

**Table S1.** List of 117 differentially expressed microRNAs in airway epithelial cells of lung transplantation patients with acute cellular rejection (Q-value < 0.05).

<b>microRNA</b>	<b>Q-value</b>
hsa-miR-1205	0.0000
hsa-miR-125a-3p	0.0000
hsa-miR-149-3p	0.0000
hsa-miR-1538	0.0000
hsa-miR-1914-5p	0.0000
hsa-miR-1972	0.0000
hsa-miR-21-3p	0.0000
hsa-miR-22-5p	0.0000
hsa-miR-298	0.0000
hsa-miR-34b-5p	0.0000
hsa-miR-371a-5p	0.0000
hsa-miR-431-5p	0.0000
hsa-miR-490-3p	0.0000
hsa-miR-514a-3p	0.0000
hsa-miR-515-3p	0.0000
hsa-miR-524-3p	0.0000
hsa-miR-552-3p	0.0000
hsa-miR-593-3p	0.0000
hsa-miR-593-5p	0.0000
hsa-miR-615-5p	0.0000
hsa-miR-622	0.0000
hsa-miR-659-3p	0.0000
hsa-miR-665	0.0000
hsa-miR-668-3p	0.0000
hsa-miR-671-5p	0.0000
hsa-miR-885-5p	0.0000
hsa-miR-891b	0.0000
hsa-miR-133a-3p	0.0124
hsa-miR-202-3p	0.0124
hsa-miR-224-5p	0.0124
hsa-miR-30c-2-3p	0.0124
hsa-miR-520h	0.0124
hsa-miR-302d-5p	0.0139
hsa-miR-433	0.0142
hsa-miR-506-3p	0.0142
hsa-miR-128-3p	0.0150
hsa-miR-1909-3p	0.0150
hsa-miR-195-3p	0.0150
hsa-miR-329-3p	0.0150

hsa-miR-34a-5p	0.0150
hsa-miR-361-3p	0.0150
hsa-miR-579-3p	0.0150
hsa-miR-937-3p	0.0150
hsa-miRPlus-A1027	0.0150
hsa-miR-1200	0.0200
hsa-miR-198	0.0200
hsa-miR-526b-3p	0.0200
hsa-miR-124-3p	0.0211
hsa-miR-326	0.0211
hsa-miR-432-3p	0.0211
hsa-miR-516a-3p	0.0211
hsa-miR-611	0.0211
hsa-miR-646	0.0211
hsa-miRPlus-C1066	0.0211
hsa-miR-135b-3p	0.0242
hsa-miR-10b-5p	0.0278
hsa-miR-1203	0.0278
hsa-miR-1254	0.0278
hsa-miR-181a-3p	0.0278
hsa-miR-564	0.0278
hsa-let-7i-3p	0.0296
hsa-miR-1236-3p	0.0296
hsa-miR-1248	0.0296
hsa-miR-1258	0.0296
hsa-miR-1260a	0.0296
hsa-miR-143-5p	0.0296
hsa-miR-147b	0.0296
hsa-miR-155-3p	0.0296
hsa-miR-214-3p	0.0296
hsa-miR-297	0.0296
hsa-miR-30c-1-3p	0.0296
hsa-miR-365a-3p	0.0296
hsa-miR-373-5p	0.0296
hsa-miR-410-3p	0.0296
hsa-miR-496	0.0296
hsa-miR-554	0.0296
hsa-miR-623	0.0296
hsa-miR-7-2-3p	0.0296
hsa-miR-765	0.0296
hsa-miR-1237-3p	0.0309
hsa-miR-148a-3p	0.0309
hsa-miR-331-5p	0.0309

hsa-miR-583	0.0309
hsa-miR-216a-5p	0.0323
hsa-miR-376a-5p	0.0323
hsa-miR-486-3p	0.0323
hsa-miR-504-5p	0.0323
hsa-miR-658	0.0323
hsa-miR-675-3p	0.0323
hsa-miR-302a-3p	0.0345
hsa-miR-551b-3p	0.0345
hsa-miR-663b	0.0345
hsa-miR-758-3p	0.0345
hsa-miR-1471	0.0360
hsa-miR-323a-5p	0.0360
hsa-miR-602	0.0360
hsa-miR-382-5p	0.0387
hsa-miR-429	0.0387
hsa-miR-517-5p	0.0395
hsa-miR-216b-5p	0.0399
hsa-miR-640	0.0410
hsa-miRPlus-C1076	0.0410
hsa-miR-1227-3p	0.0418
hsa-miR-147a	0.0418
hsa-miR-518d-5p	0.0418
hsa-miR-596	0.0418
hsa-miR-649	0.0418
hsa-miR-877-5p	0.0418
hsa-miR-518d-3p	0.0442
hsa-miR-558	0.0442
hsa-miR-182-3p	0.0449
hsa-miR-296-3p	0.0453
hsa-miR-487a	0.0453
hsa-miR-127-5p	0.0474
hsa-miR-148b-3p	0.0474
hsa-miR-518c-5p	0.0474
hsa-miR-642a-5p	0.0474

**Table S2.** List of 40 differentially expressed microRNAs (Q-value < 0.05) in acute cellular rejection with their experimentally validated targets.

<b>microRNA</b>	<b>Target Gene</b>
1. hsa-miR-10b-5p	BCL2L11
	CDK2
	CDKN1A
	CDKN2A
	CSNK2A1
	HOXD10
	KLF4
	LAMC1
	MAPRE1
	NCOR2
	NF1
	NOTCH1
	NR4A3
	NRP2
	PAX6
	PIEZO1
	PPARA
	SDC1
	SRSF1
	TFAP2C
TP53	
TRA2B	
2. hsa-miR-124-3p	ADIPOR2
	AHR
	AR
	BACE1
	CCL2
	CDK2
	CDK4
	CDK6
	CDKN2A
	CEBPA
	COL1A1
	CTDSP1
	E2F6
	EFNB1
	ELK3
	EYA4
	EZH2

FXN  
HCN2  
HMGA1  
IL6  
IL6R  
IQGAP1  
IRAK3  
ITGB1  
KLF4  
LAMC1  
MAP2K3  
MECP2  
MSN  
MTPN  
NFKBIZ  
NR3C1  
NR4A3  
PEA15  
PNP  
PPARA  
PRPS1  
QKI  
RASSF2  
RDH10  
RELA  
ROCK2  
SHC1  
SIRT1  
SLC16A1  
SMYD3  
SNAI2  
SP1  
SULF1  
VIM  
VKORC1

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3.	hsa-miR-1258	HPSE
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4.	hsa-miR-128-3p	BMI1 CTDSP1 DCX E2F3 EGFR EYA4 FBXW7
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KLF4  
MAP2K1  
NTRK3  
POU5F1  
RELN  
RPS6KA5  
SIRT1  
SLC16A1  
SOX2  
TGFB1

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5. hsa-miR-133a-3p

BCL2L1  
CACNA1C  
CASP9  
COL1A1  
EGFL7  
EGFR  
FSCN1  
GSTP1  
HCN2  
HCN4  
KCNH2  
KCNQ1  
KRT7  
LASP1  
MCL1  
MSN  
PIK3R2  
PKM  
PNP  
PRDM16  
RGS3  
SP1  
TAGLN2  
VEGFA  
VKORC1

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6. hsa-miR-147a

ACVR1C  
VEGFA

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7. hsa-miR-148a-3p

ACVR1  
BCL2  
CCKBR  
CDC25B  
DNMT1  
DNMT3B

		HLA-G
		IRS1
		NR1I2
		RPS6KA5
		TGIF2
		TMED7
8.	hsa-miR-148b-3p	CCKBR
		CSF1
		EYA4
		HLA-G
		ITGA5
		MECP2
		NR3C2
		NRAS
		PIK3CA
		ROCK1
		SNAI2
9.	hsa-miR-149-3p	AKT1
		E2F1
		MYBL2
		TGIF2
10.	hsa-miR-155-3p	IRAK3
11.	hsa-miR-181a-3p	NANOG
12.	hsa-miR-198	CCNT1
		MYB
		NTRK3
13.	hsa-miR-202-3p	MYCN
14.	hsa-miR-214-3p	ASF1B
		ATF4
		BCL2L2
		CTNNB1
		MAP2K3
		MAPK8
		PLXNB1
		POU4F2
		PSMD10
		PTEN
		QKI
		SRGAP1
		SRGAP2
		TP53
		TWIST1

		XBP1
15.	hsa-miR-216a-5p	CD44 CDC42 PTEN SIRT1 SMAD7 CSNK2A1
16.	hsa-miR-216b-5p	CSNK2A1
17.	hsa-miR-224-5p	AP2M1 API5 CDC42 CXCR4 EDNRA EYA4 FOSB KLK10 NCOA6 NIT1 PEBP1 SMAD4
18.	hsa-miR-296-3p	CDC25B CDKN2A HMGA1 KCNH1 LGALS3BP PIK3R2 PKM SPI1
19.	hsa-miR-298	BACE1 CDKN1A
20.	hsa-miR-302a-3p	AKT1 CCND1 CDKN1A DAZAP2 LEFTY1 LEFTY2 NR2F2 SLAIN1 TAC1 TOB2
21.	hsa-miR-30c-1-3p	HMBOX1
22.	hsa-miR-326	CD9



GLI1  
MSH3  
NOTCH1  
NOTCH2  
PKM  
SMO  
VKORC1

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23. hsa-miR-34a-5p

ACSL1  
ACSL4  
AP2M1  
AXIN2  
AXL  
BCL2  
BMP7  
CCL22  
CCND1  
CCND3  
CCNE2  
CD44  
CDC25A  
CDK4  
CDK6  
CDKN2A  
CDKN2C  
CEBPB  
CTNNB1  
DLL1  
E2F1  
E2F3  
EFNB1  
EPHA5  
FOSL1  
FOXP1  
GRM7  
HDAC1  
HNF4A  
IFNB1  
IMPA1  
IMPDH2  
JAG1  
KLB  
LDHA  
LEF1

MAGEA12  
MAGEA2  
MAGEA3  
MAGEA6  
MAP2K1  
MAP3K9  
MCM5  
MET  
MTA2  
MYB  
MYC  
MYCN  
NANOG  
NOTCH1  
NOTCH2  
PDGFRA  
PEA15  
PPP1R10  
SEPT7  
SIRT1  
SOX2  
SPI1  
STX1A  
SYT1  
TP53  
ULBP2  
VAMP2  
VEGFA  
WNT1  
YY1  
ZAP70

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24. hsa-miR-34b-5p

BCL2  
CCNE2  
CDK4  
CREB1  
HNF4A  
MET  
MYB  
MYC

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25. hsa-miR-365a-3p

BCL2  
CCND1  
IL6  
IMPA1

		MTA2
26.	hsa-miR-376a-5p	ACVR1C PRPS1 SLC16A1 SNX19 SRSF11 TTK ZNF513
27.	hsa-miR-429	BAP1 BCL2 ELMO2 ERBB2IP HOXB5 KLF11 KLHL20 MYC OSTF1 PTPRD RASSF2 RERE RIN2 SEPT7 SHC1 SOX2 TCF7L1 VAC14 WASF3 WDR37 XIAP ZEB1 ZEB2 ZFPM2
28.	hsa-miR-490-3p	ERGIC3
29.	hsa-miR-504-5p	DRD1 MDM2 TCEAL1 TP53 VEGFA
30.	hsa-miR-506-3p	FXN
31.	hsa-miR-515-3p	CDKN1A
32.	hsa-miR-516a-3p	SULF1
33.	hsa-miR-520h	ABCG2

VEGFA

34.	hsa-miR-596	LGALS3BP
35.	hsa-miR-615-5p	IGF2
36.	hsa-miR-622	KRAS
37.	hsa-miR-642a-5p	DOHH
38.	hsa-miR-659-3p	GRN
39.	hsa-miR-765	HNF4A
		NTRK3
40.	hsa-miR-885-5p	CDK2
		MCM5

**Table S3.** Comprehensive list of enriched functional categories based 253 experimentally verified gene targets of differentially expressed microRNAs in ACR. Enrichment *P*-values were adjusted for multiple hypothesis testing using Benjamini-Hochberg method (adjusted *P*-value cutoff < 0.01).

Database	Functional term	Adjusted P-value
GOTERM_BP_ALL	GO:0042127~regulation of cell proliferation	4.86E-27
GOTERM_BP_ALL	GO:0009893~positive regulation of metabolic process	3.20E-23
GOTERM_BP_ALL	GO:0048856~anatomical structure development	1.14E-22
GOTERM_BP_ALL	GO:0048513~organ development	1.59E-22
GOTERM_BP_ALL	GO:0019222~regulation of metabolic process	1.95E-22
KEGG_PATHWAY	hsa05200:Pathways in cancer	2.64E-22
GOTERM_BP_ALL	GO:0032502~developmental process	7.35E-22
GOTERM_BP_ALL	GO:0008284~positive regulation of cell proliferation	1.56E-21
GOTERM_BP_ALL	GO:0048731~system development	6.53E-21
KEGG_PATHWAY	hsa05215:Prostate cancer	1.57E-20
GOTERM_BP_ALL	GO:0007275~multicellular organismal development	2.91E-20
GOTERM_BP_ALL	GO:0048869~cellular developmental process	4.60E-20
GOTERM_BP_ALL	GO:0030154~cell differentiation	5.71E-20
GOTERM_BP_ALL	GO:0045595~regulation of cell differentiation	1.38E-19
GOTERM_BP_ALL	GO:0006357~regulation of transcription from RNA polymerase II promoter	6.77E-19
GOTERM_BP_ALL	GO:0050793~regulation of developmental process	4.36E-18
GOTERM_BP_ALL	GO:0010628~positive regulation of gene expression	1.19E-17
GOTERM_BP_ALL	GO:0051254~positive regulation of RNA metabolic process	9.30E-17
GOTERM_BP_ALL	GO:0010468~regulation of gene expression	9.37E-17
GOTERM_MF_ALL	GO:0043565~sequence-specific DNA binding	1.41E-16
KEGG_PATHWAY	hsa05220:Chronic myeloid leukemia	2.45E-16
GOTERM_BP_ALL	GO:0045941~positive regulation of transcription	7.04E-16
GOTERM_BP_ALL	GO:0009790~embryonic development	8.93E-16
GOTERM_MF_ALL	GO:0003700~transcription factor activity	1.22E-15
KEGG_PATHWAY	hsa05212:Pancreatic cancer	1.26E-15
GOTERM_BP_ALL	GO:0022008~neurogenesis	5.77E-15
GOTERM_BP_ALL	GO:0051252~regulation of RNA metabolic process	6.00E-15
KEGG_PATHWAY	hsa05210:Colorectal cancer	3.42E-14
GOTERM_BP_ALL	GO:0045944~positive regulation of transcription from RNA polymerase II promoter	7.06E-14
GOTERM_BP_ALL	GO:0042221~response to chemical stimulus	8.53E-14
GOTERM_BP_ALL	GO:0009887~organ morphogenesis	1.13E-13
KEGG_PATHWAY	hsa05214:Glioma	2.71E-13
GOTERM_BP_ALL	GO:0010646~regulation of cell communication	4.28E-13
GOTERM_BP_ALL	GO:0045449~regulation of transcription	5.17E-13
GOTERM_BP_ALL	GO:0007399~nervous system development	7.28E-13
GOTERM_BP_ALL	GO:0048699~generation of neurons	2.01E-12
KEGG_PATHWAY	hsa05218:Melanoma	2.32E-12
GOTERM_BP_ALL	GO:0051338~regulation of transferase activity	2.50E-12
KEGG_PATHWAY	hsa05222:Small cell lung cancer	3.87E-12
GOTERM_BP_ALL	GO:0043549~regulation of kinase activity	4.91E-12
GOTERM_BP_ALL	GO:0000122~negative regulation of transcription from RNA polymerase II promoter	6.85E-12
GOTERM_BP_ALL	GO:0009725~response to hormone stimulus	9.62E-12
GOTERM_BP_ALL	GO:0016477~cell migration	1.55E-11
KEGG_PATHWAY	hsa05219:Bladder cancer	1.67E-11
GOTERM_BP_ALL	GO:0009888~tissue development	1.80E-11
KEGG_PATHWAY	hsa05213:Endometrial cancer	2.50E-11
GOTERM_BP_ALL	GO:0051726~regulation of cell cycle	2.53E-11
GOTERM_BP_ALL	GO:0042981~regulation of apoptosis	2.61E-11
GOTERM_BP_ALL	GO:0009966~regulation of signal transduction	3.30E-11
GOTERM_BP_ALL	GO:0043067~regulation of programmed cell death	3.55E-11
GOTERM_BP_ALL	GO:0010941~regulation of cell death	3.98E-11
GOTERM_BP_ALL	GO:0045859~regulation of protein kinase activity	6.48E-11
GOTERM_BP_ALL	GO:0008361~regulation of cell size	7.65E-11
GOTERM_BP_ALL	GO:0045597~positive regulation of cell differentiation	8.57E-11
GOTERM_BP_ALL	GO:0048870~cell motility	1.54E-10

GOTERM_BP_ALL	GO:0006928~cell motion	2.25E-10
GOTERM_BP_ALL	GO:0050896~response to stimulus	2.51E-10
GOTERM_BP_ALL	GO:0045165~cell fate commitment	2.91E-10
GOTERM_BP_ALL	GO:0050790~regulation of catalytic activity	4.86E-10
KEGG_PATHWAY	hsa05223:Non-small cell lung cancer	6.38E-10
GOTERM_BP_ALL	GO:0051094~positive regulation of developmental process	6.46E-10
GOTERM_BP_ALL	GO:0030334~regulation of cell migration	8.95E-10
GOTERM_BP_ALL	GO:0040012~regulation of locomotion	1.08E-09
GOTERM_CC_ALL	GO:0005654~nucleoplasm	1.11E-09
GOTERM_BP_ALL	GO:0051270~regulation of cell motion	1.18E-09
GOTERM_BP_ALL	GO:0035295~tube development	1.79E-09
GOTERM_CC_ALL	GO:0005667~transcription factor complex	2.14E-09
GOTERM_BP_ALL	GO:0010647~positive regulation of cell communication	3.52E-09
KEGG_PATHWAY	hsa04110:Cell cycle	4.21E-09
GOTERM_MF_ALL	GO:0046983~protein dimerization activity	4.85E-09
GOTERM_BP_ALL	GO:0007417~central nervous system development	7.07E-09
GOTERM_BP_ALL	GO:0040011~locomotion	9.48E-09
GOTERM_BP_ALL	GO:0030182~neuron differentiation	1.34E-08
GOTERM_BP_ALL	GO:0009314~response to radiation	1.43E-08
KEGG_PATHWAY	hsa04510:Focal adhesion	1.65E-08
GOTERM_BP_ALL	GO:0001568~blood vessel development	6.83E-08
GOTERM_BP_ALL	GO:0003002~regionalization	7.22E-08
GOTERM_CC_ALL	GO:0043229~intracellular organelle	9.48E-08
GOTERM_BP_ALL	GO:0001944~vasculature development	1.02E-07
GOTERM_BP_ALL	GO:0006950~response to stress	1.29E-07
GOTERM_BP_ALL	GO:0022414~reproductive process	1.44E-07
GOTERM_BP_ALL	GO:0033674~positive regulation of kinase activity	1.46E-07
GOTERM_BP_ALL	GO:0014031~mesenchymal cell development	1.50E-07
GOTERM_BP_ALL	GO:0048762~mesenchymal cell differentiation	1.50E-07
GOTERM_BP_ALL	GO:0060485~mesenchyme development	1.79E-07
GOTERM_BP_ALL	GO:0009611~response to wounding	1.96E-07
GOTERM_BP_ALL	GO:0007420~brain development	2.01E-07
KEGG_PATHWAY	hsa05221:Acute myeloid leukemia	2.02E-07
GOTERM_MF_ALL	GO:0004672~protein kinase activity	2.45E-07
GOTERM_MF_ALL	GO:0003677~DNA binding	2.46E-07
GOTERM_MF_ALL	GO:0016563~transcription activator activity	2.54E-07
GOTERM_MF_ALL	GO:0016301~kinase activity	2.54E-07
GOTERM_BP_ALL	GO:0000079~regulation of cyclin-dependent protein kinase activity	2.58E-07
GOTERM_MF_ALL	GO:0008134~transcription factor binding	2.69E-07
GOTERM_BP_ALL	GO:0009967~positive regulation of signal transduction	2.82E-07
GOTERM_BP_ALL	GO:0048545~response to steroid hormone stimulus	2.88E-07
GOTERM_BP_ALL	GO:0035239~tube morphogenesis	3.44E-07
GOTERM_CC_ALL	GO:0042995~cell projection	4.40E-07
GOTERM_BP_ALL	GO:0008285~negative regulation of cell proliferation	4.40E-07
GOTERM_BP_ALL	GO:0002376~immune system process	5.58E-07
GOTERM_BP_ALL	GO:0048729~tissue morphogenesis	6.98E-07
GOTERM_MF_ALL	GO:0016773~phosphotransferase activity, alcohol group as acceptor	6.99E-07
GOTERM_BP_ALL	GO:0048732~gland development	7.20E-07
GOTERM_BP_ALL	GO:0060284~regulation of cell development	7.20E-07
GOTERM_BP_ALL	GO:0001709~cell fate determination	7.32E-07
KEGG_PATHWAY	hsa04722:Neurotrophin signaling pathway	9.67E-07
GOTERM_BP_ALL	GO:0051272~positive regulation of cell motion	1.02E-06
GOTERM_BP_ALL	GO:0048514~blood vessel morphogenesis	1.04E-06
GOTERM_BP_ALL	GO:0009952~anterior/posterior pattern formation	1.07E-06
GOTERM_BP_ALL	GO:0048754~branching morphogenesis of a tube	1.40E-06
GOTERM_BP_ALL	GO:0007049~cell cycle	1.95E-06
GOTERM_BP_ALL	GO:0031960~response to corticosteroid stimulus	1.96E-06
GOTERM_BP_ALL	GO:0002520~immune system development	2.01E-06
GOTERM_BP_ALL	GO:0045860~positive regulation of protein kinase activity	2.20E-06
GOTERM_BP_ALL	GO:0048598~embryonic morphogenesis	2.26E-06
GOTERM_BP_ALL	GO:0031099~regeneration	2.41E-06
GOTERM_BP_ALL	GO:0006915~apoptosis	2.47E-06
GOTERM_BP_ALL	GO:0008283~cell proliferation	2.84E-06
GOTERM_BP_ALL	GO:0030335~positive regulation of cell migration	2.99E-06

GOTERM_BP_ALL	GO:0008219~cell death	3.18E-06
GOTERM_BP_ALL	GO:0043434~response to peptide hormone stimulus	3.20E-06
GOTERM_BP_ALL	GO:0012501~programmed cell death	3.29E-06
GOTERM_BP_ALL	GO:0048534~hemopoietic or lymphoid organ development	3.73E-06
KEGG_PATHWAY	hsa05216:Thyroid cancer	3.92E-06
KEGG_PATHWAY	hsa04520:Adherens junction	4.43E-06
GOTERM_BP_ALL	GO:0001763~morphogenesis of a branching structure	4.47E-06
KEGG_PATHWAY	hsa04115:p53 signaling pathway	8.52E-06
GOTERM_BP_ALL	GO:0010648~negative regulation of cell communication	8.94E-06
GOTERM_BP_ALL	GO:0045937~positive regulation of phosphate metabolic process	9.23E-06
GOTERM_BP_ALL	GO:0010562~positive regulation of phosphorus metabolic process	9.23E-06
GOTERM_BP_ALL	GO:0000278~mitotic cell cycle	9.63E-06
GOTERM_BP_ALL	GO:0060541~respiratory system development	1.88E-05
GOTERM_BP_ALL	GO:0030097~hemopoiesis	2.07E-05
GOTERM_MF_ALL	GO:0003702~RNA polymerase II transcription factor activity	3.60E-05
GOTERM_BP_ALL	GO:0048666~neuron development	3.61E-05
GOTERM_BP_ALL	GO:0010551~regulation of specific transcription from RNA polymerase II promoter	3.61E-05
GOTERM_BP_ALL	GO:0051960~regulation of nervous system development	3.82E-05
GOTERM_BP_ALL	GO:0050767~regulation of neurogenesis	3.91E-05
GOTERM_MF_ALL	GO:0016564~transcription repressor activity	5.21E-05
GOTERM_MF_ALL	GO:0003705~RNA polymerase II transcription factor activity, enhancer binding	5.47E-05
GOTERM_BP_ALL	GO:0031175~neuron projection development	5.51E-05
GOTERM_BP_ALL	GO:0048663~neuron fate commitment	5.52E-05
GOTERM_BP_ALL	GO:0030324~lung development	5.64E-05
GOTERM_BP_ALL	GO:0060348~bone development	6.14E-05
GOTERM_BP_ALL	GO:0000902~cell morphogenesis	6.90E-05
GOTERM_BP_ALL	GO:0016049~cell growth	7.04E-05
GOTERM_BP_ALL	GO:0030323~respiratory tube development	7.10E-05
REACTOME_PATHWAY	REACT_11061:Signalling by NGF	9.24E-05
KEGG_PATHWAY	hsa04350:TGF-beta signaling pathway	9.55E-05
GOTERM_BP_ALL	GO:0010942~positive regulation of cell death	1.00E-04
GOTERM_BP_ALL	GO:0007507~heart development	1.25E-04
GOTERM_BP_ALL	GO:0043193~positive regulation of gene-specific transcription	1.26E-04
GOTERM_BP_ALL	GO:0006873~cellular ion homeostasis	1.29E-04
GOTERM_BP_ALL	GO:0001655~urogenital system development	1.30E-04
GOTERM_BP_ALL	GO:0042493~response to drug	1.30E-04
GOTERM_BP_ALL	GO:0042060~wound healing	1.54E-04
GOTERM_BP_ALL	GO:0055082~cellular chemical homeostasis	1.54E-04
GOTERM_BP_ALL	GO:0007154~cell communication	1.55E-04
GOTERM_BP_ALL	GO:0010720~positive regulation of cell development	1.59E-04
GOTERM_BP_ALL	GO:0050678~regulation of epithelial cell proliferation	1.93E-04
GOTERM_BP_ALL	GO:0070482~response to oxygen levels	1.93E-04
GOTERM_BP_ALL	GO:0043405~regulation of MAP kinase activity	1.93E-04
GOTERM_BP_ALL	GO:0001775~cell activation	1.93E-04
KEGG_PATHWAY	hsa04310:Wnt signaling pathway	2.22E-04
GOTERM_BP_ALL	GO:0007398~ectoderm development	2.29E-04
GOTERM_BP_ALL	GO:0051301~cell division	2.66E-04
GOTERM_BP_ALL	GO:0042692~muscle cell differentiation	2.75E-04
GOTERM_BP_ALL	GO:0045767~regulation of anti-apoptosis	3.03E-04
GOTERM_BP_ALL	GO:0010467~gene expression	3.45E-04
GOTERM_BP_ALL	GO:0007243~protein kinase cascade	3.51E-04
GOTERM_BP_ALL	GO:0048812~neuron projection morphogenesis	4.40E-04
GOTERM_BP_ALL	GO:0008544~epidermis development	4.53E-04
KEGG_PATHWAY	hsa04012:ErbB signaling pathway	4.65E-04
GOTERM_BP_ALL	GO:0031100~organ regeneration	5.05E-04
GOTERM_BP_ALL	GO:0001952~regulation of cell-matrix adhesion	6.01E-04
GOTERM_BP_ALL	GO:0060429~epithelium development	8.01E-04
BIOCARTA	h_cellcyclePathway:Cyclins and Cell Cycle Regulation	8.03E-04
KEGG_PATHWAY	hsa04010:MAPK signaling pathway	1.10E-03
GOTERM_BP_ALL	GO:0008637~apoptotic mitochondrial changes	1.14E-03
GOTERM_BP_ALL	GO:0060393~regulation of pathway-restricted SMAD protein phosphorylation	1.19E-03
GOTERM_BP_ALL	GO:0051057~positive regulation of small GTPase mediated signal transduction	1.19E-03
GOTERM_MF_ALL	GO:0046332~SMAD binding	1.22E-03
REACTOME_PATHWAY	REACT_498:Signaling by Insulin receptor	1.30E-03

GOTERM_BP_ALL	GO:0016202~regulation of striated muscle tissue development	1.31E-03
GOTERM_BP_ALL	GO:0001525~angiogenesis	1.32E-03
GOTERM_BP_ALL	GO:0001822~kidney development	1.43E-03
GOTERM_BP_ALL	GO:0014033~neural crest cell differentiation	1.50E-03
GOTERM_BP_ALL	GO:0014032~neural crest cell development	1.50E-03
GOTERM_BP_ALL	GO:0007569~cell aging	1.50E-03
GOTERM_BP_ALL	GO:0000904~cell morphogenesis involved in differentiation	1.54E-03
GOTERM_BP_ALL	GO:0051240~positive regulation of multicellular organismal process	1.54E-03
GOTERM_MF_ALL	GO:0003682~chromatin binding	1.72E-03
GOTERM_MF_ALL	GO:0016538~cyclin-dependent protein kinase regulator activity	1.72E-03
GOTERM_BP_ALL	GO:0045792~negative regulation of cell size	1.73E-03
GOTERM_BP_ALL	GO:0001889~liver development	1.73E-03
GOTERM_BP_ALL	GO:0010001~glial cell differentiation	1.73E-03
GOTERM_BP_ALL	GO:0007165~signal transduction	1.74E-03
GOTERM_BP_ALL	GO:0000165~MAPKKK cascade	1.76E-03
KEGG_PATHWAY	hsa04210:Apoptosis	2.07E-03
BIOCARTA	h_p53Pathway:p53 Signaling Pathway	2.15E-03
GOTERM_BP_ALL	GO:0034330~cell junction organization	2.47E-03
GOTERM_BP_ALL	GO:0045927~positive regulation of growth	2.50E-03
BIOCARTA	h_RacCycDPathway:Influence of Ras and Rho proteins on G1 to S Transition	2.55E-03
GOTERM_BP_ALL	GO:0001569~patterning of blood vessels	2.56E-03
GOTERM_BP_ALL	GO:0001666~response to hypoxia	2.66E-03
KEGG_PATHWAY	hsa04370:VEGF signaling pathway	3.12E-03
GOTERM_BP_ALL	GO:0007179~transforming growth factor beta receptor signaling pathway	3.14E-03
GOTERM_BP_ALL	GO:0046649~lymphocyte activation	3.15E-03
GOTERM_BP_ALL	GO:0070663~regulation of leukocyte proliferation	3.20E-03
GOTERM_BP_ALL	GO:0032944~regulation of mononuclear cell proliferation	3.20E-03
GOTERM_BP_ALL	GO:0006952~defense response	3.37E-03
GOTERM_BP_ALL	GO:0040014~regulation of multicellular organism growth	3.37E-03
GOTERM_BP_ALL	GO:0046651~lymphocyte proliferation	4.09E-03
GOTERM_BP_ALL	GO:0051591~response to cAMP	4.09E-03
GOTERM_BP_ALL	GO:0001764~neuron migration	4.26E-03
GOTERM_BP_ALL	GO:0045321~leukocyte activation	4.50E-03
GOTERM_BP_ALL	GO:0070661~leukocyte proliferation	5.00E-03
GOTERM_BP_ALL	GO:0042306~regulation of protein import into nucleus	5.00E-03
GOTERM_BP_ALL	GO:0032943~mononuclear cell proliferation	5.00E-03
KEGG_PATHWAY	hsa04620:Toll-like receptor signaling pathway	5.10E-03
KEGG_PATHWAY	hsa04062:Chemokine signaling pathway	5.12E-03
GOTERM_BP_ALL	GO:0006954~inflammatory response	6.24E-03
GOTERM_BP_ALL	GO:0002521~leukocyte differentiation	9.03E-03
GOTERM_BP_ALL	GO:0006325~chromatin organization	9.05E-03