Table 5. All 179 genes with GO annotations up- and down-regulated by > 1.5 fold

Probe	Symbol	Description	Gene Ontology	Pathway	Fold
243158_at	NT5C2	5'-nucleotidase,	cytosol	Purine metabolism	4.43
		cytosolic II		Pyrimidine metabolism	
			<u>5'-nucleotidase activity</u>	Nicotinate and	
			hydrolase activity	nicotinamide metabolism	
243149_at	EIF4G3	eukaryotic	RNA cap bindingtranslation initiation factor activity		6.38
<u> 243149_at</u>	EIF4G5	translation	KNA cap bindingualistation initiation factor activity		0.36
		initiation factor 4	regulation of translational initiation		
		gamma, 3	eukaryotic translation initiation factor 4F complex		
239238_at	SMARC	SWI/SNF related,	<u>chromatin</u>		3.49
	C1	matrix associated,			
		actin dependent	chromatin binding		
		regulator of			
		chromatin,	transcription coactivator activity		
		subfamily c,	protein binding		
		member 1	protein olitaing		
			<u>nucleoplasm</u>		

			chromatin assembly/disassembly		
			chromatin remodeling		
			transcription		
			regulation of transcription from Pol II promoter		
			SWI/SNF complex		
			positive regulation of transcription, DNA-dependent		
236128_at					2.39
232138_at	MBNL2	muscleblind-like	nucleic acid binding		2.71
		2 (Drosophila)			
242695_at					5.66
222266_at	C19orf2	chromosome 19	transcription corepressor activity		3.94
		open reading	protein binding		
		frame 2	<u>nucleus</u>		
			DNA-directed RNA polymerase II, core complex		
			<u>cytoplasm</u>		
			regulation of transcription from Pol II promoter		
			protein folding		
			response to virus		
			prefoldin complex		
232528_at	UBE2E3	ubiquitin-	ubiquitin conjugating enzyme activity	Ubiquitin mediated	3.65

		conjugating	ubiquitin-protein ligase activity	<u>proteolysis</u>	
		enzyme E2E 3	ubiquitin cycle		
		(UBC4/5	ligase activity		
		homolog, yeast)			
242963_at	MGC269		Golgi apparatus	Glycosphingolipid	2.27
	63		integral to plasma membrane	<u>metabolism</u>	
			<u>lipid metabolism</u>		
			sphingolipid metabolism		
			sphingomyelin biosynthesis		
			kinase activity		
			transferase activity		
			integral to Golgi membrane		
			ceramide cholinephosphotransferase activity		
229949 at	DKFZP4				0.37
	34A0131				
225417_at	EPC1	enhancer of	regulation of cell growth		4.59
		polycomb	<u>nucleus</u>		
		homolog 1	<u>transcription</u>		
		(Drosophila)	regulation of transcription, DNA-dependent		
			transcriptional activator activity		
			transcriptional repressor activity		
			chromatin modification		

222348 at	MAST4	microtubule	protein kinase activity	2.65
		associated	protein serine/threonine kinase activity	
		serine/threonine	calmodulin binding	
		kinase family	ATP binding	
		member 4	protein amino acid phosphorylation	
			transferase activity	
234594_at	ITPK1	inositol 1,3,4-	catalytic activity	0.32
		triphosphate 5/6	mitochondrion_	
		kinase	signal transduction	
			kinase activity	
			ligase activity	
232356_at	KIAA01		integral to membrane	4.81
	43			
1566903_a	LRP8	low density	receptor activity	0.48
<u>t</u>		lipoprotein	transmembrane receptor activity	
		receptor-related	transmembrane receptor activity	
		protein 8,	calcium ion binding	
		apolipoprotein e	plasma membrane	
		receptor	plasma membrane	
			proteolysis and peptidolysis	
			<u>lipid metabolism</u>	
			<u>lipid metabolism</u>	

			<u>endocytosis</u>	
			endocytosis	
			signal transduction	
			signal transduction	
			lipoprotein binding	
			<u>membrane</u>	
			integral to membrane	
			cytokine and chemokine mediated signaling pathway	
			apolipoprotein E receptor activity	
			apolipoprotein E receptor activity	
			apolipoprotein E receptor activity	
239716 at	TRIM33	tripartite motif-	ubiquitin ligase complex	4.77
		containing 33	DNA binding	
		containing 33	DNA binding  ubiquitin-protein ligase activity	
		containing 33		
		containing 33	ubiquitin-protein ligase activity	
		containing 33	ubiquitin-protein ligase activity nucleus	
		containing 33	ubiquitin-protein ligase activity nucleus transcription	
		containing 33	ubiquitin-protein ligase activity nucleus transcription regulation of transcription, DNA-dependent zinc ion binding	
		containing 33	ubiquitin-protein ligase activity nucleus transcription regulation of transcription, DNA-dependent zinc ion binding negative regulation of transcription	
242233 of	VIA A 12	containing 33	ubiquitin-protein ligase activity nucleus transcription regulation of transcription, DNA-dependent zinc ion binding negative regulation of transcription protein ubiquitination	2.79
242233 at	KIAA12 19	containing 33	ubiquitin-protein ligase activity nucleus transcription regulation of transcription, DNA-dependent zinc ion binding negative regulation of transcription	2.78

241769 at					2.33
1557360_a	LRPPRC	leucine-rich PPR-	biological process unknown		8.82
<u>t</u>		motif containing	single-stranded DNA binding		
			RNA binding		
			binding		
			nucleus		
			<u>nucleus</u>		
			mitochondrion		
			mitochondrion		
230651_at	THOC2	THO complex 2	nuclear mRNA splicing, via spliceosome		2.79
			RNA binding		
			<u>nucleus</u>		
			mRNA-nucleus export		
			<u>transport</u>		
230337_at	SOS1	son of sevenless	DNA binding	MAPK signaling pathway	3.45
		homolog 1	Ras guanyl-nucleotide exchange factor activity	Integrin-mediated cell	
		(Drosophila)	Rho guanyl-nucleotide exchange factor activity	<u>adhesion</u>	
			Rho GTPase activator activity	Jak-STAT signaling	
			RAS protein signal transduction	pathway	
				<u>NA</u>	
242287 at	RSN	restin (Reed-	nucleic acid binding		3.48
		Steinberg cell-	endosome		

		expressed	intermediate filament	
		intermediate	microtubule binding	
		filament-	microtubule cytoskeleton	
		associated		
		protein)		
226711_at	HTLF	human T-cell	transcription factor activity	2.16
		leukemia virus	transcription factor activity	
		enhancer factor	nucleus	
			transcription	
			regulation of transcription, DNA-dependent	
238563_at	ABI1	abl-interactor 1	soluble fraction	3.34
			nucleus	
			endoplasmic reticulum	
			<u>cytosol</u>	
			transmembrane receptor protein tyrosine kinase signaling	
			pathway	
			cytoskeletal protein binding	
			negative regulation of cell proliferation	
236778 at	ATRX	alpha	DNA binding	2.89
		thalassemia/ment	DNA helicase activity	
		al retardation	transcription factor activity	
		syndrome X-	helicase activity	

		linked (RAD54	ATP binding	
		homolog, S.	nucleus	
		cerevisiae)	nuclear heterochromatin	
			DNA repair	
			DNA methylation	
			DNA recombination	
			regulation of transcription, DNA-dependent	
			chromosome organization and biogenesis (sensu Eukarya)	
			perception of sound	
			hydrolase activity	
232696_at	C16orf46	chromosome 16		0.30
		open reading		
		frame 46		
239780 at				2.33
231087_at	hSyn		binding	2.81
236703_at				3.69
<u>1556126 s</u>	GPATC2	G patch domain	nucleic acid binding	3.93
<u>at</u>		containing 2	intracellular	
243827_at	TEX27	testis expressed	DNA binding	2.75
		sequence 27	zinc ion binding	
209735_at	ABCG2	ATP-binding	nucleotide binding	6.71
		cassette, sub-	ATP binding	

		family G	<u>transport</u>	
		(WHITE),	xenobiotic-transporting ATPase activity	
		member 2	<u>membrane</u>	
			integral to membrane	
			ATPase activity	
			response to drug	
204700_x	MGC298			2.30
<u>at</u>	75			
242920_at	KIAA09		protein serine/threonine kinase activity	4.65
	99		ATP binding	
			protein amino acid phosphorylation	
			transferase activity	
243037_at	FUBP1	far upstream	single-stranded DNA binding	1.78
		element (FUSE)	transcription factor activity	
		binding protein 1	nucleus	
			<u>cytoplasm</u>	
			transcription	
			regulation of transcription, DNA-dependent	
			transcription from Pol II promoter	
			phosphate transport	
237216 at	GARNL	GTPase	GTPase activator activity	3.12
	1	activating	<u>nucleus</u>	

		Rap/RanGAP			
		domain-like 1			
240765_at	HCMOG				1.85
	T-1				
244165_at	C10orf18	chromosome 10			2.37
		open reading			
		frame 18			
244546_at	CYCS	cytochrome c,	protein binding	<u>Apoptosis</u>	0.23
		somatic	mitochondrial electron transport chain		
			mitochondrial intermembrane space		
			mitochondrial intermembrane space		
			cytosol		
			cytosol		
			electron transport		
			DNA fragmentation		
			DNA fragmentation		
			<u>transport</u>		
			<u>apoptosis</u>		
			caspase activation via cytochrome c		
			caspase activation via cytochrome c		
			heme binding		
			electron transporter, transferring electrons from CoQH2-		

			cytochrome c reductase complex and cytochrome c oxidase		
			complex activity		
			-		
			electron transporter, transferring electrons from CoQH2-		
			cytochrome c reductase complex and cytochrome c oxidase		
			complex activity		
			cellular respiration		
			<u>cellular respiration</u>		
243450_at	AKAP13	A kinase (PRKA)	cAMP-dependent protein kinase activity		3.64
		anchor protein 13	signal transducer activity		
			receptor activity		
			Rho guanyl-nucleotide exchange factor activity		
			membrane fraction		
			intracellular signaling cascade		
			kinase activity		
234969_s_					3.57
<u>at</u>					
244633_at	PIAS2	protein inhibitor	DNA binding	Jak-STAT signaling	2.84
		of activated	nucleus	<u>pathway</u>	
		STAT, 2	transcription		
			•		
			regulation of transcription, DNA-dependent		
			ubiquitin cycle		
			<u>development</u>		

			zinc ion binding		
239227_at	EXT1	exostoses	skeletal development	Chondroitin / Heparan	4.07
		(multiple) 1	endoplasmic reticulum membrane	sulfate biosynthesis	
			Golgi apparatus		
			glycosaminoglycan biosynthesis		
			<u>cell cycle</u>		
			signal transduction		
			<u>membrane</u>		
			integral to membrane		
			transferase activity, transferring glycosyl groups		
			negative regulation of cell cycle		
			N-acetylglucosaminyl-proteoglycan 4-beta-		
			glucuronosyltransferase activity		
216321_s	NR3C1	nuclear receptor	transcription factor activity	Neuroactive ligand-	5.48
<u>at</u>		subfamily 3,	glucocorticoid receptor activity	receptor interaction	
		group C, member	steroid binding		
		1 (glucocorticoid	nucleus		
		receptor)	<u>cytoplasm</u>		
			mitochondrial matrix		
			regulation of transcription, DNA-dependent		
			transcription from Pol II promoter		
			<u>inflammatory response</u>		

			signal transduction		
236809_at	MGC404				3.55
	05				
242761_s_	ZNF420	zinc finger	nucleic acid binding		2.56
<u>at</u>		protein 420	DNA binding		
			nucleus		
			regulation of transcription, DNA-dependent		
			zinc ion binding		
232431_at	NR3C1	nuclear receptor	transcription factor activity	Neuroactive ligand-	8.48
		subfamily 3,	glucocorticoid receptor activity	receptor interaction	
		group C, member	steroid binding		
		1 (glucocorticoid	nucleus		
		receptor)	<u>cytoplasm</u>		
			mitochondrial matrix		
			regulation of transcription, DNA-dependent		
			transcription from Pol II promoter		
			inflammatory response		
			signal transduction		
237006 at	MLLT2	myeloid/lymphoi	transcription factor activity		4.66
		d or mixed-	nucleus		
		lineage leukemia			
		(trithorax			

		homolog,		
		Drosophila),		
		translocated to, 2		
227541_at	WDR20	WD repeat		2.63
		domain 20		
202724_s_	FOXO1	forkhead box	transcription factor activity	2.56
<u>at</u>	A	O1A	nucleus	
		(rhabdomyosarco	transcription	
		ma)	regulation of transcription from Pol II promoter	
			anti-apoptosis	
215786_at	HBXAP	hepatitis B virus	DNA binding	2.61
		x associated	nucleus	
		protein	nucleosome assembly	
			transcription	
			transcriptional activator activity	
			transcriptional repressor activity	
			chromatin modification	
			histone binding	
			negative regulation of transcription, DNA-dependent	
			positive regulation of viral transcription	
243003_at	MLLT10	myeloid/lymphoi	DNA binding	2.24
		d or mixed-	transcription factor activity	

		lineage leukemia	nucleus	
		(trithorax	regulation of transcription, DNA-dependent	
		homolog,		
		Drosophila),		
		translocated to,		
		10		
1562497_a				3.00
<u>t</u>				
1557432 a	RASAL2	RAS protein	GTPase activator activity	2.58
<u>t</u>		activator like 2	Ras GTPase activator activity	
			signal transduction	
242673 at	UBE3C	ubiquitin protein	protein polyubiquitination	4.44
		ligase E3C	ubiquitin-protein ligase activity	
			protein binding	
			<u>intracellular</u>	
			ubiquitin cycle	
227312_at	SNTB2	syntrophin, beta 2	actin binding	1.91
		(dystrophin-	calcium ion binding	
		associated protein	calmodulin binding	
		A1, 59kDa, basic	membrane fraction	
		component 2)	cytoskeleton	
			dystrophin-associated glycoprotein complex	

			<u>membrane</u>		
235374_at	MDH1	malate dehydrogenase 1, NAD (soluble)	L-lactate dehydrogenase activity  malic enzyme activity  cytosol  glycolysis  tricarboxylic acid cycle  malate metabolism  oxidoreductase activity  L-malate dehydrogenase activity	Citrate cycle (TCA cycle)  Pyruvate metabolism  Glyoxylate and dicarboxylate metabolism  Carbon fixation  Reductive carboxylate cycle (CO2 fixation)	1.87
224336 s at	DUSP16	dual specificity phosphatase 16	inactivation of MAPK nucleus cytoplasm protein amino acid dephosphorylation hydrolase activity MAP kinase phosphatase activity MAPK nucleus export leptomycin B-sensitive MAPK phosphatase nucleus export	MAPK signaling pathway	2.82
226208_at	MGC404 05				3.77
213459_at	RPL37A	ribosomal protein L37a	structural constituent of ribosome ribosome protein biosynthesis	Ribosome	3.25

225957 at	LOC153		DNA binding		2.53
	222		nucleus		
			regulation of transcription, DNA-dependent		
239721 at	UBE2H	ubiquitin-	ubiquitin conjugating enzyme activity		1.72
		conjugating	ubiquitin-protein ligase activity		
		enzyme E2H	ubiquitin cycle		
		(UBC8 homolog,	ligase activity		
		yeast)			
241786_at	PPP3R1	protein	calcium-dependent protein serine/threonine phosphatase activity	MAPK signaling pathway	5.09
		phosphatase 3	calcium ion binding	<u>Apoptosis</u>	
		(formerly 2B),	calmodulin inhibitor activity	Wnt signaling pathway	
		regulatory	<u>calcineurin complex</u>		
		subunit B,			
		19kDa, alpha			
		isoform			
		(calcineurin B,			
		type I)			
218819 at	DDX26	DEAD/H (Asp-	helicase activity		2.85
		Glu-Ala-Asp/His)	transmembrane receptor activity		
		box polypeptide			
		26			
242068_at	BIRC6	baculoviral IAP	ubiquitin conjugating enzyme activity		3.11
		repeat-containing	cysteine protease inhibitor activity		

		6 (apollon)	intracellular	
			ubiquitin cycle	
			<u>apoptosis</u>	
			anti-apoptosis	
			ligase activity	
235556_at				2.80
242919_at	LOC114		nucleic acid binding	2.12
	977		nucleus	
			zinc ion binding	
233085 s	FLJ2283		nucleic acid binding	5.14
<u>at</u>	3		DNA binding	
232080_at	HECW2	HECT, C2 and	ubiquitin-protein ligase activity	2.22
		WW domain	<u>intracellular</u>	
		containing E3	ubiquitin cycle	
		ubiquitin protein		
		ligase 2		
227443 at	C9orf150	chromosome 9		3.10
		open reading		
		frame 150		
227551_at	C9orf77	chromosome 9	catalytic activity	3.47
		open reading		
		frame 77		

243908 at	ZNF638	zinc finger	nucleotide binding		1.86
		protein 638	nucleic acid binding		
			double-stranded DNA binding		
			RNA binding		
			nucleus		
			nucleoplasm		
			cytoplasm		
			zinc ion binding		
			RNA splicing		
241905_at	PIK3C2	phosphoinositide-	inositol/phosphatidylinositol kinase activity	<u>Phosphatidylinositol</u>	3.57
	A	3-kinase, class 2,	phosphoinositide 3-kinase complex	signaling system	
		alpha polypeptide	phosphatidylinositol biosynthesis	<u>Apoptosis</u>	
			intracellular signaling cascade	Toll-like receptor signaling	
			phosphatidylinositol 3-kinase activity	<u>pathway</u>	
				Jak-STAT signaling	
				<u>pathway</u>	
				<u>NA</u>	
228038_at	SOX2	SRY (sex	transcription factor activity		2.68
		determining	nucleus		
		region Y)-box 2	establishment and/or maintenance of chromatin architecture		
			transcription		
			regulation of transcription, DNA-dependent		

232392 at	SFRS3	splicing factor,	nuclear mRNA splicing, via spliceosome		2.87
		arginine/serine-	nucleic acid binding		
		rich 3	RNA binding		
			nucleus		
231644_at					2.71
1553349_a	ARID2	AT rich	nucleic acid binding		2.22
<u>t</u>		interactive	translation initiation factor activity		
		domain 2 (ARID,	nucleus		
		RFX-like)	zinc ion binding		
219662_at	MGC550				1.61
	9				
232472_at					2.67
241775_at	SCFD1	sec1 family	catalytic activity		4.78
		domain	endoplasmic reticulum		
		containing 1	Golgi apparatus		
			vesicle docking during exocytosis		
			protein transport		
			vesicle-mediated transport		
1556568_a	NLK	nemo like kinase	magnesium ion binding	MAPK signaling pathway	2.05
<u>at</u>			protein serine/threonine kinase activity	Wnt signaling pathway	
			MAP kinase activity	Cadherin-mediated cell	
			ATP binding	<u>adhesion</u>	

239695_at  1556989_a t	KIAA15 79 ADAMT S9	a disintegrin-like and metalloprotease (reprolysin type) with	nucleus regulation of transcription, DNA-dependent protein amino acid phosphorylation protein kinase cascade transferase activity negative regulation of Wnt receptor signaling pathway nucleotide binding nucleic acid binding metalloendopeptidase activity extracellular matrix glycoprotein catabolism development zinc ion binding	2.04
		thrombospondin type 1 motif, 9		
228723 at	SDFR1	stromal cell derived factor receptor 1	receptor activity mannose binding membrane	1.61
208054 at	HERC4	hect domain and RLD 4	ubiquitin-protein ligase activity  intracellular  ubiquitin cycle	1.63
238558 at	MBNL1	muscleblind-like	embryonic development (sensu Mammalia)	1.87

		(Drosophila)	nucleic acid binding	
			double-stranded RNA binding	
			nucleus	
			nucleus	
			cytoplasm	
			<u>neurogenesis</u>	
			muscle development	
			embryonic limb morphogenesis	
			myoblast differentiation	
231871_at	ITR		receptor activity	1.74
204012_s_	LCMT2	leucine carboxyl	protein binding	3.42
<u>at</u>		methyltransferase	methyltransferase activity	
		2	transferase activity	
224822_at	DLC1	deleted in liver	Rho GTPase activator activity	5.21
		cancer 1	protein binding	
			extracellular	
			<u>cytoplasm</u>	
			cytoskeleton organization and biogenesis	
			signal transduction	
			regulation of cell adhesion	
			negative regulation of cell growth	
228993_s	PDCD4	programmed cell	<u>apoptosis</u>	1.50

<u>at</u>		death 4			
<del></del>		(neoplastic			
		transformation			
		inhibitor)			
232865_at	AF5Q31		transcription factor activity		2.62
			transcription from Pol II promoter		
230206 at	DOCK5	dedicator of	guanyl-nucleotide exchange factor activity		2.90
		cytokinesis 5	GTP binding		
			GTPase binding		
239731_at					2.39
1558467_a	UGCGL	UDP-glucose	UDP-glucose:glycoprotein glucosyltransferase activity	Fructose and mannose	2.38
<u>_at</u>	2	ceramide	protein binding	<u>metabolism</u>	
		glucosyltransfera	endoplasmic reticulum lumen	N-Glycans biosynthesis	
		se-like 2	protein amino acid glycosylation	O-Glycans biosynthesis	
			transferase activity, transferring glycosyl groups	<u>NA</u>	
				Glycerolipid metabolism	
				Glycosylphosphatidylinosit	
				ol(GPI)-anchor biosynthesis	
				Glycosphingolipid	
				metabolism	
				Blood group glycolipid	
				biosynthesis-lactoseries	

201865_x at	NR3C1	nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor)	transcription factor activity glucocorticoid receptor activity steroid binding nucleus cytoplasm mitochondrial matrix regulation of transcription, DNA-dependent	Blood group glycolipid biosynthesis-neolactoseries Globoside metabolism Ganglioside biosynthesis Neuroactive ligand- receptor interaction	4.11
238549 at	CBFA2T 2	core-binding factor, runt domain, alpha subunit 2,	mitochondrial matrix		2.71
226807_at	ZFP1	zinc finger protein 1 homolog (mouse)	cell proliferation  DNA binding nucleus transcription		2.45

			regulation of transcription, DNA-dependent		
			zinc ion binding		
240502_at	MGC141		<u>binding</u>		1.99
	61		cytoplasm		
			cytoskeleton		
			cytoskeletal protein binding		
			<u>membrane</u>		
219595 at	ZNF26	zinc finger	nucleic acid binding		1.86
		protein 26 (KOX	nucleus		
		20)	regulation of transcription, DNA-dependent		
			zinc ion binding		
222313_at	CNOT2	CCR4-NOT	nucleus		2.30
		transcription	regulation of transcription, DNA-dependent		
		complex, subunit	regulation of global transcription from Pol II promoter		
		2	RNA polymerase II transcription mediator activity		
			transcription regulator activity		
227140_at	INHBA	inhibin, beta A	skeletal development	Cytokine-cytokine receptor	2.14
		(activin A, activin	ovarian follicle development	interaction	
		AB alpha	cytokine activity	TGF-beta signaling	
		polypeptide)	transforming growth factor beta receptor binding	<u>pathway</u>	
			hormone activity		
			protein binding		

<u>extracellular</u>
induction of apoptosis
<u>defense response</u>
<u>cell cycle arrest</u>
cell surface receptor linked signal transduction
cell-cell signaling
<u>neurogenesis</u>
mesoderm development
growth factor activity
response to external stimulus
activin inhibitor activity
cell differentiation
erythrocyte differentiation
growth growth
negative regulation of phosphorylation
hemoglobin biosynthesis
negative regulation of interferon-gamma biosynthesis
negative regulation of B-cell differentiation
negative regulation of macrophage differentiation
negative regulation of cell cycle
positive regulation of follicle-stimulating hormone secretion
negative regulation of follicle-stimulating hormone secretion
negative regulation of formere stitutioning normalic secretion

237483 at	PLEKH	pleckstrin	biological_process unknown		1.55
	A5	homology	phosphatidylinositol binding		
		domain	cellular_component unknown		
		containing,			
		family A member			
		5			
230083_at	USP53	ubiquitin specific	cysteine-type endopeptidase activity		2.77
		protease 53	ubiquitin thiolesterase activity		
			ubiquitin-dependent protein catabolism		
			ubiquitin cycle		
213913 s	KIAA09				3.20
<u>at</u>	84				
233369_at	SOS2	son of sevenless	DNA binding	MAPK signaling pathway	3.25
		homolog 2	guanyl-nucleotide exchange factor activity	Integrin-mediated cell	
		(Drosophila)	small GTPase mediated signal transduction	<u>adhesion</u>	
			cellular_component unknown	<u>Jak-STAT signaling</u>	
				<u>pathway</u>	
				<u>NA</u>	
218926_at	MYNN	myoneurin	nucleic acid binding		1.80
			transcription factor activity		
			protein binding		
			nucleus		

			transcription, DNA-dependent	
			regulation of transcription, DNA-dependent	
			zinc ion binding	
			zinc ion binding	
229366 at	CRBN	cereblon	ATP-dependent peptidase activity	2.59
			mitochondrion_	
			ATP-dependent proteolysis	
229483 at	UBE2H	ubiquitin-	ubiquitin conjugating enzyme activity	2.29
		conjugating	ubiquitin-protein ligase activity	
		enzyme E2H	ubiquitin cycle	
		(UBC8 homolog,	ligase activity	
		yeast)		
232778_at	C10orf18	chromosome 10		2.04
		open reading		
		frame 18		
225956 at	LOC153		DNA binding	4.73
	222		<u>nucleus</u>	
			regulation of transcription, DNA-dependent	
235436 at	DDX31	DEAD (Asp-Glu-	nucleic acid binding	2.15
		Ala-Asp) box	ATP binding	
		polypeptide 31	ATP-dependent helicase activity	
			hydrolase activity	

217626 at	AKR1C2	aldo-keto	<u>binding</u>	2.20
		reductase family	electron transporter activity	
		1, member C2	<u>lipid metabolism</u>	
		(dihydrodiol	<u>transport</u>	
		dehydrogenase 2,	digestion	
		bile acid binding	steroid metabolism	
		protein, 3-alpha	bile acid transporter activity	
		hydroxysteroid	canalicular bile acid transport	
		dehydrogenase,	oxidoreductase activity	
		type III)	3-alpha-hydroxysteroid dehydrogenase (A-specific) activity	
			trans-1,2-dihydrobenzene-1,2-diol dehydrogenase activity	
222052 4	EL DES	C1		0.00
222853_at	FLRT3	fibronectin	receptor signaling protein activity	2.23
		leucine rich	extracellular matrix	
		transmembrane	integral to plasma membrane	
		protein 3	<u>cell adhesion</u>	
			protein binding, bridging	
225731_at	KIAA12			3.08
	23			
243691_at	KIAA02			2.48
	76			
213684 s	PDLIM5	PDZ and LIM	actin binding	2.20
<u>at</u>		domain 5	protein kinase C binding	

			protein binding		
			membrane fraction		
			<u>cytosol</u>		
			heart development		
			zinc ion binding		
			receptor signaling complex scaffold activity		
			actinin binding		
226075_at	SSB1		intracellular signaling cascade		1.87
239862_at	TPD52	tumor protein	<u>morphogenesis</u>		2.48
		D52			
241681_at	MBNL1	muscleblind-like	embryonic development (sensu Mammalia)		2.49
		(Drosophila)	nucleic acid binding		
			double-stranded RNA binding		
			nucleus		
			nucleus		
			<u>cytoplasm</u>		
			<u>neurogenesis</u>		
			muscle development		
			embryonic limb morphogenesis		
			myoblast differentiation		
1553994 a	NT5E	5'-nucleotidase,	nucleotide binding	Purine metabolism	2.77
<u>t</u>		ecto (CD73)	membrane fraction	Pyrimidine metabolism	

			DNA metabolism	Nicotinate and	
			5'-nucleotidase activity	nicotinamide metabolism	
			nucleotide catabolism		
			<u>membrane</u>		
			hydrolase activity, acting on ester bonds		
229022_at	ZFX	zinc finger	DNA binding		1.72
		protein, X-linked	DNA binding		
			transcription coactivator activity		
			nucleus		
			regulation of transcription, DNA-dependent		
			zinc ion binding		
			transcription regulator activity		
			regulation of transcription		
			metal ion binding		
239476 at	PIK3R1	phosphoinositide-	phosphatidylinositol binding	<u>Phosphatidylinositol</u>	3.47
		3-kinase,	phosphoinositide 3-kinase complex	signaling system	
		regulatory	intracellular signaling cascade	<u>Apoptosis</u>	
		subunit 1 (p85	intracellular signaling cascade	Integrin-mediated cell	
		alpha)	kinase activity	<u>adhesion</u>	
			phosphatidylinositol 3-kinase activity	Toll-like receptor signaling	
			phosphatidylinositol 3-kinase activity	pathway	
				Jak-STAT signaling	

				pathway	
				<u>NA</u>	
213065_at	MGC234		nucleus		2.53
	01		mRNA processing		
233112_at	C9orf150	chromosome 9			2.99
		open reading			
		frame 150			
240655_at	ALCAM	activated	receptor binding		2.25
		leukocyte cell	protein binding		
		adhesion	membrane fraction		
		molecule	integral to plasma membrane		
			cell adhesion		
			signal transduction		
			antimicrobial humoral response (sensu Vertebrata)		
41329 at	SCYL3	SCY1-like 3 (S.	protein serine/threonine kinase activity		2.10
		cerevisiae)	ATP binding		
			Golgi apparatus		
			protein amino acid phosphorylation		
235757_at	C10orf18	chromosome 10			2.36
		open reading			
		frame 18			
213743 at	CCNT2	cyclin T2	regulation of cell cycle		3.16

			regulation of cyclin dependent protein kinase activity		
			<u>cytokinesis</u>		
			nucleus		
			<u>transcription</u>		
			regulation of transcription, DNA-dependent		
			transcription from Pol II promoter		
232017_at	TJP2	tight junction	guanylate kinase activity	<u>NA</u>	1.90
		protein 2 (zona	protein binding		
		occludens 2)	nucleus		
			integral to plasma membrane		
			tight junction		
			<u>membrane</u>		
216022_at	WNK1	WNK lysine	protein serine/threonine kinase activity		2.30
		deficient protein	protein kinase inhibitor activity		
		kinase 1	ATP binding		
			<u>cytoplasm</u>		
			protein amino acid phosphorylation		
			ion transport		
			protein kinase cascade		
			transferase activity		
			regulation of cellular process		
235648_at	ZNF567	zinc finger	nucleic acid binding		3.43

		protein 567	nucleus	
			regulation of transcription, DNA-dependent	
			zinc ion binding	
226588_at	KIAA16		RNA binding	2.29
	04			
240594 at	CDYL	chromodomain	<u>chromatin</u>	3.04
		protein, Y-like	chromatin binding	
			catalytic activity	
			nucleus	
			chromatin assembly/disassembly	
			<u>spermatogenesis</u>	
			<u>metabolism</u>	
			peptidase activity	
222872_x	FLJ2283		nucleic acid binding	4.61
<u>at</u>	3		DNA binding	
222728 s	MGC530			1.92
<u>at</u>	6			
222282_at	PAPD4	PAP associated	nucleic acid binding	1.78
		domain		
		containing 4		
236153_at				1.65
225914 s	CAB39L	calcium binding	binding	2.14

<u>at</u>		protein 39-like			
218566_s_	CHORD	cysteine and	biological process unknown		1.49
<u>at</u>	C1	histidine-rich	molecular_function unknown		
		domain	cellular component unknown		
		(CHORD)-	-		
		containing, zinc			
		binding protein 1			
224831_at	CPEB4	cytoplasmic	nucleotide binding		4.57
		polyadenylation	nucleic acid binding		
		element binding			
		protein 4			
1560082_a	FLJ1407				1.97
<u>t</u>	5				
227038_at	MGC269		Golgi apparatus	Glycosphingolipid	2.59
	63		integral to plasma membrane	<u>metabolism</u>	
			<u>lipid metabolism</u>		
			sphingolipid metabolism		
			sphingomyelin biosynthesis		
			kinase activity		
			transferase activity		
			integral to Golgi membrane		
			ceramide cholinephosphotransferase activity		

236472 at	NRD1	nardilysin (N-	proteolysis and peptidolysis		2.59
		arginine dibasic	neuromuscular junction development		
		convertase)	cellular_component unknown		
			nardilysin activity		
240788_at	ME1	malic enzyme 1,	malate dehydrogenase (oxaloacetate-decarboxylating) (NADP+)	Pyruvate metabolism	2.30
		NADP(+)-	<u>activity</u>	Carbon fixation	
		dependent,	electron transporter activity		
		cytosolic	<u>cytosol</u>		
			<u>carbohydrate metabolism</u>		
			tricarboxylic acid cycle		
			malate metabolism		
			oxidoreductase activity		
236265_at					2.43
1559401_a	ZNF609	zinc finger	nucleic acid binding		2.10
<u>at</u>		protein 609	nucleus		
			zinc ion binding		
223204_at	DKFZp4				2.85
	34L142				
242225 at	KIAA10		binding		3.52
	40		mitochondrion_		
			mitotic chromosome condensation		
			ATP synthesis coupled proton transport		

232489 at	FLJ1028		membrane proton-transporting two-sector ATPase complex hydrogen-transporting ATP synthase activity, rotational mechanism hydrogen-transporting ATPase activity, rotational mechanism  DNA binding		2.01
239561_at	THRAP2	thyroid hormone receptor associated protein 2	receptor activity		3.41
243410 at	PTPN2	protein tyrosine phosphatase, non- receptor type 2	protein tyrosine phosphatase activity protein tyrosine phosphatase activity receptor activity protein amino acid dephosphorylation protein amino acid dephosphorylation hydrolase activity		2.18
230769_at	FLJ3709 9				2.04
212990_at	SYNJ1	synaptojanin 1	RNA binding inositol/phosphatidylinositol phosphatase activity phosphoinositide 5-phosphatase activity	Inositol phosphate  metabolism  Phosphatidylinositol	3.13

			inositol-polyphosphate 5-phosphatase activity	signaling system	
			phosphate metabolism		
			hydrolase activity		
236251_at					3.73
242059 at					2.39
1559020_a					1.82
<u>at</u>					
242029_at	FNDC3B	fibronectin type			2.17
		III domain			
		containing 3B			
220612_at	MGC430				2.64
	8				
244010_at	MLL3	myeloid/lymphoi	ubiquitin ligase complex		3.09
		d or mixed-	DNA binding		
		lineage leukemia	ubiquitin-protein ligase activity		
		3	ATP binding		
			nucleus		
			<u>transcription</u>		
			regulation of transcription, DNA-dependent		
			methyltransferase activity		
			zinc ion binding		
			ATP synthesis coupled proton transport		

			proton-transporting two-sector ATPase complex	
			protein ubiquitination	
			chromatin modification	
			transferase activity	
			histone-lysine N-methyltransferase activity	
			metal ion binding	
			hydrogen-transporting ATP synthase activity, rotational	
			<u>mechanism</u>	
			hydrogen-transporting ATPase activity, rotational mechanism	
230205_at	ZNF561	zinc finger	nucleic acid binding	1.57
		protein 561	nucleus	
			zinc ion binding	
218761_at	RNF111	ring finger	ubiquitin ligase complex	2.44
		protein 111	ubiquitin-protein ligase activity	
			zinc ion binding	
			protein ubiquitination	
233869_x	DKFZP5			1.66
<u>at</u>	86B0319			
1557238_s	FLJ1070			2.41
<u>at</u>	7			
<u>1565887 a</u>	TRPM7	transient receptor	protein serine/threonine kinase activity	2.08
<u>t</u>		potential cation	calcium channel activity	

		channel,	ATP binding		
		subfamily M,	protein amino acid phosphorylation		
		member 7	cation transport		
			calcium ion transport		
			<u>membrane</u>		
			integral to membrane		
			transferase activity		
232297_at					1.9
244015_at	EIF4G3	eukaryotic	RNA cap binding		1.8
		translation	translation initiation factor activity		
		initiation factor 4	regulation of translational initiation		
		gamma, 3	eukaryotic translation initiation factor 4F complex		
1556543_a					2.2
<u>t</u>					
243046_at	UBE2D3	ubiquitin-	ubiquitin conjugating enzyme activity	<u>Ubiquitin mediated</u>	2.3
		conjugating	ubiquitin-protein ligase activity	proteolysis	
		enzyme E2D 3	ubiquitin cycle		
		(UBC4/5	ligase activity		
		homolog, yeast)			
235791 x	CHD1	chromodomain	chromatin		2.7
<u>at</u>		helicase DNA	chromatin binding		
		binding protein 1	ATP-dependent DNA helicase activity		

			helicase activity	
			ATP binding	
			nucleus	
			chromatin assembly/disassembly	
			regulation of transcription from Pol II promoter	
			chromosome organization and biogenesis (sensu Eukarya)	
			hydrolase activity	
219284_at	HSPBAP	HSPB (heat		1.78
	1	shock 27kDa)		
		associated protein		
		1		
228336_at	KIAA19			1.82
	35			
230296_at	C16orf52	chromosome 16		1.88
		open reading		
		frame 52		
222580_at	ZNF644	zinc finger	DNA binding	2.94
		protein 644	nucleus	
			<u>transcription</u>	
			regulation of transcription, DNA-dependent	
			zinc ion binding	
239516_at	LYPLAL	lysophospholipas	<u>lipid metabolism</u>	2.00

	1	e-like 1	fatty acid metabolism	
			hydrolase activity	
206648_at	ZNF571	zinc finger	DNA binding	1.96
		protein 571	nucleus	
			regulation of transcription, DNA-dependent	
			zinc ion binding	
219854_at	ZNF14	zinc finger	DNA binding	2.20
		protein 14 (KOX	nucleus	
		6)	<u>transcription</u>	
			regulation of transcription, DNA-dependent	
			zinc ion binding	
215083_at	PSPC1	paraspeckle	nucleotide binding	2.30
		component 1	nucleic acid binding	
227599_at	LOC151			3.70
	963			
231940_at	ZNF529	zinc finger	nucleic acid binding	3.68
		protein 529	nucleus	
			regulation of transcription, DNA-dependent	
			zinc ion binding	