
CIC	1	2,62	X							capicua homolog (Drosophila) (CIC), mRNA
CP110	1	3,26						X		CP110 protein (CP110), mRNA
ERGIC1	1	5,71				X				endoplasmic reticulum-golgi intermediate compartment (ERGIC) 1 (ERGIC1), transcript variant 1, mRNA
GPD1L	1	8,59			X					glycerol-3-phosphate dehydrogenase 1-like (GPD1L), mRNA
IGFBP5	1	6476,31		X						insulin-like growth factor binding protein 5 (IGFBP5), mRNA
PPARGC1A	1	95,52	X	X	X	X		X		peroxisome proliferator-activated receptor gamma, coactivator 1 alpha (PPARGC1A), mRNA
RB1CC1	1	3,37	X	X	X		X			RB1-inducible coiled-coil 1 (RB1CC1), mRNA
RRM2B	1	8,04			X		X			ribonucleotide reductase M2 B (TP53 inducible) (RRM2B), mRNA
STAT5B	2	10,87	X	X			X			signal transducer and activator of transcription 5B (STAT5B), mRNA
STX1A	1	4,00				X				syntaxin 1A (brain) (STX1A), mRNA
TEF	1	3,13	X	X						thyrotrophic embryonic factor (TEF), mRNA
TTL	1	18,69						X		tubulin tyrosine ligase (TTL), mRNA
USP30	1	3,15			X					ubiquitin specific peptidase 30 (USP30), mRNA

miR206	Functional classes (downregulated):															
			p-value	2.48E-30	2.74E-28	1.37E-25	2.67E-23	1.32E-20	1.05E-18	4.16E-18	3.88E-20	2.92E-17	4.62E-18	1.24E-15	7.43E-16	
				transcription, negative reg.	apoptosis	DNA damage response	cell cycle regulation	transport/localization	reg. of kinase activity	cytoskeleton organization	nucleotide biosynthesis	phosphorylation	cell motility	ubiquitination/proteolysis	chromatin organization/modification	Other
Target gene name	miRNA sites	Fold change														Gene description
Total: 90			19	18	17	16	14	12	14	11	10	10	9	9	9	
ACTL6A	1	-4,17												X		actin-like 6A (ACTL6A), transcript variant 3, mRNA
ACTR3	1	-2,04							X	X		X				ARP3 actin-related protein 3 homolog (yeast) (ACTR3), mRNA
AK5	1	-14,69									X					adenylate kinase 5 (AK5), transcript variant 1, mRNA
AP1B1	1	-1,81					X									adaptor-related protein complex 1, beta 1 subunit (AP1B1), transcript variant 1, mRNA
API5	1	-3,47	X													apoptosis inhibitor 5 (API5), mRNA
ARHGAP26	1	-3,38							X							Rho GTPase activating protein 26 (ARHGAP26), mRNA
ARHGEF3	1	-18,49	X													Rho guanine nucleotide exchange factor (GEF) 3 (ARHGEF3), mRNA
ATP2B1	1	-35,02								X						ATPase, Ca++ transporting, plasma membrane 1 (ATP2B1), transcript variant 2, mRNA
ATP9B	1	-3,84									X					ATPase, Class II, type 9B (ATP9B), mRNA
BAG4	1	-2,50	X													BCL2-associated athanogene 4 (BAG4), mRNA
BCL2L11	1	-3,80	X													BCL2-like 11 (apoptosis facilitator) (BCL2L11), transcript variant 1, mRNA
CAND1	2	-3,36	X						X				X			cullin-associated and neddylation-dissociated 1 (CAND1), mRNA
CCND1	1	-120,05			X	X		X			X					cyclin D1 (CCND1), mRNA
CD302	1	-4,09					X									CD302 molecule (CD302), mRNA
CECR1	1	-2,00								X						cat eye syndrome chromosome region, candidate 1 (CECR1), transcript variant 1, mRNA
CLP1	1	-2,26	X													CLP1, cleavage and polyadenylation factor I subunit, homolog (S. cerevisiae) (CLP1), mRNA
COL3A1	1	-7,10			X			X								collagen, type III, alpha 1 (Ehlers-Danlos syndrome type IV, autosomal dominant) (COL3A1), mRNA
COPA	1	-2,47					X									coatomer protein complex, subunit alpha (COPA), mRNA
CORO1C	2	-12,43					X									coronin, actin binding protein, 1C (CORO1C), mRNA
DHFR	1	-22,32								X						dihydrofolate reductase (DHFR), mRNA
DNMT1	1	-1,84	X		X				X						X	DNA (cytosine-5-)-methyltransferase 1 (DNMT1), mRNA
EGFR	1	-7,16		X	X	X	X	X				X				epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) (EGFR),
ELAVL1	1	-3,07													X	ELAV (embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R) (ELAVL1), mRNA
EP300	1	-2,47	X	X			X		X					X		E1A binding protein p300 (EP300), mRNA
EP400	1	-3,43												X		E1A binding protein p400 (EP400), mRNA
ETS1	1	-8,26	X	X			X						X			v-ets erythroblastosis virus E26 oncogene homolog 1 (avian) (ETS1), mRNA
FANCA	1	-16,65				X	X									Fanconi anemia, complementation group A (FANCA), transcript variant 1, mRNA
FZD1	1	-79,02	X													frizzled homolog 1 (Drosophila) (FZD1), mRNA
GMFB	1	-4,33										X				glia maturation factor, beta (GMFB), mRNA
GNRH1	1	-2,90		X				X								gonadotropin-releasing hormone 1 (luteinizing-releasing hormone) (GNRH1), mRNA
H3F3B	1	-4,69												X		H3 histone, family 3B (H3.3B) (H3F3B), mRNA
HLTF	1	-4,51	X										X	X		helicase-like transcription factor (HLTF), transcript variant 1, mRNA
INTS6	1	-2,07													X	integrator complex subunit 6 (INTS6), transcript variant 1, mRNA
IRS1	1	-4,70						X								insulin receptor substrate 1 (IRS1), mRNA
JUB	1	-7,19				X							X			jub, ajuba homolog (Xenopus laevis) (JUB), transcript variant 1, mRNA
KCNIP3	1	-8,61	X	X												Kv channel interacting protein 3, calsenilin (KCNIP3), transcript variant 1, mRNA
LASP1	1	-13,02							X							LIM and SH3 protein 1 (LASP1), mRNA
LIN7C	1	-2,41					X									lin-7 homolog C (C. elegans) (LIN7C), mRNA
LRRCC1	1	-6,04					X									leucine rich repeat and coiled-coil domain containing 1 (LRRCC1), transcript variant 1, mRNA
MECP2	1	-3,52	X													methyl CpG binding protein 2 (Rett syndrome) (MECP2), mRNA
MET	1	-3,40						X			X	X				met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
MICB	1	-5,04		X	X											MHC class I polypeptide-related sequence B (MICB), mRNA
MID1	1	-3,92							X					X		midline 1 (Opitz/BBB syndrome) (MID1), transcript variant 3, mRNA
MMD	1	-12,18		X												monocyte to macrophage differentiation-associated (MMD), mRNA
MPDU1	1	-4,86													X	mannose-P-dolichol utilization defect 1 (MPDU1), mRNA
MXD4	1	-6,68	X													MAX dimerization protein 4 (MXD4), mRNA
NBN	1	-4,00			X	X								X		nibrin (NBN), transcript variant 2, mRNA
NCL	1	-1,79													X	nucleolin (NCL), mRNA
NDE1	1	-3,11				X	X		X				X			nudE nuclear distribution gene E homolog 1 (A. nidulans) (NDE1), mRNA
NEDD4	1	-26,59	X		X		X							X		neural precursor cell expressed, developmentally down-regulated 4 (NEDD4), transcript variant 2, mRNA
NEDD9	1	-7,29				X			X							neural precursor cell expressed, developmentally down-regulated 9 (NEDD9), transcript variant 1, mRNA
NRBP2	1	-4,23										X				nuclear receptor binding protein 2 (NRBP2), mRNA
NRP1	1	-14,86							X			X				neuropilin 1 (NRP1), transcript variant 3, mRNA
NT5E	1	-48,13		X						X						5'-nucleotidase, ecto (CD73) (NT5E), mRNA
NUDT21	1	-4,18													X	nudix (nucleoside diphosphate linked moiety X)-type motif 21 (NUDT21), mRNA
NXT2	1	-5,69					X									nuclear transport factor 2-like export factor 2 (NXT2), mRNA
ORC6L	1	-11,48			X											origin recognition complex, subunit 6 like (yeast) (ORC6L), mRNA
OSBPL5	1	-6,32					X									oxysterol binding protein-like 5 (OSBPL5), transcript variant 1, mRNA
PDCD4	1	-7,67	X	X		X		X								programmed cell death 4 (neoplastic transformation inhibitor) (PDCD4), transcript variant 2, mRNA
PIK3C2A	2	-2,51										X				phosphoinositide-3-kinase, class 2, alpha polypeptide (PIK3C2A), mRNA
PPM1F	1	-5,82		X								X				protein phosphatase 1F (PP2C domain containing) (PPM1F), mRNA
PTPLAD1	1	-7,08			X			X				X				protein tyrosine phosphatase-like A domain containing 1 (PTPLAD1), mRNA
PXDN	1	-9,44			X											peroxidasin homolog (Drosophila) (PXDN), mRNA
RAD18	1	-5,18			X									X		RAD18 homolog (S. cerevisiae) (RAD18), mRNA
RAD54B	1	-8,93			X	X										RAD54 homolog B (S. cerevisiae) (RAD54B), mRNA
RFX5	1	-7,36	X													regulatory factor X, 5 (influences HLA class II expression) (RFX5), transcript variant 1, mRNA
RNF138	1	-2,69												X		ring finger protein 138 (RNF138), transcript variant 1, mRNA
RP2	1	-2,29								X						retinitis pigmentosa 2 (X-linked recessive) (RP2), mRNA
RRM2	1	-206,34			X						X					ribonucleotide reductase M2 polypeptide (RRM2), mRNA

RYBP	2	-5,09	X	X														RING1 and YY1 binding protein (RYBP), mRNA
SENP1	1	-6,09												X				SUMO1/sentrin specific peptidase 1 (SENP1), mRNA
SERP1	1	-2,57				X												stress-associated endoplasmic reticulum protein 1 (SERP1), mRNA
SLC23A2	1	-2,33				X												solute carrier family 23 (nucleobase transporters), member 2 (SLC23A2), transcript variant 2, mRNA
SMC4	1	-25,31			X									X				structural maintenance of chromosomes 4 (SMC4), transcript variant 1, mRNA
SNRNP1	1	-4,86												X				small nuclear ribonucleoprotein D1 polypeptide 16kDa (SNRNP1), mRNA
SUZ12	1	-3,31	X											X				suppressor of zeste 12 homolog (Drosophila) (SUZ12), mRNA
TBL1X	1	-6,51	X											X				transducin (beta)-like 1X-linked (TBL1X), mRNA
TFE3	1	-3,35	X															transcription factor binding to IGHM enhancer 3 (TFE3), mRNA
TGFB1I1	1	-2,32												X				transforming growth factor beta 1 induced transcript 1 (TGFB1I1), transcript variant 1, mRNA
THBS1	1	-73,21	X	X	X	X	X	X	X	X	X	X	X					thrombospondin 1 (THBS1), mRNA
THG1L	1	-3,71												X				tRNA-histidine guanylyltransferase 1-like (S. cerevisiae) (THG1L), mRNA
TMEM123	1	-9,93	X															transmembrane protein 123 (TMEM123), mRNA
TPM4	1	-4,84												X				tropomyosin 4 (TPM4), mRNA
TRIM4	1	-5,16												X				tripartite motif-containing 4 (TRIM4), transcript variant alpha, mRNA
TRIO	1	-1,98	X								X							triple functional domain (PTPRF interacting) (TRIO), mRNA
TUBB	1	-9,52	X		X		X		X		X							tubulin, beta (TUBB), mRNA
TWSG1	1	-3,49												X				twisted gastrulation homolog 1 (Drosophila) (TWSG1), mRNA
TYMS	1	-159,68		X					X									thymidylate synthetase (TYMS), mRNA
VPS4B	1	-6,23			X	X	X	X	X									vacuolar protein sorting 4 homolog B (S. cerevisiae) (VPS4B), mRNA
ZNF462	1	-3,07	X															zinc finger protein 462 (ZNF462), mRNA

miR221	Functional classes (upregulated):											
Target gene name	miRNA sites	Fold change	transcription regulation	ubiquitination/proteolysis	apoptosis	insulin receptor signaling	transport/localization	reg. of kinase activity	cellular respiration	transcription, pos, reg	Other	Gene description
Total: 43			14	13	11	9	9	9	8	7	1	
ACTR3B	1	5,92									X	ARP3 actin-related protein 3 homolog B (yeast) (ACTR3B), transcript variant 2, mRNA
AKAP13	1	10,78			X							A kinase (PRKA) anchor protein 13 (AKAP13), transcript variant 1, mRNA
AMFR	1	3,84		X		X						autocrine motility factor receptor (AMFR), mRNA
BCL2	2	70,63	X	X	X	X	X	X		X		B-cell CLL/lymphoma 2 (BCL2), nuclear gene encoding mitochondrial protein, transcript variant alpha, mRNA
BECN1	1	2,49			X							beclin 1 (coiled-coil, myosin-like BCL2 interacting protein) (BECN1), mRNA
CBX7	1	3,53	X									chromobox homolog 7 (CBX7), mRNA
CDKN2B	1	17,85				X		X				cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (CDKN2B), transcript variant 1, mRNA
CEBPG	1	8,67	X		X			X		X		CCAAT/enhancer binding protein (C/EBP), gamma (CEBPG), mRNA
CHURC1	2	2,77	X							X		churchill domain containing 1 (CHURC1), mRNA
CPEB2	1	9,94		X								cytoplasmic polyadenylation element binding protein 2 (CPEB2), transcript variant B, mRNA
CYCS	3	17,05	X	X				X	X			cytochrome c, somatic (CYCS), nuclear gene encoding mitochondrial protein, mRNA
DHTKD1	1	2,61							X			dehydrogenase E1 and transketolase domain containing 1 (DHTKD1), mRNA
EPM2A	1	42,49							X			epilepsy, progressive myoclonus type 2A, Lafora disease (laforin) (EPM2A), transcript variant 2, mRNA
FAM125B	1	10,28					X					family with sequence similarity 125, member B (FAM125B), transcript variant 2, mRNA
GAN	1	2,85		X	X							giant axonal neuropathy (gigaxonin) (GAN), mRNA
HIF1AN	1	4,60	X						X			hypoxia-inducible factor 1, alpha subunit inhibitor (HIF1AN), mRNA
HMBOX1	1	58,14	X									homeobox containing 1 (HMBOX1), mRNA
IGFBP5	1	6476,31		X								insulin-like growth factor binding protein 5 (IGFBP5), mRNA
KLHL2	1	4,38					X					kelch-like 2, Mayven (Drosophila) (KLHL2), mRNA
KLHL3	1	23,19		X								kelch-like 3 (Drosophila) (KLHL3), mRNA
LNKX1	1	8,78		X								ligand of numb-protein X 1 (LNKX1), mRNA
MAPK1	1	3,08	X	X	X	X	X	X		X		mitogen-activated protein kinase 1 (MAPK1), transcript variant 1, mRNA
MGEA5	1	3,56		X	X	X	X			X		meningioma expressed antigen 5 (hyaluronidase) (MGEA5), mRNA
NDUFA6	1	3,17							X			NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6, 14kDa (NDUFA6), nuclear gene encoding mitochond
NDUFS3	1	4,97			X				X			NADH dehydrogenase (ubiquinone) Fe-S protein 3, 30kDa (NADH-coenzyme Q reductase) (NDUFS3), mRNA
NUPL1	1	4,12					X					nucleoporin like 1 (NUPL1), transcript variant 1, mRNA
PDGFD	1	11,98		X				X				platelet derived growth factor D (PDGFD), transcript variant 1, mRNA
PTPN11	1	4,61				X		X				protein tyrosine phosphatase, non-receptor type 11 (Noonan syndrome 1) (PTPN11), mRNA
RAB23	1	6,25		X			X					RAB23, member RAS oncogene family (RAB23), transcript variant 1, mRNA
SETD7	1	36,80	X									SET domain containing (lysine methyltransferase) 7 (SETD7), mRNA
SLC25A4	1	704,27			X				X			solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4 (SLC25A4), nuclear
SNX9	1	3,31					X					sorting nexin 9 (SNX9), mRNA
SOCS4	2	3,59		X								suppressor of cytokine signaling 4 (SOCS4), transcript variant 1, mRNA
STAT3	2	7,94	X			X		X		X		signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3), transcript variant 3
STAT5B	2	10,87	X		X	X		X		X		signal transducer and activator of transcription 5B (STAT5B), mRNA
TCF20	1	2,20	X									transcription factor 20 (AR1) (TCF20), transcript variant 1, mRNA
TFRC	1	21,46				X						transferrin receptor (p90, CD71) (TFRC), mRNA
VPS13D	1	2,08					X					vacuolar protein sorting 13 homolog D (S. cerevisiae) (VPS13D), transcript variant 1, mRNA
ZADH2	1	2,41							X			zinc binding alcohol dehydrogenase, domain containing 2 (ZADH2), mRNA
ZBTB47	2	29,55	X									zinc finger and BTB domain containing 47 (ZBTB47), mRNA
ZFP28	1	2,02	X									zinc finger protein 28 homolog (mouse) (ZFP28), mRNA
ZNF302	1	76,69	X									zinc finger protein 302 (ZNF302), transcript variant 1, mRNA
ZNF780B	1	6,46	X									zinc finger protein 780B (ZNF780B), mRNA

miR222		Functional classes (upregulated):										Gene description
Target gene name	miRNA sites	Fold change	p-value	ubiquitination/proteolysis	transcription regulation	apoptosis	reg. of kinase activity	transport/localization	cellular respiration	transcription, pos. reg	Other	
Total: 72				21	20	13	13	12	10	9		
AKAP13	2	10,78			X							A kinase (PRKA) anchor protein 13 (AKAP13), transcript variant 1, mRNA
ASB8	1	4,18	X									ankyrin repeat and SOCS box-containing 8 (ASB8), mRNA
BACH2	1	18,94		X								BTB and CNC homology 1, basic leucine zipper transcription factor 2 (BACH2), mRNA
BBC3	1	13,63			X	X						BCL2 binding component 3 (BBC3), mRNA
BDP1	1	2,63		X								B double prime 1, subunit of RNA polymerase III transcription initiation factor IIIB (BDP1), mRNA
CEBPG	1	8,67		X	X	X				X		CCAAT/enhancer binding protein (C/EBP), gamma (CEBPG), mRNA
CPEB2	1	9,94	X									cytoplasmic polyadenylation element binding protein 2 (CPEB2), transcript variant B, mRNA
CYCS	1	17,05	X		X	X		X				cytochrome c, somatic (CYCS), nuclear gene encoding mitochondrial protein, mRNA
DGKI	1	18,83				X						diacylglycerol kinase, iota (DGKI), mRNA
E2F5	1	6,67		X								E2F transcription factor 5, p130-binding (E2F5), mRNA
EIF5	1	2,56	X									eukaryotic translation initiation factor 5 (EIF5), transcript variant 1, mRNA
EPB41L5	1	20,30								X		erythrocyte membrane protein band 4.1 like 5 (EPB41L5), mRNA
EPM2A	1	42,49						X				epilepsy, progressive myoclonus type 2A, Lafora disease (laforin) (EPM2A), transcript variant 2, mRNA
FAM125B	2	10,28						X				family with sequence similarity 125, member B (FAM125B), transcript variant 2, mRNA
FBXO27	1	9,71	X									F-box protein 27 (FBXO27), mRNA
GAN	1	2,85	X		X							giant axonal neuropathy (gigaxonin) (GAN), mRNA
GGA3	1	1,99						X				golgi associated, gamma adaptin ear containing, ARF binding protein 3 (GGA3), transcript variant long, mRNA
HIF1AN	1	4,60		X				X				hypoxia-inducible factor 1, alpha subunit inhibitor (HIF1AN), mRNA
HMBBOX1	1	58,14		X								homeobox containing 1 (HMBBOX1), mRNA
IGFBP5	1	6476,31	X									insulin-like growth factor binding protein 5 (IGFBP5), mRNA
KLHL2	1	4,38						X				kelch-like 2, Mayven (Drosophila) (KLHL2), mRNA
KLHL3	2	23,19	X									kelch-like 3 (Drosophila) (KLHL3), mRNA
L2HGDH	1	3,17						X				L-2-hydroxyglutarate dehydrogenase (L2HGDH), nuclear gene encoding mitochondrial protein, mRNA
LNX1	1	8,78	X									ligand of numb-protein X 1 (LNK1), mRNA
MAFF	1	3,53		X								v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian) (MAFF), transcript variant 1, mRNA
MAP1A	1	4,76								X		microtubule-associated protein 1A (MAP1A), mRNA
MAPK1	1	3,08	X	X	X	X	X	X		X		mitogen-activated protein kinase 1 (MAPK1), transcript variant 1, mRNA
MEF2C	1	23,94		X	X					X		MADS box transcription enhancer factor 2, polypeptide C (myocyte enhancer factor 2C) (MEF2C), mRNA
MYOM2	1	9455,53								X		myomesin (M-protein) 2, 165kDa (MYOM2), mRNA
NDUFA6	1	3,17						X				NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6, 14kDa (NDUFA6), nuclear gene encoding mitochondrial protein, mRNA
NDUFS3	1	4,97				X		X				NADH dehydrogenase (ubiquinone) Fe-S protein 3, 30kDa (NADH-coenzyme Q reductase) (NDUFS3), mRNA
NMNAT2	1	26,05								X		nicotinamide nucleotide adenyltransferase 2 (NMNAT2), transcript variant 1, mRNA
PANK3	1	4,96								X		pantothenate kinase 3 (PANK3), mRNA
PCGF3	2	3,34		X								polycomb group ring finger 3 (PCGF3), mRNA
PDGFD	1	11,98	X			X						platelet derived growth factor D (PDGFD), transcript variant 1, mRNA
PLAGL1	2	6,61		X	X					X		pleiomorphic adenoma gene-like 1 (PLAGL1), transcript variant 2, mRNA
PPM1E	2	313,73										protein phosphatase 1E (PP2C domain containing) (PPM1E), mRNA
PRICKLE2	3	10,19								X		prickle homolog 2 (Drosophila) (PRICKLE2), mRNA
PSMB5	1	6,02	X			X				X		proteasome (prosome, macropain) subunit, beta type, 5 (PSMB5), mRNA
PTPN11	2	4,61				X						protein tyrosine phosphatase, non-receptor type 11 (Noonan syndrome 1) (PTPN11), mRNA
RAB18	1	2,86		X				X				RAB18, member RAS oncogene family (RAB18), mRNA
RAB23	1	6,25	X					X				RAB23, member RAS oncogene family (RAB23), transcript variant 1, mRNA
RAB6B	1	8,48						X				RAB6B, member RAS oncogene family (RAB6B), mRNA
RAB9B	1	264,01						X				RAB9B, member RAS oncogene family (RAB9B), mRNA
RNF41	1	86,27	X									ring finger protein 41 (RNF41), transcript variant 2, mRNA
RNPEPL1	1	4,42	X									arginyl aminopeptidase (aminopeptidase B)-like 1 (RNPEPL1), mRNA
RRM2B	1	8,04				X		X				ribonucleotide reductase M2 B (TP53 inducible) (RRM2B), mRNA
SETD7	1	36,80		X								SET domain containing (lysine methyltransferase) 7 (SETD7), mRNA
SGCG	1	12133,22								X		sarcoglycan, gamma (35kDa dystrophin-associated glycoprotein) (SGCG), mRNA
SIAH1	1	2,13	X		X							seven in absentia homolog 1 (Drosophila) (SIAH1), transcript variant 1, mRNA
SLC11A2	1	3,30			X	X						solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2 (SLC11A2), mRNA
SLC25A12	1	23,14						X	X			solute carrier family 25 (mitochondrial carrier, Aralar), member 12 (SLC25A12), mRNA
SLC25A4	1	704,27			X			X				solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4 (SLC25A4), nuclear gene encoding mitochondrial protein, mRNA
SNX9	1	3,31						X				sorting nexin 9 (SNX9), mRNA
SOCS4	1	3,59	X									suppressor of cytokine signaling 4 (SOCS4), transcript variant 1, mRNA
SOCS5	1	2,00	X									suppressor of cytokine signaling 5 (SOCS5), transcript variant 2, mRNA
SPRED2	1	3,86				X						spouty-related, EVH1 domain containing 2 (SPRED2), mRNA
STAT3	1	7,94		X		X				X		signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3), transcript variant 3, mRNA
TBL1XR1	1	2,13	X	X						X		transducin (beta)-like 1X-linked receptor 1 (TBL1XR1), mRNA
TMOD1	1	6927,37								X		tropomodulin 1 (TMOD1), mRNA
TOLLIP	1	2,85										toll interacting protein (TOLLIP), mRNA
TRIM72	1	6,46								X		tripartite motif-containing 72 (TRIM72), mRNA
UBE2D1	1	7,44	X			X				X		ubiquitin-conjugating enzyme E2D 1 (UBC4/5 homolog, yeast) (UBE2D1), mRNA
VGLL4	1	8,67		X								vestigial like 4 (Drosophila) (VGLL4), mRNA
VPS24	2	5,04						X				vacuolar protein sorting 24 homolog (S. cerevisiae) (VPS24), transcript variant 1, mRNA
YWHAG	1	4,09				X	X					tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide (YWHAG), mRNA

ZADH2	1	2,41					X		zinc binding alcohol dehydrogenase, domain containing 2 (ZADH2), mRNA
ZBTB47	2	29,55	X						zinc finger and BTB domain containing 47 (ZBTB47), mRNA
ZFP28	1	2,02	X						zinc finger protein 28 homolog (mouse) (ZFP28), mRNA
ZNF652	1	3,77	X						zinc finger protein 652 (ZNF652), mRNA
ZNF780B	1	6,46	X						zinc finger protein 780B (ZNF780B), mRNA
ZRANB1	1	7,47	X						zinc finger, RAN-binding domain containing 1 (ZRANB1), mRNA

miR550		Functional classes (upregulated):										
Target gene name	miRNA sites	Fold change	p-value	transcription, pos. reg	ubiquitination/proteolysis	transcription regulation	phosphate metabolism	apoptosis	insulin receptor signaling	muscle development	transport/localization	cell morphogenesis
				3.39E-12	4.62E-11	2.03E-07	6.33E-06	6.19E-08	2.39E-07	1.48E-05	6.73E-05	1.01E-05
				8	8	6	5	5	4	3	3	4
				transcription, pos. reg	ubiquitination/proteolysis	transcription regulation	phosphate metabolism	apoptosis	insulin receptor signaling	muscle development	transport/localization	cell morphogenesis
				Other								
Total: 24				8	8	6	5	5	4	3	3	4
AFF1	1	2,23	X	X								
CASQ2	1	44556,70							X			
DLD	1	2,63	X		X							
DYRK2	2	6,71	X		X	X						
EIF5	1	2,56		X								
ERBB3	1	4,22				X	X	X	X	X		
FBXO27	1	9,71	X									
FOSL2	1	2,75	X	X		X						
H1F0	1	35,31									X	
LPIN1	1	10,79						X			X	
MAPK1	2	3,08	X	X	X	X	X	X	X	X		
MGEA5	1	3,56	X	X			X	X	X			
MSRB3	1	3,49									X	
PANK3	1	4,96									X	
PPM1A	1	10,68	X	X	X							
PRICKLE2	1	10,19									X	
RCOR2	1	1,99			X							
SAMD4A	1	25,92	X	X								
SOC55	1	2,00		X								
SOX11	1	37,36	X		X							
TTL	1	18,69									X	
XPOT	1	3,93								X		
ZFAND5	1	6,86							X			
ZRANB1	1	7,47	X									