

ABSTRACT

Gene Expression Profiling to Understand the Alterations in the Monocyte Compartment of Pediatric Systemic Lupus Erythematosus

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Blood monocytes from SLE patients display DC function, as they are able to induce the proliferation of allogeneic T cells. Furthermore, sera from SLE patients induce healthy monocytes to differentiate into DCs. This DC-inducing property is in part due to the presence of type-I IFNs in SLE sera, as well as other, yet uncharacterized factors. To understand these alterations, we performed a thorough phenotypic analysis and gene expression profiling of monocytes from children with active, newly diagnosed and untreated disease. Phenotypic analysis of freshly isolated SLE blood monocytes revealed a modest expansion of CD14^{high}CD16⁺ cells and an otherwise lack of expression of molecules related to DC function. Further characterization of a fraction of SLE monocytes inducing allogeneic T cell proliferation revealed that upon contact with T cells, SLE monocytes secrete proinflammatory cytokines such as IL-1 and IL-6 and do upregulate expression of innate immunity receptors involved in DC differentiation and molecules responsible for antigen presentation. To recapitulate the initial events leading

to monocyte differentiation in this disease, we studied the effects of SLE serum on healthy monocyte at the transcriptional and protein levels. These studies revealed the upregulation of expression on these cells of chemokine receptor such as CX3CR1 and CCR7, which may lead to the migration of blood monocytes to inflamed tissues and/or secondary lymphoid organs respectively *in vivo*. There, contact with T cells would lead to the acquisition of antigen presenting function and skewing from tolerogenic to immunogenic responses.

Gene Expression Profiling to Understand the Alterations in the Monocyte Compartment
of Pediatric Systemic Lupus Erythematosus

by

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LIST OF ABBREVIATIONS

IFNs	Interferons
IL	Interleukin
ACR	American college of Rheumatology
ANAs	Antinuclear antibodies
BAFF	B cell-activating factor
BCR	B cell receptor
CCL19	Chemokine ligand 19
CCL21	Chemokine ligand 21
CCR7	Chemokine receptor 7
CFSE	Carboxy fluorescein succinimidyl ester
CNS	Central nervous system
CTLA-4	Cytotoxic T lymphocyte-associated 4
CX3CR1	Chemokine, CX3C motif, receptor 1
CXCL10	Chemokine, CXC motif, ligand 10
CXCL11	Chemokine, CXC motif, ligand 11
CXCL9	Chemokine, CXC motif, ligand 9
CXCR3	Chemokine, CX3C motif, receptor 3
DCs	Dendritic cells
DILE	Drug-induced lupus erythematosus
dsDNA	Double stranded DNA

EBNA-1	Epstein-Barr nuclear antigen 1
EBV	Epstein-Barr virus
EMG	Electromyogram
FCS	Fetal calf serum
GSMA	Genome scale meta analysis
HLA	Human leukocyte antigen
IBM	Inclusion body myositis
ICs	Immune complexes
IDDM	Insulin dependent diabetes mellitus
IFNAR1	Interferon- α receptor 1
IFNAR2	Interferon- α receptor 2
IIMs	Idiopathic inflammatory myopathies
IRF	Interferon regulatory factor
IRF5	Interferon regulatory factor 5
IRF9	Interferon regulatory factor 9
ISGF3	Interferon stimulated gene factor 3
ISREs	Interferon stimulated response elements
ITIM	Immunoreceptor tyrosine-based inhibitory motif
IV	Intravenous
JAK1	Janus activated kinase 1
JAKs	Janus activated kinases
LPS	Lipopolysaccharide
MAC	Membrane attack complex

MDA5	Melanoma differentiation associated gene 5
MHC	Major histocompatibility complex
MLR	Mixed lymphocyte reaction
MxA	Myxovirus resistance 1
NKT cell	Natural killer T cells
NOD	Nucleotide binding oligomerization domain
NSAIDs	Non-steroidal anti-inflammatory drugs
NZB	New Zealand black
NZW	New Zealand white
PAMPs	Pathogen associated membrane proteins
PBMCs	Peripheral blood mononuclear cells
PBS	Phosphate buffered saline
pDC	Plasmacytoid dendritic cell
PDCD1	Programmed cell death 1
PGE2	Prostaglandin E2
PRR	Pattern recognition receptors
PTPN22	Protein tyrosine phosphatase, non receptor-type, 22
RAG	Recombination-activating gene
RANK	Receptor activator of NF-Kappa-B
RANKL	Receptor activator of NF-Kappa-B ligand
RIN	RNA integration number
RUNX1	Runt-related transcription factor 1
SLAM	Signaling lymphocyte activation molecule

SLC	Secondary lymphoid-tissue chemokine
SLE	Systemic lupus erythematosus
SLEDAI	Systemic lupus erythematosus disease activity index
snRNP	Small nuclear ribonucleoprotein
SS	Sjogren's syndrome
STAT1	Signal transducer and activator of transcription 1
STAT2	Signal transducer and activator of transcription 2
Tfh	Follicular helper T cells
Th1	Helper T cells 1
Th2	Helper T cells 2
TLR	Toll-like receptor
TNF	Tumor necrosis factor
TYK2	Tyrosine kinase 2
WBC	White blood count
Yaa	Y-linked autoimmune accelerator

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DEDICATION

To all children who suffer from lupus

CHAPTER ONE

Introduction

Role of Interferon

Background

Discovered in 1957, the interferons (IFNs) are family of proteins secreted in response to viral and bacterial infections (Borden and others 2007). There are two types of IFNs, Type I and Type II. They belong to the class II family of α -helical cytokines that includes IFN- λ s, IL-10, and several IL-10 homologs including IL-19, IL-20, IL-22, IL-24, and IL-26. Type I IFNs consist of seven classes, including IFN- α , IFN- β , IFN- ϵ , IFN- κ , IFN- ω , IFN- δ , and IFN- τ . Out of these, IFN- δ and IFN- τ are not found in humans, IFN- ϵ and IFN- κ are expressed in the placenta and keratinocytes respectively. Humans have 13 members of functional IFN- α encoded by 14 genes and single member of IFN- β (Pestka and others 2004; Theofilopoulos and others 2005). The type II IFN consists of only one member which is IFN- γ .

Various cells types such as myeloid dendritic cells (mDCs) can secrete type I IFNs along with plasmacytoid dendritic cells (pDC), which are main producers of Type I IFNs upon virus stimulation (Liu 2005). Secretion of Type-I IFN occurs upon engagement of specific TLRs (TLR4, TLR9) by pathogen associated molecular patterns (PAMPs) expressed by infectious agents, immune complexes (ICs) containing TLR7, 8 and 9 ligands, and other environmental ligands which can recognize by these receptors. TLRs which strongly induce the secretion of type I IFNs include TLR7 and 9 which are

expressed by pDCs, along with TLRs 3 and 4 expressed by myeloid dendritic cells and macrophages. The specific ligands which can induce type I IFN secretion upon ligation with TLRs are dsRNA for TLR3, LPS for TLR4, ssRNA for TLR7 and 8, and unmethylated CpG-DNA for TLR9 (Iwasaki and Medzhitov 2004). There are other pattern recognition receptors (PRR) like RIG-I (retinoic acid-inducible gene I) and MDA5 (melanoma differentiation associated gene 5) which recognize cytosolic uncapped ssRNA containing 5'-triphosphates and poly I:C respectively (Gitlin and others 2006; Hornung and others 2006).

In both TLR dependent and non TLR dependent secretion of type I IFNs, the interferon-regulatory factor (IRF) family of transcription factors plays a central role in driving intracellular signaling cascades (Honda and Taniguchi 2006). Secreted type-I IFNs exert their effect on target cells by binding their two receptor subunits: IFNAR1 and IFNAR2. The IFNAR1 subunit is constitutively associated with tyrosine kinase 2 (TYK2) and the IFNAR2 subunit is associated with Janus activated kinase 1 (JAK1). Binding of type-I IFNs induces the dimerization of both receptor subunits followed by autophosphorylation and activation of associated JAKs. Activation of the JAKs associated with type I IFN receptors leads to tyrosine phosphorylation of STAT1 (signal transducer and activator of transcription 1) and STAT2, and this results into the formation of STAT1-STAT2-IRF9 complexes, which is known as ISGF3 (IFN-stimulated gene factor 3) complexes. These complexes translocate to the nucleus and bind to ISREs (IFN-stimulated response elements) on target genes to initiate their downstream transcription (Platanias 2005).

Type-I IFNs are pleiotropic cytokines and act as an important player in linking innate and adaptive immune responses. IFN α/β signaling upregulates IFN- γ production by dendritic cells (DCs) and T cells (Brinkmann and others 1993; Montoya and others 2002). IFN α/β also enhances the signaling of IL-6 receptors (Mitani and others 2001) and induces the expression of IL-15 (Zhang and others 1998). IFN α/β influence many cell subsets in immune system as, they enhance MHC class I and co-stimulatory molecule expression upon activation of dendritic cells (Biron 2001). IFN α/β induce the expression of TLR7 on mDCs (Mohty and others 2003). Monocytes represent a major source of precursor DCs under inflammatory conditions, and a combination of IFN α/β and GM-CSF drives them to differentiate into DCs (Banchereau and Pascual 2006). IFN- α strongly enhances IL-10-induced differentiation of functional CD4⁺ T regulatory cells (Tr1) (Levings and others 2001). Recently it has been shown that IFN α/β secreted by pDC upon exposure to flu virus induces the differentiation of B cells into plasmablast, the precursors of antibody secreting plasma cells (Jego and others 2003).

As type I IFN play an important role in mounting immune responses against foreign microbes, it may also play a deleterious role in some autoimmune diseases like Systemic Lupus Erythematosus (SLE), Dermatomyositis (DM), Insulin-Dependent Diabetes Mellitus (IDDM), Sjogren's syndrome (SS) and Psoriasis (Banchereau and Pascual 2006; Theofilopoulos and others 2005). This dissertation focuses on the monocyte compartment of pediatric Systemic Lupus Erythematosus patients.

Systemic Lupus Erythematosus

History of Systemic Lupus Erythematosus

The word lupus, which is a Latin word for wolf, was used in medicine from the 13th to the 19th centuries to describe a dermatitis characterized by recurrent, florid facial ulcerations. In 1872 Kaposi clarified the acute and chronic types of lupus skin diseases. Osler, in 1895, recognized the systemic nature of the disease Libman and Sacks described the cardiac complications of this disease in 1924. Baehr, Klempler, and Schiffrin delineated the features of SLE in 1935 (Smith and Cyr 1988).

The demonstration that lupus patients display was possible thanks to the development of ANAs (antinuclear antibodies) indirect immunofluorescence microscopy. Identification of an antibody against dsDNA in patients with SLE led to the concept that its immune complex mediated disease and many pathological features of the disease like glomerulonephritis can be explained from this finding. The fact that lupus patients display hypercomplementemia was described in 1991 by Morgan and colleagues (Morgan and Walport 1991).

In 1979, Hooks and colleagues reported the presence of circulating interferon in patient with SLE (Hooks and others 1979) which was later confirmed in 1982 by Preble and colleagues (Preble and others 1982). The role of type I IFNs in SLE was supported by the observation that when patients with malignancies or chronic hepatitis C are treated with type I IFNs autoimmune symptoms and seroconversion may occur in a fraction of patients (Ronnlom and others 1991). In 1999 Vallin and colleagues showed that SLE serum contains anti DNA ICs which can induce the secretion of type I IFNs when cultured with healthy PBMC (Vallin and others 1999a). Blanco *et. al.* in 2001 proposed

that type I IFNs break tolerance in SLE by inducing the maturation of dendritic cells (Blanco and others 2001). In 2003 Bennett *et al.* and other groups showed expression of type I IFN regulated genes in peripheral blood cells (Baechler and others 2003; Bennett and others 2003).

Clinical presentation and treatment. Systemic lupus erythematosus (SLE) is an episodic, multisystem, autoimmune disease characterized by widespread inflammation of blood vessels and connective tissues and the presence of antinuclear antibodies (ANAs), especially antibodies to double stranded DNA (dsDNA) with hypergammaglobulinemia, lymphopenia and multiple immune dysregulations. Signs and symptoms of SLE can show up quickly or may develop slowly. The disease can be mild or severe, with acute phase to chronic in nature. I almost all patients their symptoms flare and then improve or even disappear completely for some period of time. Some of the most common signs and symptoms of lupus are described in Table 1. These disease manifestations usually develop over the course of time rather than all at once.

Table 1. Clinical Symptoms of Systemic Lupus Erythematosus.

Constitutive	Fever, malaise, weight loss
Cutaneous	Butterfly rash, discoid lupus, periungual erythema, photosensitivity, alopecia, mucosal ulcerations
Musculoskeletal	Polyarthralgia and arthritis, tenosynovitis, myopathy, aseptic necrosis
Vascular	Raynaud's phenomenon, livedo reticularis, thrombosis, erythromelalgia, lupus profundus
Cardiac	Pericarditis and effusion, myocarditis, Libman-Sacks endocarditis
Pulmonary	Pleuritis, basilar pneumonitis, atelectasis, hemorrhage
Gastrointestinal	Peritonitis, esophageal dysfunction, colitis
Liver, spleen, nodes	Hepatomegaly, splenomegaly, lymphadenopathy
Neurologic	Organic brain syndrome, seizures, psychosis, chorea, cerebrovascular accident, polyneuritis and peripheral neuropathy, cranial nerve palsies, pseudotumor cerebri
Ocular	Exudates, papilledema, retinopathy
Renal	Glomerulonephritis, nephrotic syndrome, uremia, hypertension

Diagnosis of SLE can be tricky initially as it is an episodic disease; and patients sometimes present with a history of intermittent symptoms like arthritis, pleuritis, and dermatitis that may precede the actual diagnosis by months or even years. In addition, SLE is a multisystem disease, and patients often have signs and symptoms affecting more than one organ system. Typically, however, SLE is characterized by the presence of anti-nuclear antibodies like anti-dsDNA and anti-RNP.

The American college of Rheumatology (ACR) devised a list of criteria to classify SLE patients (Table 2). These measures are used mainly for diagnosis purposes in the clinic. The ACR revised these criteria for the first time in 1982 (Tan and others 1982) and modified them in 1997 (Table 2) (Hochberg 1997). This classification includes eleven criteria, and diagnosis of lupus can be made when a patient presents with four or more.

Treatment of SLE patients depends on the manifestations of disease. Often times an interdisciplinary approach – with a team of rheumatologists, psychologists, nephrologists, dermatologists, nutritionists and other subspecialists - is taken to tackle this disease effectively (Benseler and Silverman 2005).

Typically, non steroidal anti-inflammatory drugs (NSAIDs) are used to manage musculoskeletal symptoms like myalgia and arthritis. Glucocorticoids, such as oral prednisone and IV methylprednisolone to control fever, dermatitis, arthritis, and serositis, in addition to managing patients with severe acute disease such as hemolytic anemia or overwhelming systemic disease with lupus nephritis. Sometimes hydroxychloroquine is used to treat cutaneous disease as an adjunct to glucocorticoids for systemic disease. Finally, immunosuppressive agents, such as oral azathioprine or oral cyclophosphamide,

are used for patients who are either unresponsive to glucocorticoids or develop severe toxicity to these drugs. Cyclosporine or mycophenolate mofetil help manage renal disease; and IV cyclophosphamide and methotrexate are used to deal with resistant CNS, renal, or skin disease and resistant arthritis. Of course, specific treatments must be individualized based on the extent and severity of disease, as well as efficiency of various pharmacologic agents and patient's tolerance to them.

Table 2. Revised ACR Criteria for Classification of SLE.

1. Malar rash	Fixed erythema, flat or raised, over the malar eminence, tending to spare the nasolabial folds
2. Discoid rash	Erythematous raised patches with adherent keratotic scaling and follicular plugging, atrophic scarring can occur in older lesions
3. Photosensitivity	Skin rash as a result of unusual reaction to sunlight, per history or physician observation
4. Oral ulcers	Oral or nasopharyngeal ulceration, usually painless, observed by the physician
5. Arthritis	Non-erosive, involving ≥ 2 peripheral joints, characterized by tenderness, swelling or effusion
6. Serositis	Pleuritis: history of pleuritic pain, rubbing heard by physician or evidence of pleural effusion Pericarditis: documented by electrocardiogram, rub or evidence of pericardial effusion
7. Renal disorders	Proteinuria > 0.5 g/24 h or 3+, persistently Cellular cast: red cell, hemoglobin, granular, tubular or mixed
8. Neurological disorder	Seizures: in the absence of offending drugs or metabolic derangements Psychosis: in the absence of offending drugs or metabolic derangements
9. Hematological disorder	Hemolytic anemia Leucopenia $< 4,000/\mu\text{l}$ on 2 or more occasions Lymphopenia $< 1,500/\mu\text{l}$ on 2 or more occasions Thrombocytopenia $< 100,000/\mu\text{l}$ in the absence of offending drug
10. Immunological disorder	Elevated anti-DNA antibody Positive anti-Smith antibody Positive finding of antiphospholipid antibodies based on: IgG/IgM anticardiolipins Lupus anticoagulant False positive serologic test for syphilis, present for at least 6 months
11. Antinuclear antibody in a raised titer	

Genetic Susceptibility to Human SLE

It is usually believed that susceptibility to SLE involves the deregulation of multiple genes in conjunction with external factors, as it described by a “threshold liability model” (Wandstrat and Wakeland 2001). According to this model, the disease will occur if the disease liability - interaction of environmental factors with the presence of genetic susceptibility alleles - passes certain threshold. As described in murine models of SLE like the congenic strain NZM2410, multiple susceptibility loci must be inherited to predispose to disease.

Various studies conducted in the past to years show that first, second, and third degree relatives of SLE patients are more susceptible to disease than non-related healthy counterparts (Alarcon-Segovia and others 2005; Deapen and others 1992; Vyse and Kotzin 1998). In twin studies, a concordance rate of 24% to 57% was observed for SLE (Deapen and others 1992). In addition, the degree of family clustering, which is a ratio of the prevalence of SLE in affected family to the prevalence of SLE within the population as a whole is 10-20 (Vyse and Kotzin 1998). Great progress been made in establishing relationship between lupus susceptibility and polymorphisms in various individual genes in humans (Alarcon-Riquelme 2006)

Linkage studies. The goal of linkage studies is to identify genomic segments cotransmitted with the disease in families containing two or more affected members (Tsao 2004). Tsao *et. el.* first described the 1q41-42 region on chromosome 1 is associated with SLE. Of interest, this region equivalent to one of the chromosomal regions known to convey SLE susceptibility in mice (Tsao and others 1997). Since then many more regions have been identified which are linked to SLE susceptibility.

Recently Criswell and colleagues performed genome scale meta-analysis (GSMA) to combine linkage results from all genome screens for SLE done until the time of study. They identified genome-wide regions on 6p21.1-q15, 20p11-q13.3 and 16p13-q12.2 significantly associated with SLE susceptibility (Forabosco and others 2006). Fine mapping of these regions led to the candidate genes which might contribute to the onset of SLE. Some of them are going to be discussed in following two sections.

Susceptibility genes associated with HLA complex. In 1979, the first genetic association study done in human SLE described association of human leukocyte antigens (HLA) to disease susceptibility (Goldberg and others 1976). The HLA region is located within a 3.6 Mb interval on human chromosome 6p21.3, it encodes more than 200 genes and out of them around 40% are related to immune function (1999). Class II haplotypes containing DRB1 and DQB1 alleles are associated with susceptibility to SLE (Graham and others 2002). In Caucasians HLA-DR2 and HLA-DR3 convey about a two- to three-fold increased risk of developing SLE, and HLA-DR2 and HLA-DR7 increase susceptibility in African-American population (Vyse and Kotzin 1998). Certain haplotypes are also associated with the production of specific antibodies. Specifically, Griffing and colleagues described a strong association between HLA-DRw3 haplotype and anti dsDNA antibodies in SLE patients (Griffing and others 1980). More recently, an association of DR2 haplotypes with production of anti-Sm antibodies and DR3 haplotypes with anti-Ro and anti-La antibodies has been reported (Graham and others 2007).

The MHC class III locus contains genes encoding members of the classical pathway of the complement cascade. Homozygous hereditary deficiency of various

component of this pathway like C1q, C1r, C1s, C4, and C2 is associated with increased susceptibility to SLE (Morgan and Walport 1991). The same region also contains the gene encoding TNF- α , and a -308 promoter polymorphism in the TNF gene is associated with SLE and leads to decrease levels of TNF in patients (Magnusson and others 2001). Interestingly, levels of TNF α may regulate the production of type I IFN as described by Palucka *et.al.* (Palucka and others 2005).

Susceptibility Genes Outside of the HLA Complex. Many genes related to immune function outside of the HLA complex may be of interest in studying possible mechanisms of immune dysregulation in lupus. One such gene is PDCD1. PDCD1 is an immunoreceptor of the co-stimulatory receptor family that has immunoreceptor tyrosine-based inhibitory motif (ITIM). It is expressed on the surface of activated T cells and B cell and plays a significant role in maintenance of peripheral tolerance (Nishimura and Honjo 2001). A recent study showed an intronic single nucleotide polymorphism in PDCD1 that is significantly associated with the development of SLE in Europeans and Mexicans. This SNP alters the binding site for the transcription factor RUNX1 (Prokunina and others 2002). Another gene, PTPN22 found at the 1p13 region of chromosome 1 has been associated to lupus. This gene encodes a negative regulator of T-cells signal transduction (Hasegawa and others 2004). A polymorphism at the proximal proline-rich SH3-binding domain of PTPN22 results in an R630W amino acid substitution. This polymorphism is associated with an increased risk of developing SLE in Caucasians (Kyogoku and others 2004).

Another candidate immunoregulatory gene encodes Fc γ RIIb, which has an ITIM in its cytoplasmic domain and inhibits tyrosine-based activation signals in different cell

subsets (Hawiger and others 2001). Mice deficient for FcγRIIb develop autoantibodies and autoimmune glomerulonephritis in a strain-dependent fashion (Bolland and Ravetch 2000). In humans, a polymorphism of FcγRIIb, FcγRIIbT₂₃₂, was identified that encodes a substitution from isoleucine to threonine at position 232 within the transmembrane domain. Frequency of homozygosity for this polymorphism is at least double in persons affected with SLE as compared to their healthy counterparts (Floto and others 2005). Polymorphisms at this position in the cytoplasmic domain of FcγRIIb make it unable to inhibit activatory receptors. Alternatively, activating Fcγ receptors, such as FcγR2A and FcγR3A, have immunoreceptor tyrosine-based activating motifs (ITAMs) in their cytoplasmic tail which activate the cells when they bind to the Fc portion of antibodies. These receptors play very important roles in the clearance of immune complexes from the blood.

A recent meta-analysis, involving around 17 different studies including 1,405 patients with lupus nephritis, 1,709 SLE patients without nephritis and 2,580 healthy controls, showed significant correlation of FcγIIa- R/H131 polymorphism to SLE susceptibility in patients from different ethnic background (Karassa and others 2002). Other receptors like FcγIIIa, which is expressed on NK cells, subsets of monocytes and macrophages, binds to the Fc portion of both IgG1 and IgG3 subclasses. This receptor has two variants, F158 and V158, that differ in phenylalanine or valine amino acids at position 176 in the extracellular domain of the receptor, respectively. V158 homozygous variant binds to Fc portion of IgG1 and IgG3 more avidly than the F158 variant (Koene and others 1997; Wu and others 1997). Recently, a separate meta analysis which included 11 studies and involved 1154 patients with lupus nephritis, 1261 SLE patients

without nephritis, and 1455 controls, showed that the FcγIIA-V/F158 polymorphism was significantly associated with lupus nephritis (Karassa and others 2003).

Another important player in the clearance of immunecomplexes is the complement system. Very recently it has been shown that a single nucleotide polymorphism in the receptor for the complement component CR2, which expressed on mature B cells and follicular dendritic cells, was significantly associated with susceptibility to SLE (1.54-fold increased risk) (Wu and others 2007). Because it was recently shown that type I IFNs play a prominent role in the pathogenesis of SLE (Banchereau and Pascual 2006), genetic alterations in this pathway are of great interest. When thirteen candidate genes in these pathway were analyzed for 44 SNPs in patients from different ethnic background with SLE, polymorphism in tyrosine kinase 2 (TYK2) and IFN regulatory factor 5 (IRF5) were significantly associated with SLE (Sigurdsson and others 2005); and interestingly, these findings were very recently confirmed (Harley and others 2008). This same report as well as others show that polymorphisms in various genes like BANK1 (a B cell genes), BLK gene encoding B lymphoid tyrosine kinase, ITGAM gene encoding CD11b, ITGAX gene encoding integrin- α , and PXX gene were associated with susceptibility to SLE (Harley and others 2008; Hom and others 2008; Kozyrev and others 2008; Nath and others 2008). A significant gender bias of SLE towards females can possibly be explained by the recent finding regarding association of a SNP in the MECP2 gene which encode methyl-CpG-binding protein 2, to susceptibility to SLE, since this gene is located on chromosome Xq28 and play an important role in epigenetic transcriptional regulation of methylation-sensitive genes (Sawalha and others 2008)

Environmental Factors

Photosensitivity is a hallmark symptom of SLE. Exposure to sunlight is known to exacerbate the systemic disease activity. Specifically, ultraviolet B (UVB) irradiation has multiple effects on the keratinocytes of the skin which are important in lupus pathogenesis, including induction of apoptosis of keratinocytes and expression of soluble intracellular antigens like small nuclear ribonucleoprotein (snRNPs) such as the 52 kD Ro/SS-A on the cell surface. This ectopic expression of intracellular antigens may make them available as immunogens (Casciola-Rosen and others 1994; White and Rosen 2003). It is well known that SLE patients have antibodies against these nuclear antigens, which can form ICs. ICs containing chromatin antigens can bind to plasmacytoid dendritic cells and activate them to secrete type I IFN, therefore closing a pathogenic loop (Lovgren and others 2006).

In addition, various drugs and chemicals have been reported to cause symptoms and laboratory characteristics which closely resemble those of SLE, giving rise to what is known as the “lupus-like syndrome” or as “drug-induced lupus erythematosus (DILE)”. DILE is diagnosed according to: (1) continuous treatment with suspected drug for at least one month or longer, (2) common presenting symptoms: arthralgias, myalgias, malaise, fever, serositis, (3) laboratory profile: anti-histone antibodies, (4) symptoms improve within days or few weeks after discontinuation of the treatment (Sarzi-Puttini and others 2005). The first reported agent associated with DILE was sulfadiazine. Since then over eighty, often commonly prescribed drugs, has been reported to induce DILE. Another chemical which can induce lupus like symptoms is, L-cancavaline, a non-protein amino acid in alfalfa sprouts and seeds (Akaogi and others 2006).

Viral infection may also play an important role in the etiology and pathogenesis of DLR. In lupus patients, elevated titres of antibodies against measles, rubella and Epstein-Barr virus (EBV) has been reported (Edwards and Cooper 2006). Since these are common viral infections, increased antibody titres can result from polyclonal B cell activation rather than have a causative role. A strong association of SLE with EBV has been suggested due to increased load of EBV in patients, along with high titres of anti-EBV antibodies. Furthermore, sequence homology between various autoantigens and Epstein-Barr Nuclear Antigen-1 (EBNA-1) have been described (James and others 2006).

Immune System Dysregulation

As described in the previous section, environmental factors acting on individuals with genetic susceptibility can trigger disease. But how this cascade of events starts and

SLE Monocytes Display DC Function

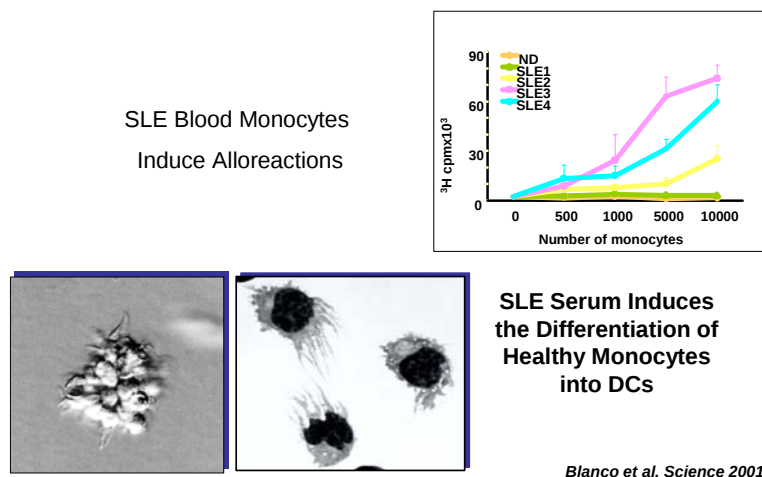


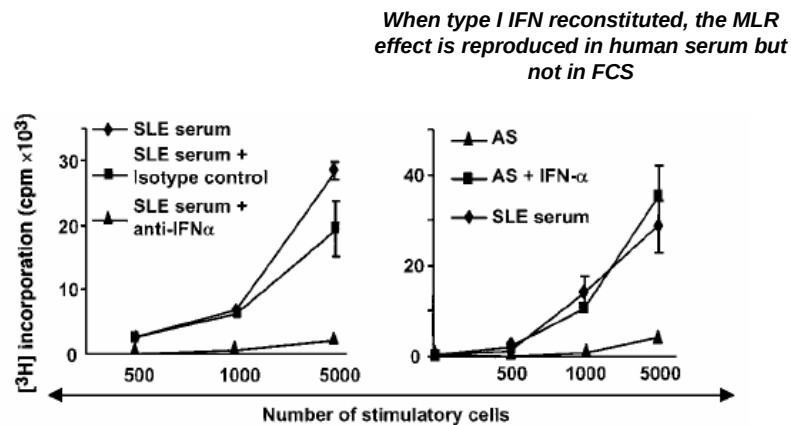
Figure 1. SLE monocytes display DC function. (A) Monocytes from a proportion of SLE patients induce proliferation of allogeneic CD4⁺ T cells. (B) SLE patients' serum induces monocytes to differentiate into cells with DC properties. Monocytes cultured with SLE patients' serum (left), but not with autologous serum (right), cluster within 12 to 24 hours, and, within 24 to 72 hours, clustered cells display fine cytoplasmic projections (Giemsa staining, middle).

at what point immune regulation mechanisms fail is not known. Very recently, great progress has been made in understanding how peripheral tolerance breaks. Dendritic cells, which bridge innate and adaptive immunity, induce tolerance when they are immature and incite immune reactions when mature (Banchereau and Steinman 1998; Steinman and others 2003). In SLE patients, monocytes - precursors for dendritic cells - induce CD4 T cells to proliferate (Blanco and others 2001) (Figure 1). This CD4 T cell proliferation-inducing capacity of monocytes from SLE patients is dependent on the presence of type-I interferons in patients' sera, as it can be reproduced by adding lupus sera to healthy monocytes and can be inhibited by adding neutralizing monoclonal antibodies (Figure 2). It also been shown that type I interferon, which is produced by plasmacytoid dendritic cells (pDC) (Liu 2005; Siegal and others 1999), with the help of IL-6 drive the differentiation of mature B cells to plasma cells (Jego and others 2003; Jego and others 2005). In SLE patients plasmablast cells which are precursors of plasma cells are expanded in the blood (Arce and others 2001). Gene expression profile from the PBMCs of the pediatric SLE patients showed the signature of plasma cells and low density immature neutrophils, which correlated with number of immature neutrophils in PBMCs (Bennett and others 2003).

Blood B cell alterations in human SLE. Profound alterations in blood B cell compartments have been described in SLE (Odendahl and others 2000). Conventional naïve and memory B cell numbers are decreased while CD38⁺ B cells, which include oligoclonal plasma cell precursors (PCPs), are expanded. SLE blood PCPs display a phenotype similar to that of PCPs found in the blood during secondary immune responses, including isotype-switched and mutated Ig genes (Arce and others 2001).

While these cells are only transiently increased during normal immune responses, they are persistently elevated in children with SLE. Whether these SLE PCs will become short-lived or long-lived plasma cells is not clear yet. Studies in mice suggest that they may be only short lived.

SLE Serum-Induced Monocyte Differentiation into DC is Due to IFN- α



Blanco et al. Science 2001

Figure 2. Induction of DC differentiation is IFN- α dependent. (A) IFN- α neutralizing antibody (10 $\mu\text{g/ml}$) blocks the induction of DCs by SLE patients' serum. Representative of three experiments. (B) Spiking autologous serum with 100 UI/ml IFN- α results in the induction of monocyte differentiation to DCs as determined by MLR capacity.

Intrinsic defects in B cell tolerance checkpoints. Large numbers of developing B cells in the bone marrow and recent emigrants in the blood express self-reactive B cell receptors (BCRs). However, they represent only 5-20% of healthy naïve blood B cells (Wardemann and others 2003), thus suggesting the presence of a major tolerance checkpoint. In SLE patients this checkpoint is defective, as 25-50% of the blood naïve B cells express self-reactive BCRs (Yurasov and others 2005). Further evidence for altered B cell tolerance checkpoints in SLE comes from the analysis of B cells expressing the

VH4-34 gene, which encodes autoantibodies of different specificities (Pascual and Capra 1992). In healthy individuals, VH4-34⁺ B cells are excluded during the early stages of the germinal center (GC) reaction before acquiring a centroblast phenotype, thus representing a second checkpoint. In SLE, but not in Rheumatoid Arthritis (RA) patients, VH4-34⁺ cells progress through this checkpoint, participate in GC reactions, and are expanded within the post-GC IgG memory and plasma cell compartments (Cappione and others 2005). Although the gene(s) responsible for the control of human B cell tolerance checkpoints in SLE patients are not known, studies in mice have identified potential candidates. For example, the Sle1z/Sle1bz murine lupus susceptibility locus on chromosome 1, which is associated with production of anti-chromatin antibodies, has been shown to impair B cell anergy, receptor revision, and deletion. The Ly108.1 isoform of the Ly108 gene, a member of the SLAM costimulatory family, influences the ability of immature B cells to undergo deletion and RAG reexpression and represents the prime candidate for altering tolerance checkpoints in this model (Kumar and others 2006).

IFN- α/β and B cells. Through their effect on B cells, IFN- α/β directly enhance primary antibody responses to soluble proteins and induce the production of all subclasses of IgG in mice (Le Bon and others 2006). IFN- α/β also increases the expression of CD38 (Bennett and others 2003), which is expressed on germinal center B cells and plasma cells (Galibert and others 1996). Furthermore, it promotes the differentiation of mDCs that can directly act on the growth and differentiation of B cells (Dubois and others 1997; Garcia De Vinuesa and others 1999). mDCs trigger B cell growth and differentiation through IL-12 and IL-6 (Dubois and others 1998) as well as

BAFF (Balazs and others 2002; Litinskiy and others 2002; MacLennan and Vinuesa 2002), which is induced by IFN- α/β and contributes to the survival of peripheral, including self-reactive B cells (Thien and others 2004).

Virus-stimulated pDCs can induce the maturation of CD40-activated B cells into plasma cells through two cytokines. First, IFN- α/β promotes the differentiation of activated B cells into plasmablasts, then IL-6 permits plasmablasts to become antibody-secreting plasma cells (Jego and others 2003). The CD40-L signal required to activate pDCs might be provided by T cells, but other cell types may contribute as CD40-L is expressed by circulating T and B cells in SLE (Desai-Mehta and others 1996).

TLRs and B cells. Clinical SLE is preceded by the progressive accumulation of autoantibody specificities up to 9 yr before diagnosis. Anti-nuclear, anti-Ro, anti-La, and anti-phospholipid antibodies appear first, followed by anti-dsDNA antibodies and then anti-Sm and anti-nuclear ribonucleoprotein antibodies (Arbuckle and others 2003). Thus, clinically overt disease develops closer to the time of breakdown of tolerance against DNA and ribonucleoproteins.

The contribution of ICs and TLR signaling to the generation of autoantibodies characteristic of SLE has attracted numerous studies in mice but less is known in humans. In vitro, chromatin-containing IC activate transgenic autoreactive B cells via sequential engagement of the B cell antigen receptor (BCR) and TLR 9 (Leadbetter and others 2002). In vivo, TLR 9 contributes to the development of anti-ds DNA antibodies, as lupus-prone (Fas-deficient) mice that lack TLR 9 on the mixed MRL/B6/129 background fail to generate these antibodies. Yet, the production of cardiolipin and RNA-reactive antibodies and the development of nephritis are not affected in these mice (Christensen

and others 2005). On a different mouse background (B6 mice lacking the inhibitory Fc γ RIIb) (Bolland and Ravetch 2000), TLR 9 signaling is required for anti-DNA/polyreactive IgM⁺ B cells that have escaped central tolerance to switch to pathogenic isotypes (Ehlers and others 2006). Yet, in a different mouse lupus-like model, the pure MRL/lpr, TLR 9 seems to deliver protective signals, as TLR 9^{-/-} MRL/lpr mice develop more autoantibodies and severe lupus-like disease (Wu and Peng 2006). As discussed earlier, this model seems to be mediated by IFN- γ and not IFN- $\alpha\beta$, as the absence of type-I IFN receptor worsens disease in these mice (Hron and Peng 2004), which is at variance with the NZB model (Santiago-Raber and others 2003).

The contradicting mouse results on the contribution of TLR 9 signaling to SLE pathogenesis have also been reported for Dextran Sulfate Sodium (DSS)-induced Inflammatory Bowel Disease. Thus, TLR 9 ligands protect mice if administered prior to disease induction, but have the opposite effect in mice with established chronic disease (Katakura and others 2005; Obermeier and others 2003). Conclusions drawn from lupus-like models should therefore be extrapolated to humans only with caution. First, the expression of TLR 9 on immune cells differs significantly in mice and humans. Second, the various murine lupus-like models may not faithfully reproduce the human disease. For example, mutations in Fas/Fas-L which are the hallmark of the MRL/lpr/gld models extensively studied as surrogates to human SLE, do not cause this disease in humans. Instead, these mutations give rise to a unique syndrome characterized by lymphoproliferation and autoimmunity that is easy to differentiate from SLE (Worth and others 2006).

TLR 7 signaling also seems to contribute to SLE-like syndrome in mice. As shown for pDCs, ICs containing RNA and RNA-associated autoantigens activate autoreactive B cells in vitro (Lau and others 2005). In vivo, Fc γ RIIb $-/-$ mice develop enhanced autoimmunity when crossed to the Y-linked autoimmune accelerator (Yaa) locus (Bolland and others 2002), which harbors a duplication in the TLR 7 gene (Pisitkun and others 2006). Finally, injection of the TLR 7 ligand Imiquimod® increases serum levels of IL-12p70, IFN- α and IL-6 and aggravates lupus nephritis in MRL/lpr mice (Pawar and others 2006). Naturally occurring differences in expression of the TLR 7 gene, as well as environmental factors that induce TLR 7 expression (i.e., IFN- $\alpha\beta$ (Bekeredjian-Ding and others 2005; Mohty and others 2003)) and /or TLR 7 responses, could therefore result in increased pDC and B cell responses to RNA-containing self antigens and contribute to human SLE pathogenesis as well.

T cells and lupus. T cell lymphopenia is as common to SLE patients as B cell lymphopenia. Excess of IFN- α/β can explain this phenomenon as administration of type I IFNs into new born mice greatly reduced the development of both T and B lymphocytes (Lin and others 1998). In SLE, T cells are altered functionally as both CD4 and CD8 T cells express high amount of ICOS compared to healthy (Yang and others 2005). In the NZM2410 mice model of SLE, mice express Sle1 locus; and CD4 T cells from this mice are hyperproliferative and secrete high amount of cytokines, and provide help to anti-chromatin B cells in order to produce anti-nuclear antibodies (Chen and others 2005). Also, CD4 T cells from the MRL/lpr mice showed lower threshold of activation (Zielinski and others 2005). CD4 $^{+}$ T cells expressing CCR4 infiltrate renal tissue in SLE patients (Yamada and others 2002) and may cause renal tissue damage by cytotoxic

effect via perforin secretion, since secreted perforin is known to be functional as evidenced by its ability to kill monocytes *in vitro* (Kaplan and others 2004).

The role of regulatory T cells, important players in the maintenance of tolerance, in SLE patients is not well understood. Mice depleted of Tregs develop multi-organ autoimmune disease, and some mice develop lupus features like antibodies to dsDNA and glomerulonephritis (Sakaguchi and others 1995). CD4⁺CD25⁺ Tregs are reduced in SLE mice as well as in SLE patients (Mudd and others 2006). The suppressive function of CD4⁺CD25^{high} Treg is significantly decreased in active SLE patients along with reduced expression of Foxp3 at the RNA and protein level (Valencia and others 2007). Other subsets of T cells, such as follicular B helper T cells (T_{fh}) which are localized in B cell follicles in lymph node and support the antibody production (Vinuesa and others 2005b) may play an important role in SLE as these cells are expanded in two murine models of SLE: the Sanroque mice carrying a mutated ubiquitin ligase (roquin) gene (Vinuesa and others 2005a) and the B6.Sle1.yaa mice carrying a polymorphic cluster encoding SLAM and CD2 in addition to a duplication in TLR (Subramanian and others 2006).

Alteration in the CD8 compartment in SLE patients has been reported very extensively. Despite lymphopenia, active SLE patients have higher number of CD8⁺ T cells (Matsushita and others 2000) along with CD8⁺ T cells expressing HLA-DR, a marker for activated T cells (Viallard and others 2001). Percentages of CD8⁺DR⁺ T cells are most significantly associated with a flare in SLE patients (Blanco and others 2005; Viallard and others 2001). CD8 T cells from SLE patients express higher amount of perforin and granzyme B which correlated with disease activity. Sera from SLE patients

contain high amount of soluble nucleosomes (Amoura and others 1997). SLE CD8 T cells may play a role in this aspect of SLE, as CD8 T cells from SLE patients generate nucleosomes when mixed with target cells *in vitro* (Blanco and others 2005). It has been shown that CD8 T cells infiltrate predominantly the periglomerular areas of the kidney and may cause permanent damage at the site of infiltration (Couzi and others 2007).

Role of DCs in inducing immune reactions. Dendritic cells (DCs) play a central role in the immune reactions. They initiate as well as control the immune system by influencing other arms of the immune system. Dendritic cells are professional antigen presenting cells, and they present antigen to both B cells and T cells to initiate the antigen specific adaptive immune response (Banchereau and others 2000; Banchereau and Steinman 1998; Steinman 1991). DCs act as sentinels in all peripheral tissues in their immature state. There are mainly two types of dendritic cells based on their blood precursors: myeloid dendritic cells (mDC), originated from myeloid CD34⁺ progenitor cells which include interstitial dendritic cells, and langerhans DC and plasmacytoid dendritic cells (pDC) which may originate from lymphoid progenitor cells.

Microbial infections stimulate DCs to orchestrate a protective function for the immune system. Microbial products trigger DCs to secrete large amount of IL-12 (Reis e Sousa and others 1997), and IFN- α/β (Dalod and others 2002). Exposure to these cytokines activates other cells in the innate immune system like natural killer (NK) (Fernandez and others 1999) and NKT cells (Fujii and others 2002). Mature DC initiate or prime T cell responses (Inaba and others 1993; Inaba and others 1990) by polarizing it to either Th1 or Th2 responses (Nakahara and others 2006; Pulendran 2004; Soares and others 2007). To control innate and adaptive immunity, DCs must undergo terminal

differentiation and maturation. Maturation can be induced by various agents including microbes and their products. *In vivo*, maturation can be induced by TLR ligation (De Smedt and others 1996; Sparwasser and others 2000) and CD40, a tumor necrosis family member (O'Sullivan and Thomas 2003). *In vitro*, DC maturation can be induced by a cocktail of inflammatory cytokines like IL-1, TNF- α , IL-6 and PGE₂, as it has been shown in clinical vaccine trials (Jonuleit and others 1997). Maturation of dendritic cells results in many phenotypic and functional changes, such as increased production and expression of peptide-MHC complexes on the surface (Inaba and others 2000), increased expression of co-stimulatory molecules (Inaba and others 1994) and production of T cell growth factors like IL-2 (Granucci and others 2001) as well as thiols (require for to sustain lymphocyte activation and proliferation (Gmunder and others 1990)) (Angelini and others 2002), chemokines (Sallusto and others 1999), and cytokines (Langenkamp and others 2000). The maturation process triggers peripheral DC migration to the T cell area of lymphoid organs. Upon maturation, DCs upregulate a chemokine receptor, CCR7 (Yoshida and others 1997) and acquire responsiveness to MIP-3 β (CCL19) (Dieu and others 1998) and other secondary lymphoid-tissue chemokines (SLC) (CCL21) (Chan and others 1999). CCR7 allows mature DC to leave the inflamed tissues and enter the lymph by transmigrating through lymph vessels (Saeki and others 1999). In the lymphoid organs, mature dendritic cells encounter T cells and receive additional maturation signals from CD40 ligand, RANK/RANKL, 4-1BB and OX40 ligand, they in turn secrete IL-8, fractalkine and other chemokines which attract lymphocytes (Adema and others 1997; Kanazawa and others 1999; Tang and Cyster 1999).

Role of DC in Immune Tolerance. Dendritic cells play a role in both central and peripheral tolerance. During the process of intrathymic T cell development, around fifty million cells are generated daily, and 95% of them are lost daily due to positive and negative selection of T cells in the thymus (von Boehmer and others 2003). Cortical and medullary thymic epithelial cells (cTEC and mTECs), thymic dendritic cell, macrophages and thymic B cells express various tissue restricted self-antigens (TRAs) in the context of MHC class II molecules (Kyewski and Klein 2006). Both thymic epithelial cells and thymic DCs can eliminate autoreactive T cells. Thymic dendritic cells are most efficient at deleting T cells during this process (Anderson and others 1998).

Even though central tolerance is efficient, it is not complete. Indeed self-reactive T cells especially those T cells with lower affinity for self-antigens, can escape the negative selection and reach the periphery (Bouneaud and others 2000). Tolerance to those self antigens which do not have access to the thymus needs to be developed (Lo and others 1989). T cells recognizing antigens which are expressed later in the life after formation of the lymphocyte repertoires, as well as those non pathogenic environmental antigens to which body is constantly exposed to, like proteins and natural commensal bacterial flora in gut and intestines, also need to be toleraized (Steinman and Nussenzweig 2002). Dendritic cells play an important role in this process. Indeed, immature myeloid DCs induce tolerance in the steady state (Steinman and Nussenzweig 2002). At this stage, DCs are highly phagocytic and efficiently engulf and process proteins from peripheral tissues including those from dying cells. These DCs then migrate to lymphoid tissues. Thus, DCs loaded with apoptotic material are found in steady-state within Peyer's patches and mesenteric lymph nodes in the gut and (Huang

and others 2000), and in the thoracic lymph nodes from the lung (Vermaelen and others 2001). These DCs then present the processed self-antigens in the absence of costimulatory signals to naïve autoreactive T cells and induce T-cell anergy or deletion (Banchereau and others 2004). Also, immature DCs control peripheral tolerance by inducing the expansion of regulatory T cells (Yamazaki and others 2006). Additionally, plasmacytoid DCs (pDC), induce tolerance against alloantigens through induction of regulatory T cells (Ochando and others 2006).

Role of DCs in SLE. Monocytes represent a major source of precursor DCs under inflammatory conditions (Banchereau and Palucka 2005). Thus, GM-CSF allows monocyte activation and other cytokines permit the differentiation into distinct DC subtypes. In particular, IFN- α/β together with GM-CSF drive monocytes to become DCs (Luft and others 1998; Paquette and others 1998; Santini and others 2000). Blood monocytes from SLE patients behave like mDCs, as they are able to induce the proliferation of allogeneic CD4⁺ T cells (Blanco and others 2001). Furthermore, exposure of normal monocytes to SLE serum results in the generation of DCs, suggesting that SLE blood represents a DC-inducing environment. This activity is dependent on IFN- α and correlates with disease activity (Blanco and others 2001). Unabated DC maturation could lead to the activation/expansion of autoreactive T cells which have escaped central tolerance, thus explaining many of the features of the disease (Banchereau and others 2004) (Figure 3).

DCs generated in the presence of sera containing IFN- α from patients with active disease also drive the differentiation of CD8⁺ T cells toward fully active cytotoxic effector T lymphocytes able to generate nucleosomes (Blanco and others 2005) as well

as granzyme B-dependent unique autoantigen fragments (Casciola-Rosen and others 1999). These novel autoantigens could be captured and presented by mDCs, therefore establishing a self-amplifying loop. Indeed, administration of DC loaded with apoptotic cells consistently triggers autoimmune responses in mice, although clinical autoimmunity only develops in genetically susceptible recipients (Bondanza and others 2003; Georgiev and others 2005).

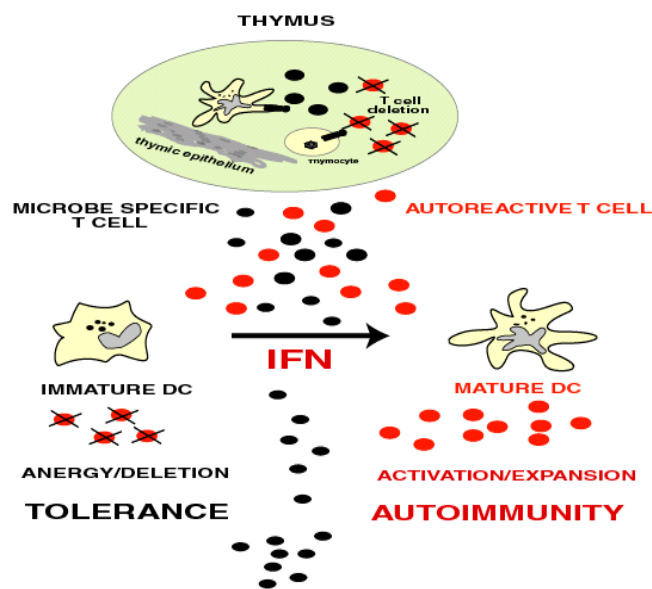


Figure 3. Fate of Autoreactive T Cells. Autoreactive thymic escapees are silenced in periphery via immature DCs, which control peripheral tolerance. Excess IFN- $\alpha\beta$ induces unabated DC maturation, which leads to activation/expansion of autoreactive T cells.

pDC numbers are reduced in SLE blood (Blanco and others 2001), but these cells massively infiltrate inflamed lupus skin (Blomberg and others 2001; Farkas and others 2001). The decrease in SLE blood pDCs might thus result from their accelerated migration to inflammation sites, as demonstrated in allergen challenged nasal mucosa (Jahnsen and others 2000). A unified view of the pathogenesis of SLE is depicted in Figure 4.

migrate to inflamed tissue where they differentiate into dendritic cells and induce naïve T cells proliferation, and (2) $\text{Gr-1}^{\text{low}}\text{CCR2}^-\text{CX3CR1}^{\text{high}}$ migrate to non inflamed tissues like spleen, lungs, liver, and brain (Geissmann and others 2003). Like in the mouse, two subsets of human monocytes circulate in the blood: (1) $\text{CD14}^+\text{CD16}^-\text{CX3CR1}^{\text{low}}$ and (2) $\text{CD14}^{\text{low}}\text{CD16}^+\text{CX3CR1}^{\text{high}}$ (Geissmann and others 2003; Passlick and others 1989; Ziegler-Heitbrock and others 1993). Monocytes migrate from the peripheral blood and differentiate into macrophages and DCs in peripheral tissues, Langerhans cells in skin, osteoclast in bone, microglial cells in CNS and Kupffer cells in liver (Gordon and Taylor 2005). In mouse, $\text{Gr-1}^{\text{high}}$ subsets of monocytes home to the inflamed skin and differentiate to epidermal Langerhans cells *in vivo* (Ginhoux and others 2006). In humans, $\text{CD14}^+\text{CD16}^-$ monocytes differentiate into Langerhans cells in CXCL14 based *in vitro* tissue model system (Schaerli and others 2005). Some evidence suggest the presence of third subtype Gr-1^{int} monocyte which express CCR7 and CCR8 at RNA transcription level in the mice likely to be a precursor for the lymph homing dendritic cells (Qu and others 2004) correspond to $\text{CD14}^+\text{CD16}^+$ in humans (Tacke and Randolph 2006) and these subtypes believed to be precursors for Gr-1^{low} subtype of monocytes differentiating from $\text{Gr-1}^{\text{high}}$ monocytes.

Alteration in the monocyte compartment of individuals with SLE have been described, since monocytes from these patients induce CD4 T cells proliferation, a characteristic of dendritic cells (Blanco and others 2001). SLE serum induces the differentiation of monocytes into dendritic cells, and this differentiation capacity of SLE serum depends on the presence of type-I IFN based on evidence that using a neutralizing anti-type-I IFN antibody abrogates the capacity of the serum to induce dendritic cell

differentiation. This effect of SLE serum was reproduced when type I IFN was reconstituted in human AB serum, but could not be reproduced using fetal calf serum (FCS) reconstituted with type-I IFN. Based on these observations, our hypothesis is that there are other serum factor(s) present in SLE serum which contribute to the differentiation of monocytes into dendritic cells. This hypothesis will be investigated in these studies using gene expression profiling as a tool. SLE monocytes will be studied to determine whether or not they harbor intrinsic defects or if the cytokine microenvironment in which these cell develop can explain their abnormal behavior.

What Have We Learned From the Animal Models of Lupus?

Overview. Several murine lupus models exist, though none of them appears to fully reproduce the human disease. They can be divided into: (1) spontaneous, (2) congenic, and (3) engineered models (Liu and Mohan 2006).

The best known spontaneous models arise on New Zealand Black (NZB), New Zealand White (NZW), MRL, BXSB and SWR backgrounds. Hybrids of some of these background strains, like the NZB/W F1, NZM2410 and the SWR/NZB F1 develop anti-nuclear antibodies, glomerulonephritis and other features of human disease. The *lpr* (Fas) or *gld* (FasL) mutations on the MRL background give rise to mice with features of human lupus (Liu and Mohan 2006). Yet, the massive degree of lymphoproliferation that occurs in these mice is not found in humans. Additionally, although MRL-*lpr/lpr* mice spontaneously develop arthritis, it displays more features of rheumatoid arthritis than of the arthropathy seen in human SLE. Conversely, humans carrying mutations in the Fas/FasL genes do not develop SLE. The *yaa* mutation, which accelerates disease on the

BXSB background, is due to a translocation of the TLR7 gene into the Y chromosome, explaining the predominantly male predisposition to disease in this particular model (Pisitkun and others 2006; Subramanian and others 2006), which is at striking difference with the 9:1 female to male ratio in human SLE.

Congenic mice bearing individual predisposing loci on lupus-resistant strains have been generated. The best studied models bear the NZM2410-derived *Sle1*, *Sle2* and *Sle3/5* intervals on the B6 background (Liu and Wakeland 2001). These models underscore the importance of epistatic interactions among different loci. *Sle1*, for example, is a genetic interval responsible for breaking B cell tolerance to chromatin. However, this interval does not lead to disease manifestations unless in epistasis with *Sle2* (B cell hyperactivity), *Sle3/5* (APC hyperactivity), *Yaa* (TLR7 duplication) or *lpr* (Fas mutation).

Many lupus-like syndromes arise in mice deficient in single genes. They fall into two main categories: (1) clearance of apoptotic cells and (2) lymphocyte activation and survival. Genes within the first (C1q, C2, C4 and Dnase I) and second (CD45, CTLA-4, PD1 and FcγRIIb) groups are also candidate susceptibility genes in humans according to linkage and/or association studies (Alarcon-Riquelme 2005).

IFN in mouse models. Recent studies in lupus-prone mice confirm the critical role of IFN- $\alpha\beta$ in SLE pathogenesis. *In vivo* delivery of IFN- α to preautoimmune NZB/W F(1), rapidly results in severe SLE. Anti-dsDNA antibodies appear as early as 10 days after initiation of IFN- α treatment, demonstrating a critical role for IFN- α in the selection and expansion of autoreactive clones. Proteinuria and glomerulonephritis-induced death occurred in all treated mice at 9 and 18 weeks respectively, a time when

untreated mice did not show any sign of disease (Mathian and others 2005). Conversely, the cross of both NZB and B6 *lpr/lpr* mice with a type-I IFN receptor KO strain significantly decreases morbidity and prolongs the survival of these animals (Braun and others 2003; Santiago-Raber and others 2003). As opposed to the NZB/W model, IFN- γ but not IFN- $\alpha\beta$ seems to mediate disease in the MRL*lpr* mice. Indeed, deficiency of the IFN- γ or the IFN- γ receptor genes lead to a delay in both the onset of disease and the severity of glomerulonephritis (Balomenos and others 1998; Peng and others 1997) while these symptoms are enhanced when the mice are rendered deficient in the type-I IFN receptor (Hron and Peng 2004). These data, together with the expression of a strong IFN- γ gene signature in the spleen (Liu and others 2006), support the role IFN- γ in the *lpr* model.

Project Objectives

Healthy monocytes are immunologically quiescent cells. The monocyte compartment in circulating blood is heterogeneous in nature and are comprised of at least three subsets: CD14^{high}CD16⁻, CD14^{high}CD16⁺, and CD14^{low}CD16⁺, each with different migratory properties. Among these subsets, the CD14^{low}CD16⁺ monocytes may be a potential source of precursors for DC in the normal steady-state (Randolph and others 2002).

In SLE patients, however, these cells are altered. Specifically, monocytes isolated from these patients display DC function – that is, they are able to induce the proliferation of allogeneic T cells. Furthermore, sera from SLE patients can induce normal monocytes to differentiate into DCs. This DC-inducing property may be due to the presence of type-I

IFNs in SLE serum (Blanco and others 2001), as well as other, yet uncharacterized factors (Gill and others 2002).

The overall goal of this project is to study and characterize the monocyte compartment of SLE patients in an effort to identify alterations at both the genomic and proteomic level that may help explain some of these unusual features displayed by SLE monocytes. Along with this, studies have been delineated in an effort to try to identify additional uncharacterized factors in SLE sera, which may induce the differentiation of monocytes into dendritic cells.

To this end, the following specific aims will be addressed:

1. Phenotypic characterization of SLE monocytes
2. Gene Expression Profiling of SLE monocytes
3. Characterization of the effects of SLE serum on healthy monocytes

CHAPTER TWO

Materials and Methods

Subjects

Patients

All SLE patients were collected from the Pediatric Rheumatology Clinic at Texas Scottish Rite Hospital in Dallas, Texas.

A total of 51 SLE patients including 7 males and 44 females, were studied in this project. The average age of the patients at the day of sample collection was 15 years (range, 8 to 19), and the average duration of SLE was 0.69 years (range, 0 to 2.06 years). The breakdown of the patients with regards to ethnicity was as follows: 45% Hispanic, 27% African American, 18% Caucasians, 4% Asian, and 2% unspecified. Table 5 shows the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) and medications for each patient in the study.

Healthy Donors

The control population consisted of 21 randomly selected healthy children, including 5 males and 16 females, with an average age of 12 years (range, 6 to 22). The ethnic breakdown of the healthy donors was as follows: 42% Caucasian, 29% Hispanic, 19% African American, and 10% Asians.

Blood Collection

Whole blood samples were collected from pediatric patients and healthy donors using standard venipuncture techniques. Blood was drawn in either EDTA or sodium citrate vacutainer tubes (BD, Franklin Lake, NJ) for the cellular immunology experiments, and the samples were utilized within four hours of collection. All blood collection protocols were reviewed and approved by the Institutional Review Board at the Baylor Research Institute, at Texas Scottish Rite Hospital in Dallas, Texas.

Isolation/Purification of Cell Subsets

Peripheral Blood Mononuclear Cells

A standard protocol for lymphocyte separation with modifications was used for isolation of peripheral blood mononuclear cells (PBMCs) (Marjorie E. Kanof 2007). Briefly, after blood collection, tubes containing EDTA or sodium citrate were centrifuged at 2400 rpm for 10 minutes to separate the plasma from the cells. Plasma was then collected in separate 50ml conical tubes, and the remaining sample diluted in PBS (2X the remaining volume). Diluted blood cells were then layered onto Lymphocyte Separation Media (half the volume of diluted blood) Cellgro® (Mediatech Inc., Herndon, VA) in a separate 50 ml conical tube, and the tubes were centrifuged in a Sorvall/Heraeus MultiFuge® 3S-R centrifuge at 1800 rpm for thirty minutes at room temperature without brake. After centrifugation, cells at the interface were collected and transferred to a 50 ml tube, washed with PBS, and spun down at 1400 rpm at 4 °C. The supernatant was removed, and cells were transferred to a 15 ml tube conical tube. Finally, the cells were washed again with PBS and spun down at 1000 rpm for 10 minutes at 4 °C.

Table 3. Clinical and Treatment Information for SLE Patients

OP: Oral prednisone, CYC: cyclophosphamide, Plaq: plaquenil, MMF: Mycophenolate Mofetil, MTX: Methotrexate, A-HTN: anti hypertensive, NSAID: Non Steroidal Anti Inflammatory drugs, ASA: Aspirin

Sample	SLEDAI	OP	Steroid IV	CYC	Plaq	MMF	MTX	A-HTN	NSAID	ASA
SLE-113	2	Yes	No	No	Yes	No	No	No	No	No
SLE-123	12	No	No	No	Yes	Yes	No	No	No	No
SLE-125	8	No	No	No	Yes	No	No	No	No	No
SLE-133	ND	Yes	Yes	Yes	Yes	No	No	Yes	No	No
SLE-136	10	Yes	No	No	Yes	Yes	No	No	No	No
SLE-137	18	No	No	No	No	No	No	No	No	No
SLE-138	2	-	-	-	-	-	-	-	-	-
SLE-140	-	No	No	No	No	No	No	No	No	No
SLE-142	8	Yes	Yes	No	Yes	No	Yes	No	No	No
SLE-143	22	No	No	No	No	No	No	No	No	No
SLE-144	8	No	No	No	No	No	No	No	No	No
SLE-145	21	No	No	No	No	No	No	No	No	No
SLE-150	5	Yes	No	No	Yes	Yes	No	No	No	Yes
SLE-154	16	Yes	Yes	Yes	Yes	No	No	Yes	No	No
SLE-157	3	Yes	No	No	Yes	Yes	No	No	No	Yes
SLE-163	2	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes
SLE-168	12	Yes	Yes	Yes	Yes	No	No	Yes	No	No
SLE-170	6	Yes	Yes	Yes	Yes	No	No	Yes	yes	No
SLE-171	6	Yes	Yes	Yes	Yes	No	No	No	No	Yes
SLE-172	4	No	No	No	no	No	No	No	yes	No
SLE-176	2	-	-	-	-	-	-	-	-	-
SLE-177	8	Yes	Yes	Yes	Yes	No	No	Yes	No	No
SLE-180	2	-	-	-	-	-	-	-	-	-
SLE-181	12	Yes	No	No	Yes	No	No	No	No	Yes
SLE-183	6	Yes	No	Yes	Yes	No	No	No	No	No
SLE-185	12	Yes	Yes	No	Yes	No	No	E	No	No
SLE-19	0	No	No	No	no	No	No	No	Yes	No
SLE-190	8	No	No	No	no	No	No	No	No	No
SLE-197	10	Yes	No	No	no	Yes	No	Yes	No	No
SLE-199	14	Yes	Yes	Yes	Yes	No	No	Yes	No	No
SLE-20	6	Yes	No	No	Yes	Yes	No	Yes	No	No
SLE-207	-	Yes	No	Yes	Yes	Yes	No	Yes	No	No
SLE-209	-	Yes	No	No	Yes	Yes	No	Yes	No	No
SLE-215	24	Yes	No	No	Yes	No	No	No	No	No
SLE-216	-	No	No	No	Yes	No	No	No	No	No
SLE-218	-	Yes	No	Yes	No	No	No	Yes	No	No
SLE-224	16	Yes	No	No	Yes	No	No	No	No	No
SLE225	-	Yes	Yes	No	Yes	Yes	No	Yes	No	No
SLE-226	-	No	No	No	No	No	No	No	No	No
SLE-29	2	No	No	No	Yes	No	No	No	No	No
SLE-31	8	Yes	No	No	Yes	Yes	No	E	No	No
SLE-41	16	No	No	No	No	No	No	No	No	No
SLE-55	18	Yes	Yes	Yes	Yes	No	No	No	No	No
SLE-64	0	No	No	No	Yes	No	No	No	No	Yes
SLE-65	-	No	No	No	Yes	Yes	No	Yes	No	No

Table 4 Continued

Sample	SLEDAI	OP	Steroid IV	CYC	Plaq	MMF	MTX	A-HTN	NSAID	ASA
SLE-68	4	Yes	No	No	Yes	No	No	No	No	No
SLE-76	12	Yes	No	No	Yes	Yes	No	No	No	No
SLE-79	16	Yes	No	No	Yes	Yes	No	No	No	No
SLE-80	20	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
SLE-95	-	-	-	-	-	-	-	-	-	-
SLE-99	-	Yes	No	Yes	Yes	No	No	Yes	No	No

Monocytes

Monocytes were isolated from PBMCs from healthy donors and SLE patients by positive selection with CD14 Micro Beads (Miltenyi Biotec, Auburn, CA) as per the manufacturer's protocol. Briefly, every 10^7 PBMCs were resuspended in 80ul of PBS and incubated with 20ul of CD14 Micro Beads on ice for 20 minutes. Cells were then passed through an MS column (Miltenyi Biotec, Auburn, CA) using a VarioMACSTM magnetic separator (Miltenyi Biotec, Auburn, CA). The column was washed two times with ice cold PBS. After washing, the column was removed from the magnet; and cells were collected in a 15ml conical tube with ice cold PBS using a plunger. Monocytes were washed and counted, and their purity was checked by flow cytometry using the following antibody cocktail: CD14-FITC (M5E2), CD3-PE (HIT3a), HLA-DR-PerCP (L243) and CD19-APC (SJ25C1). Samples with a purity of >97% were utilized for further processing.

CD4 T Cells

PBMCs were isolated as described above and washed three times with PBS. CD4 T cells were then enriched using a StemSepTM Human CD4⁺ T Cell Enrichment Kit (StemCell Technologies, Inc., U.S.A). Briefly, PBMCs were incubated with a CD4 T cell enrichment antibody cocktail for 20 minutes at room temperature, then incubated

further with magnetic colloid for 20 minutes, and finally passed through a CS column (Miltenyi Biotec, Auburn, CA) and washed with PBS to enrich CD4 T cells. Possible contaminating dendritic cells were removed by using anti-HLA-DR magnetic beads (Miltenyi Biotec, Auburn, CA). CD4 T cells were counted and frozen at -80 °C.

Cell Sorting of Myeloid Dendritic cells (mDC) and Monocytes

Myeloid dendritic cells and monocytes from healthy volunteers were sorted on a FACS Aria® (BD Bioscience, Franklin Lakes, NJ) as Lineage⁻, CD11c⁺ HLA-DR⁺ and CD14⁺ HLA-DR⁺ cells respectively.

Cell Staining

Immunofluorescence

Monocytes, either from PBMCs (purified or unpurified) or harvested from cell culture experiments were stained with various conjugated antibodies (Table 8) using staining buffer (PBS+2% FCS) and Fc blockers (Miltenyi Biotec, Auburn, CA). Cells were washed after staining, fixed in 2% paraformaldehyde solution, and stored at 2-8°C prior to data acquisition. For whole blood staining, blood was incubated with antibodies and cells were lysed with BD FACS™ Lysing Solution (BD Biosciences, Franklin Lakes, NJ), washed, and fixed in 2% paraformaldehyde. Sample data was acquired on a BD FACSCalibur™ System (BD Biosciences, Franklin Lakes, NJ), analyzed using either CellQuest™ Pro (BD Biosciences, Franklin Lakes, NJ) or FlowJo (Tree Star, Ashland, OR) analysis software, and stored on a local BIIR server.

CFSE Staining

Frozen CD4 T cells were thawed, washed, and live cells were counted. Ten million CD4 T cells were resuspended in 1ml of PBS (Invitrogen Corporation, Carlsbad, CA) and stained with 1uM Carboxy Fluorescein Succinimidyl Ester (CFSE) (Invitrogen Corporation, Carlsbad, CA) for ten minutes in the dark. Staining was blocked with cold complete RPMI medium containing ten percent human AB serum. Cells were washed twice, resuspended in complete RPMI containing human AB serum and counted for viability.

Table 4. Antibodies used for immunofluorescence staining.

Antibody Specificity	Clone	Label	Vendor	Concentration
CD3	HIT3a	PE	BD, Franklin Lake, NJ	1ug/100 ul
CD4	RPA-T4	PE	BD, Franklin Lake, NJ	1ug/100 ul
CD8	SK1	Per-CP	BD, Franklin Lake, NJ	1ug/100 ul
CD11c	S-HCL-3	APC	BD, Franklin Lake, NJ	1ug/100 ul
CD14	M5E2	FITC	BD, Franklin Lake, NJ	1ug/100 ul
CD14	MΦP9	Per-CP/APC	BD, Franklin Lake, NJ	1ug/100 ul
CD16	3G9	APC	Invitrogen, Carlsbad, CA	1ug/100 ul
CD19	SJ25C1	APC	BD, Franklin Lake, NJ	1ug/100 ul
CD37	M-B371	FITC	BD, Franklin Lake, NJ	1ug/100 ul
CD40	5C3	PE	BD, Franklin Lake, NJ	1ug/100 ul
CD47	B6H12	FITC	BD, Franklin Lake, NJ	1ug/100 ul
CD48	MEM-102	FITC	Abd Serotec, Raleigh, NC	1ug/100 ul
CD56	MY31	PE	BD, Franklin Lake, NJ	1ug/100 ul
CD62L	Dreg 56	PE	BD, Franklin Lake, NJ	1ug/100 ul
CD64	10.1	FITC	BD, Franklin Lake, NJ	1ug/100 ul
CD69	L78	PE	BD, Franklin Lake, NJ	1ug/100 ul
CD80	L307.4	PE	BD, Franklin Lake, NJ	1ug/100 ul
CD81	JD-81	APC	BD, Franklin Lake, NJ	1ug/100 ul
CD83	HB5e	FITC	BD, Franklin Lake, NJ	1ug/100 ul
CD86	2331	FITC	BD, Franklin Lake, NJ	1ug/100 ul
CD123	955	PE	BD, Franklin Lake, NJ	1ug/100 ul
HLA-ABC	G46-2.6	PE	BD, Franklin Lake, NJ	1ug/100 ul
HLA-DR	L243	Per-CP	BD, Franklin Lake, NJ	1ug/100 ul
CCR1	53504.11	PE	R&D, Minneapolis,MN	1ug/100 ul
CCR2	48607	PE	R&D, Minneapolis,MN	1ug/100 ul
CCR5	CTC5	PE	R&D, Minneapolis,MN	1ug/100 ul
CCR7	150503	PE	R&D, Minneapolis,MN	1ug/100 ul
CXCR4	12G5	PE	R&D, Minneapolis,MN	1ug/100 ul
CX3CR1	2A9-1	PE	MBL, Woburn, MA	1ug/100 ul

In Vitro Experiments

Effect of IFN α 2b on Monocytes

Blood monocytes isolated from healthy volunteers were incubated with 20% autologous serum alone or in the presence of 1000U/ml of IFN α 2b (Schering Plough, Kenilworth, NJ) in 6-well plates at a concentration of 10^6 monocytes per well in 3 ml of media. After incubating for one hour at 37 °C, cells were harvested and RNA was extracted. Identical experiments were done after the following incubation time points: six hours, twenty four hours, two days, and three days.

Effect of Lupus Sera on Monocytes

Blood monocytes isolated from healthy volunteers were incubated in RPMI supplemented with L-glutamine, Gentamicin, and Penicillin in 6-well plates (1,000,000 cells/well/3 ml of medium) with either 20% autologous serum or 20% SLE sera from active and untreated lupus patients. Cells were harvested and RNA was extracted after a 6 hours incubation. In the same experimental setting, type-I IFNs were blocked in SLE serum by antibodies against human IFN- α (15000 neutralizing units), human IFN- β (3000 neutralizing units), and human IFN α/β receptor chain 2 (3.5 ug) (PBL InterferonSource, Piscataway, NJ). Soluble IFNs in SLE sera were blocked with anti IFN- α and anti IFN- β and monocytes were blocked with anti receptor antibodies for 30 minutes at 37 °C prior to mixing both in culture plate.

In some experiments, blood monocytes isolated from healthy volunteers were incubated in RPMI supplemented with L-glutamine, Gentamicin, and Penicillin in 24-

well plates (500,000 cells/well/1 ml of medium) with either 20% autologous serum or 20% SLE sera from active and untreated lupus patients.

Migration Assay

Healthy monocytes were incubated with 20% autologous sera or SLE sera for 16 hours. Cells were then harvested and an *in vitro* transwell migration assay was performed. Briefly, a 5 μ m-pore size insert with a polycarbonate membrane designed for a 24 well-plate was used for this assay (Corning Incorporated, Corning, NY). The lower chamber contained 600 μ l of 0.5 μ g/ml of CCL19 solution in RPMI supplemented with L-glutamine, Gentamicin, and Penicillin. A total of 0.5×10^6 monocytes in 200 μ l of the same media were added to the upper chamber. The plate was incubated at 37 $^{\circ}$ C for 3 hours, and the number of migrated cells was counted by flowcytometry using CountBright™ Absolute Counting Beads (Invitrogen Corporation, Carlsbad, CA).

Mixed Lymphocyte Reaction

CFSE labeled CD4 T cells (1×10^5) were incubated with monocytes (2×10^4) in 96-well plates in complete RPMI medium. Cells were harvested at six hours, 2 days, and 5 days. After 6 hours of culture, harvested cells were enriched by depleting T cells with CD3 Dynabeads® (Invitrogen, Carlsbad, CA), and RNA was extracted for use in microarray testing. After two days of culture, cells were harvested, and monocytes were stained for different cell surface markers. After five days of culture, cells were harvested, and the CFSE dilution was measured to assess the level of T cell proliferation.

Microarray Testing and Analysis

RNA Extraction and Quantitation

RNA was extracted using either the RNeasy® Mini Kit (Qiagen, Valencia, CA), if $> 5 \times 10^5$ were recovered, or PicoPure™ RNA Isolation Kit (Molecular Devices Corporation, Sunnyvale, CA) when $< 5 \times 10^5$ cells were recovered. The quantity of the RNA was determined by NanoDrop® ND-1000 UV-Vis Spectrophotometer (NanoDrop Technologies Wilmington, DE) by measuring 1 ul of the RNA solution against water as a blank. RNA integrity was determined using the Agilent 2100 bioanalyzer (Agilent Technologies, Santa Clara, CA) in which the RNA integration number (RIN) is expressed as a quality factor. Only RNA samples with a RIN of > 7.0 were used for final hybridization in the microarray assay.

Labeling and Hybridization of RNA Samples

RNA was labeled using the GeneChip® Two-Cycle Target Labeling kit (Affymetrix, Santa Clara, CA) following the manufacturer's recommended procedures. cRNA was fragmented and hybridized to the HG-U133A & HG-U133B Affymetrix GeneChip® arrays that contain 45,000 probe sets at 45°C for 16 hours. GeneChip arrays were washed, stained, and scanned according to protocols described in the GeneChip Expression Analysis Technical Manual (Affymetrix, Santa Clara, CA). Scanned GenesChips were inspected visually for abnormalities or irregularities.

Microarray Data Analysis

For each Affymetrix U133A and B GeneChip®, raw intensity data were normalized to the mean intensity of all measurements on that array and scaled to a target

intensity value of 500 (TGT), using Affymetrix Microarray Suite 5.0 software. Data were then further analyzed using GeneSpring software version 7.3.

To analyze the data from monocytes from untreated and treated SLE patients, 5 samples in each data set were used for final analysis, and compared to 5 samples from healthy donors. Data were normalized to this set of healthy controls. For each set of experiments, unsupervised clustering of samples was performed using the list of genes present in at least one sample to rule out technical variability. For supervised analysis, an Affymetrix flag call of 'present' in 3 out of 5 samples from each cohort was used to designate the filter for a reliable intensity measurement from each individual gene chip. These two lists combined were used as a quality control measure for class comparison, which was performed using a non- parametric ranking statistical analysis test (Mann Whitney) as well as a 2-fold difference in the average normalized value of healthy to test set. Genes from both class comparison methods were combined, and noise in the final data was reduced by filtering genes with a raw value of >200 in 3 out of 5 test samples, compared to the average raw signal from the healthy control set.

In the alloreaction experiments, data was normalized to monocytes that did not induce an alloreaction. An Affymetrix flag call of 'present' in 3 out of 4 samples of each cohort was used to designate the filter for a reliable intensity measurement from each individual gene chip. These two lists combined were used as a quality control measure for class comparison, since there was a 2-fold difference in the average normalized value of the two groups of monocytes. Possible noise in the final data was reduced by filtering in genes with expression raw values of >200 in 3 out of 4 monocyte samples inducing

alloreaction compared to the average raw value of monocytes which did not induce an alloreaction.

To identify monocyte genes up- or down-regulated after incubation with SLE serum, data were normalized to data from the corresponding control experiment using autologous serum. An Affymetrix flag call of 'present' in 3 out of 3 samples and a raw value of > 200 for each condition was used to designate the filter for a reliable intensity measurement from each individual gene chip. These two lists combined were used as a quality control measure for class comparison, since there were 2 fold differences in the average normalized values from the two groups of experiments.

In order to determine the global pattern of IFN-regulated genes in untreated SLE monocytes compared to healthy controls, a K-mean clustering algorithm was applied to genes expressed in untreated SLE monocytes cultured with IFN and harvested at different time points (1hr, 6hrs, 24 hrs, 2 days and 3 days).

CHAPTER THREE

Results

Phenotypic Characterization of SLE Monocytes

The differential expression of CD14 and CD16 (also known as Fc γ RIII) defines two major subsets of monocytes in peripheral blood: the “classical” CD14⁺CD16⁻ monocytes, typically representing up to 95% of the monocytes in healthy individuals, and the “non-classical” CD14^{low}CD16⁺ monocytes comprising the remaining fraction of monocytes (Passlick and others 1989; Ziegler-Heitbrock and others 1993). These subsets differ in many respects, including adhesion molecule and chemokine receptor (CCR) expression. CD14⁺CD16⁻ monocytes express CCR2, CD62L (L-Selectin) and FC γ RI (CD64), whereas CD14^{low}CD16⁺ monocytes lack CCR2, and have higher levels of MHC-II and FC γ RII (CD32) (Ancuta and others 2003; Geissmann and others 2003; Gordon and Taylor 2005; Weber and others 2000; Ziegler-Heitbrock and others 1993). Considerable heterogeneity exists however in the minor CD16⁺ monocyte fraction. An “intermediate” population of monocytes that is CD14⁺ (as opposed to CD14^{low}) and CD16⁺ differentiates *in vitro* differently than CD14^{low}CD16⁺ monocytes (Grage-Griebenow and others 2001a). CD16⁺ monocytes have been described to differentiate into antigen-presenting DCs (Grage-Griebenow and others 2001a; Randolph and others 2002). The extent to which human monocyte subsets differentiate into DCs *in vivo* is however too complex to predict, as both the phenotype of the cultured monocytes and factors present in the *in vitro* culture are expected to have a strong influence on the differentiation.

Previous work at our Institute revealed that blood monocytes from a fraction of pediatric SLE patients function as DCs (Blanco and others 2001). Thus, we used flow cytometry to characterize 1) the monocyte subpopulation distribution in pediatric SLE patients and healthy children, 2) the expression of molecules that might explain the acquisition of DC function by SLE monocytes. Whole blood samples were obtained after informed consent from 23 pediatric SLE patients (average age: 16.0 years) and 15 healthy children (average age: 12.2 years). The two groups were matched for gender and ethnicity. Samples (100 µl) were stained with the antibody combinations depicted in Table 5. While two major monocyte populations have been described based on expression of CD14 and CD16 in healthy adult donors, healthy children and pediatric SLE patients displayed a more complex pattern of surface monocyte staining. Indeed, 4 discrete populations could be recognized in the majority of blood samples: 1) CD14⁺⁺ CD16⁻ CD64⁺ CD62L⁺ HLA-DR^{low}, 2) CD14⁺⁺ CD16⁺ CD64⁺ CD62L⁺ HLA-DR^{high}, 3) CD14⁺ CD16⁺ CD64⁻ CD62L⁻ HLA-DR^{high} and 4) CD14⁺ CD16⁻ CD64⁻ CD62L⁻ HLA-DR^{low}. Furthermore, in a small number of healthy donors (N=3), a fifth population characterized by CD14⁺⁺⁺ CD16⁻ surface expression could be identified (Figure 5). According to this phenotypic scheme, pediatric SLE patients displayed an expansion of CD14⁺⁺CD16⁺ cells (p=0.01) while the distribution of the remaining populations did not differ from controls (Figure 6). We next analyzed monocyte surface marker expression in the same two groups of healthy and pediatric SLE patients using mAbs as described in the methods section. To our surprise, most of the molecules that are upregulated as monocytes differentiate into DCs were similarly expressed in cells from healthy children

and SLE patients (Table 5). The two main exceptions included a mild upregulation of CCR7 and a significant down-regulation of HLA-DR molecules especially within the

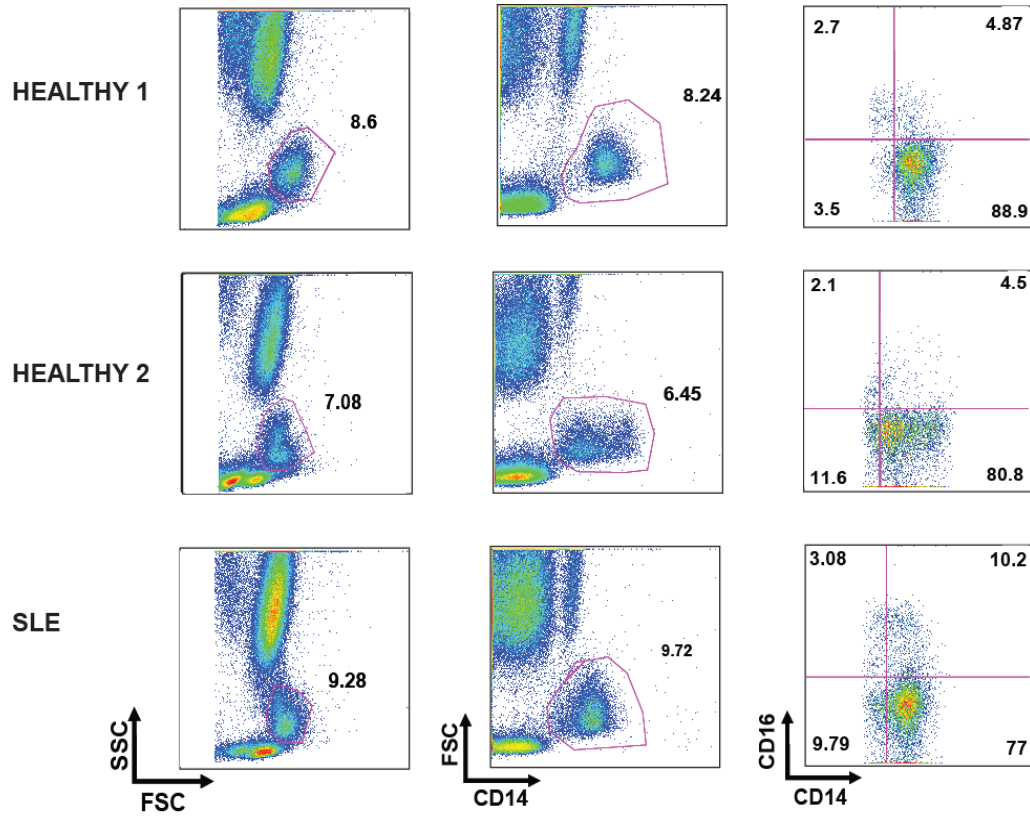


Figure 5. Distribution of major blood cells and monocyte subpopulations in two healthy children (H1 and H2) and one pediatric SLE patient. Cells were analyzed according to side and forward scatter (left panel), gated according to FSC and CD14 expression (middle panel) and further analyzed according to CD14 and CD16 expression into 4 subpopulations. Note the variability in CD14 expression among the two healthy controls.

CD14+ CD16- monocyte fraction from SLE patients (Table 5 and Figure 7). CD64 and CD62L, which are normally expressed within the CD14++ fraction, were mildly upregulated in SLE patients. Finally, CD81, a co-receptor for HCV and HIV which is known to be downregulated upon IFN-alpha exposure (Kronenberger and others 2001), was significantly downregulated in SLE CD14++ CD16- monocytes.

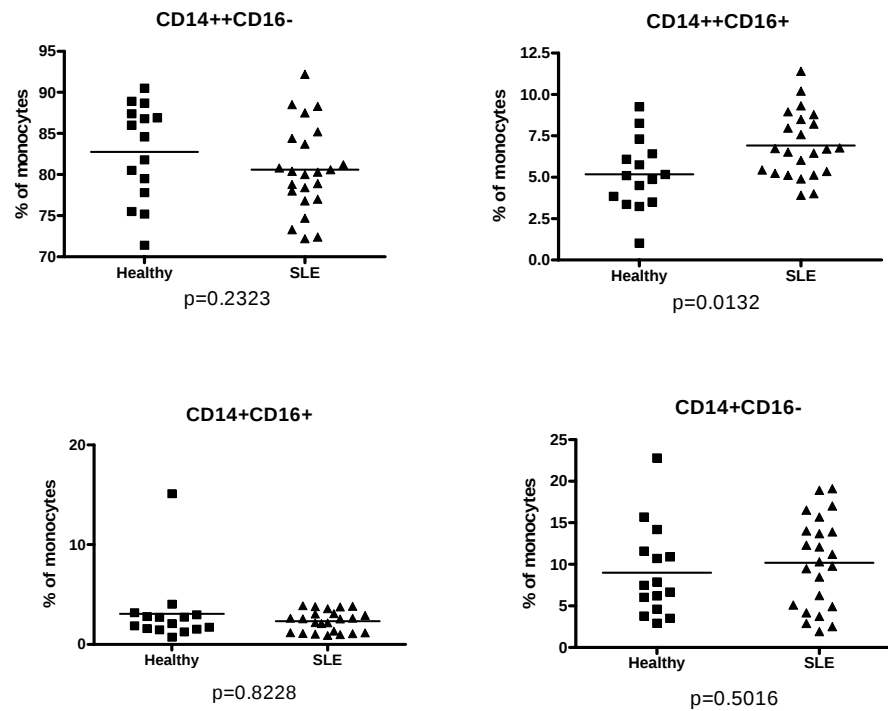


Figure 6. Distribution of major monocyte subpopulations in the blood of healthy children (N. 15) and pediatric SLE patients (N.23). P value was obtained according to non-parametric t-test (Mann-Whitney).

The fact that except for a mild upregulation of CCR7 none of the surface molecules involved in antigen presentation (i.e. HLA-DR, CD80, CD86) or in monocyte differentiation into DC (i.e. CD83) were upregulated in SLE blood monocytes led us to adopt a broader approach to identify possible differences between healthy children and patient cells.

Table 5. Subsets of monocytes (p-values between healthy and SLE)
* Low in SLE blood ** High in SLE blood

Markers	CD14++ CD16-	CD14++/+ CD16+
CD37	0.6541	0.5016
CD40	0.1695	0.2945
CD48	0.9286	0.4031
CD62L	0.058	** 0.0293
CD64	** 0.0316	** 0.0394
CD80	0.1135	0.2265
CD81	* 0.0001	0.3947
CD83	0.8695	0.3469
CD86	0.4736	0.8344
CCR2	* 0.0293	0.1561
CCR7	** 0.0155	0.2503
CX3CR1	0.2628	0.7201
HLA-ABC	0.1354	0.1434
HLA-DR	* 0.0488	0.5705

Gene Expression Profiling of SLE Monocytes

SLE Monocytes Display a Unique Gene Expression Profile

To assess the transcriptional program of SLE monocytes, we purified these cells from the blood of 5 healthy controls and 5 pediatric SLE patients. Previous gene profiling studies in our laboratory using PBMCs from SLE patients revealed that their transcriptional program changed considerably upon exposure to the drugs used to control disease manifestations (data not shown). We therefore selected for this study blood samples from 5 active, newly diagnosed patients who had never received oral or IV medications. After CD14⁺ selection, the purity of the obtained monocyte fraction was >97%. RNA was extracted as described in the material & methods section and hybridized to human genome U-133 A & B chips using the Affymetrix® platform (Figure 8). An unsupervised clustering algorithm was performed on genes present in at

least 20% of all samples. As shown in Figure 8b, monocytes from healthy donors and SLE patients clustered into two well defined groups, thus ruling out variability due to sample processing. To find genes differentially regulated in SLE monocytes, the microarray data from SLE patients was normalized to that of healthy controls (Figure 8c). This analysis yielded 1,629 transcripts as differentially regulated in SLE monocytes (Figure 8d).

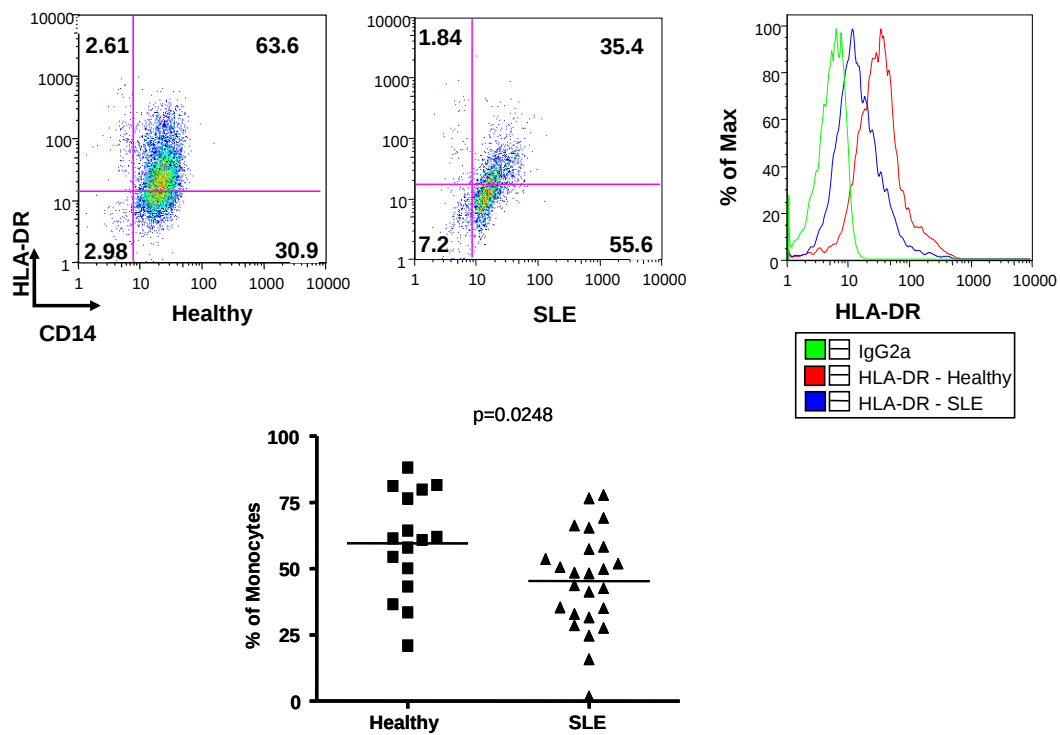


Figure 7. Downregulation of MHC class II expression on ex-vivo SLE monocytes (healthy children, n = 15; pediatric SLE patients, n = 23). p value was obtained using a non-parametric t-test (Mann-Whitney).

It has been previously shown that the presence of type I IFN in SLE serum is fundamental for the differentiation of monocytes into dendritic cells (Blanco and others 2001). Furthermore, PBMCs from >90% SLE patients express a type I IFN signature (Bennett and others 2003). We therefore surmised that a large proportion of the genes found differentially expressed in SLE monocytes might be IFN-regulated. To identify these genes, we first exposed monocytes from 2 healthy donors to type I IFN (1,000 IU of

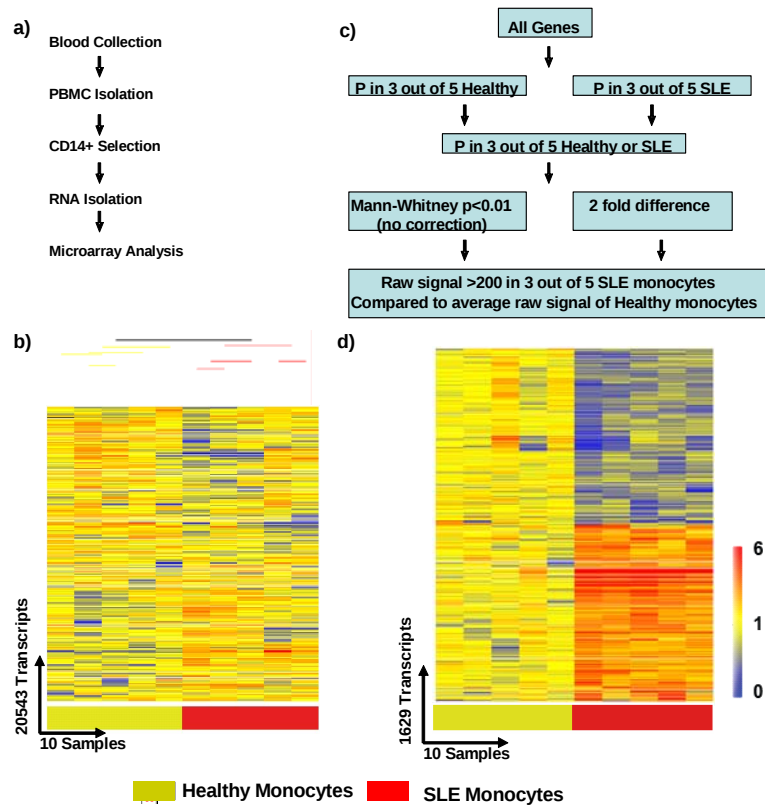


Figure 8. Differentially regulated genes in circulating monocytes of SLE patients (a) Overview of experimental design (b) Unsupervised analysis of monocytes from 5 healthy children and 5 pediatric SLE patients (transcripts present in 20% of samples) (c) Overview of supervised analysis used to find differentially regulated genes in SLE monocytes (d) Heat map of 1629 transcripts expressed in SLE monocytes (each column represents an individual sample)

recombinant IFN- α 2) in vitro. RNA was extracted at different incubation time points (1, 6, 24, 48 and 72 hr) and processed for microarray analysis as described in materials and methods.

We found that >35% (606/1629) of the transcripts dysregulated in SLE monocytes were *bona fide* type I IFN induced. Figure 9b shows the gene trees of type I IFN regulated genes in *ex vivo* SLE monocytes as well as in healthy monocytes exposed *in vitro* to type I IFN at different time points. This kinetic analysis allowed us to conclude that the bulk of *in vitro* IFN-induced transcriptional changes is observed at 6 hr and is maintained for up to the 72 hr time point. A group of transcripts (N=226) was already dysregulated however 1 hr after exposure to IFN-alpha. Very few transcripts (N=21) appeared to be the result of late (24 hr or later) IFN induction (Supplementary Figure

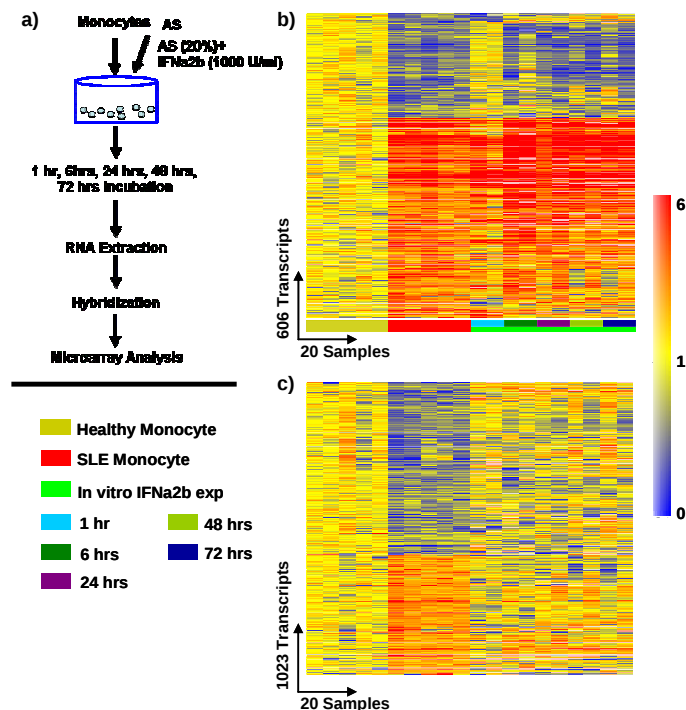


Figure 9. Kinetic study of IFN-inducible genes expressed in circulating blood monocytes from SLE patients. (a) Overview of experimental design (b) IFN- inducible genes regulated in SLE monocytes (c) 1023 transcripts expressed in SLE monocytes that are not type I IFN regulated.

1). The remaining 1023 transcripts were not considered to be type I IFN regulated as either they were not up or down-regulated in culture at any time point during the 72hr of exposure to IFN-alpha (Figure 9c), or their fold expression changed but their raw expression value in vitro did not reach the value that we selected as threshold to document true changes in expression. This, therefore, might represent a significant underestimation of the effects of IFN-alpha. Indeed, many factors, such as the survival of monocytes in culture, may affect the transcriptional activity of these cells. Only an in vivo experiment (i.e. administration of IFN alpha to a healthy volunteer and subsequent longitudinal follow up) would allow us to fully address this question.

Within the 606 transcripts that we selected as *bona fide* type I IFN-regulated, we found dysregulation of most of the genes that previous work with PBMCs from SLE patients in our laboratory had identified as components of the IFN-signature in (i.e. IFI27, IFIT1-3, IFI44, IFI44L, MX1 and OAS) (Bennett and others 2003). Other significantly upregulated genes encoded apoptosis-inducing molecules such as TRAIL and FAS; adhesion molecules such as sialoadhesin, a monocyte/macrophage specific lectin, SLAMFM7 (CRACC), a member of the CD2 family of cell surface receptors implicated in the activation of NK cell-mediated cytotoxicity, ITGB7, a receptor for fibronectin, MADCAM1 and VCAM1, and claudin 23, a molecule that plays a major role in tight junction-specific obliteration of the intercellular space; ubiquitination such as culin 1, an essential component of the SCF (SKP1-CUL1-F-box protein) E3 ubiquitin ligase complex, which mediates the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription and, ISG15 and its deconjugating protease USP18; chemokines and chemokine receptors such as CXCL10 (IP10), CCR1,

CCR5, CCL2 (MCP1) and CCL8 (MCP2); and Fc receptors such as CD64 (FcγRIA), which is normally expressed on CD14^{high} monocytes.

Within the list of genes that we could not formally ascribe as IFN alpha-regulated (in part due to the limitations of the in vitro experiments), there was a remarkable down-regulation of ribosomal protein- and HLA class II-encoding transcripts. Thus, gene expression profiling of ex vivo SLE monocytes did not provide a clear-cut answer to the question of what made these cells function as DCs. Figure 10 depicts genes involved in IFN signaling pathway (a), antigen presentation (b), as well as molecules characteristically expressed by the CD14^{high}CD16⁺ subsets of monocytes.

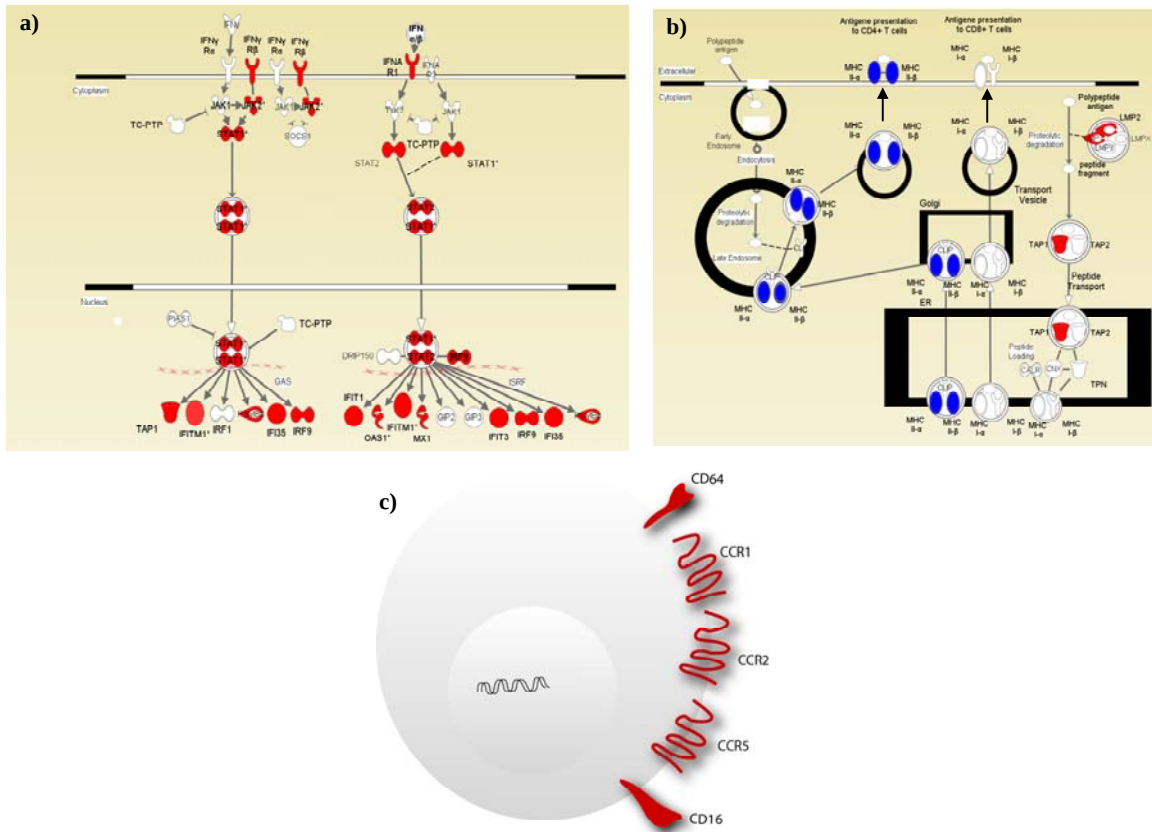


Figure 10. Pathways represented by genes expressed in ex vivo SLE monocytes. Genes involved in (a) type I IFN regulated pathway, (b) antigen presenting pathway, and (c) molecules expressed by CD14^{high}CD16⁺ subsets of monocytes. Red color represent overexpression and blue color represent down regulation of particular molecule in ex vivo SLE monocytes.

There is Little Transcriptional Overlap between SLE Blood Monocytes and Healthy Blood mDC

To find genes which could explain the DC characteristics of SLE monocytes, blood mDCs were sorted from five healthy individuals as Lineage⁻ HLA-DR^{high} CD11C^{high} cells and their transcriptional programs were compared to those of blood CD14⁺ monocytes isolated from the same donors (figure 11). An unsupervised clustering analysis performed on genes present in 20% of the samples (19,216 transcripts), and that included SLE blood monocytes, showed that the observed changes were not due to technical variability, as healthy blood monocytes, SLE blood monocytes and healthy blood mDC clustered into well defined groups (Figure 12b). A supervised analysis was then performed to find 1) genes differentially expressed in healthy blood mDCs compared to healthy monocytes, 2) similarly expressed in healthy blood mDCs and SLE blood monocytes.

Lineage - CD11c+ mDC and CD14+ monocytes were sorted from the blood of 5 healthy donors

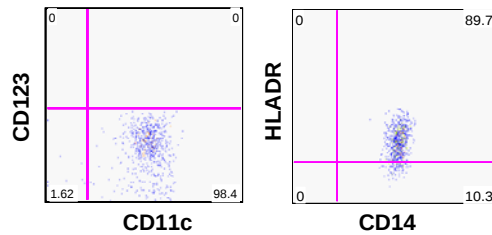


Figure 11. Flow cytometric representation of purity of blood circulating dendritic cells and monocytes sorted from healthy donors (N=5). Blood mDC and monocytes sorted based on their expression of Lineage-CD11c+ and CD14+, respectively.

Healthy blood mDCs differentially express 2,408 transcripts compared to monocytes. Among them, and as expected, HLA class II genes were significantly upregulated and CD14 was downregulated. None of the known co-stimulatory molecules

that become upregulated during DC maturation (i.e. CD80, CD86 etc.) were differentially expressed at the transcriptional level however in healthy blood mDCs. Among Toll-like receptors (TLRs), TLR2, 4, 5 and 8 were significantly down-regulated while TLR-3 and 10 were upregulated.

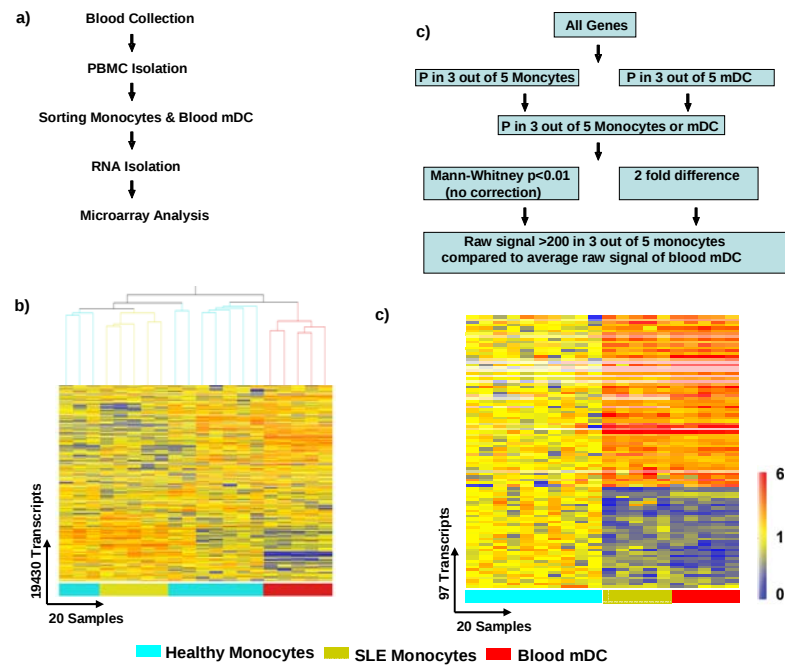


Figure 12. SLE blood monocytes and healthy blood mDC show little transcriptional overlap. a) Overview of experimental design; (b) Unsupervised analysis comparing monocytes from healthy donors (n=10), monocytes from SLE patients (N=5), and blood mDC from healthy donors (N=5); (c) Only 97 of the 2408 mDC transcripts are expressed in SLE monocytes which include genes involved in adhesion, chemotaxis, innate immunity, signal transduction, and transcription.

To our surprise, only 97 of the 2,408 “mDC transcripts” were similarly expressed in blood SLE monocytes. Among these, the most significant similarities were found in genes involved in 1) adhesion (i.e. ITGB7, SLAMF7 and AMIGO2), 2) chemotaxis (i.e. FPRL2 and CCR5), 3) cytoskeleton (AKAP2), 4) innate immunity (TLR5), 5) signal transduction (CD2AP and GPR18), and 6) transcription (ETS1, ARID5B, HOXA9). As none of the proteins encoded by these genes could easily explain the DC function of SLE

monocytes, we decided to explore the possibility that contact with T cells might be required in order for SLE monocytes to acquire an antigen-presenting transcriptional program and/or phenotype.

Upon Exposure to Naïve CD4⁺ T Cells, Blood Monocytes from Some SLE Patients Acquire DC Properties

As previously published (Blanco and others 2001), not every SLE patient displays blood monocytes able to induce alloreactive CD4⁺ T cell proliferation. Thus, we screened SLE monocytes from SLE patients (N=19) in standard alloreaactions and, as described in Figure 13, we classified samples based on either capacity to induce CD4 T cell proliferation or not. CFSE labeled CD4 T cells (10^5) were incubated with monocytes (2×10^4). Cells were harvested at 6 hours, 2 days, and 5 days. After 6 hours of culture, the monocytes were enriched by depletion of CD3⁺ T cells, and their RNA was prepared for microarray analysis. After two days of culture, cells were harvested and monocytes were stained for different cell surface markers. After five days of culture, cells were harvested and CFSE concentration was measured to assess the level of T cell proliferation (Figure 13).

Unsupervised clustering performed on genes present in 20% of the samples (18,022 transcripts) classified samples into two distinct groups which correlated with their capacity to induce CD4 T cell proliferation (Figure 13b). Supervised analysis to find differentially regulated genes (between SLE monocytes which induced MLR and those which did not) disclosed 265 transcripts differentially regulated in these two groups (Figure 13c).

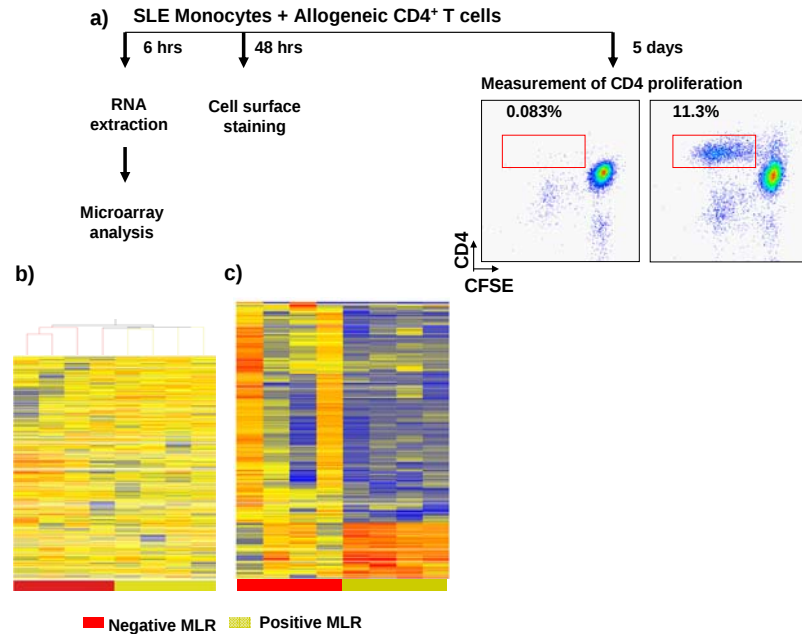


Figure 13. Gene expression profile in SLE monocytes after exposure to naïve CD4 T cells. (a) Experiment design for mixed lymphocyte reaction of SLE monocytes and allogeneic CD4 T cells. Microarray assay was performed on SLE monocytes after 6 hours of culture with CD4 T cells. Cell surface staining was done after 48 hours of culture. At day 5, CD4 T cell proliferation was measured by CFSE dilution. (b) Unsupervised clustering of genes present in 20% of samples (n=8 samples). This analysis separates SLE monocytes that induce CD4 T cells proliferation from those that do not. (c) SLE monocytes that induce T cell proliferation express 265 transcripts different from those monocytes that do not induce T cell proliferation.

All SLE monocyte samples which induced CD4⁺ T cell proliferation upregulated MHC class II transcripts after 6 hr of culture with T cells at similar levels as blood mDC (Figure 14). On the contrary, only ¼ samples do not induce alloreactions upregulated, and to a lesser extent, HLA class II genes. Other MLR⁺ monocyte upregulated transcripts encoded innate immunity molecules such as IL-1b, KCNJ15, a potassium rectifier channel which follows the transcription pattern of IL-1b, MARCO, a receptor involved in actin cytoskeleton rearrangements and down-regulation of antigen uptake function during DC maturation (Granucci and others 2003), and CXCL10, a ligand for CXCR3 that is induced by type I and type II IFN and may play a key role in IFN- γ mediated responses (Figure 14).

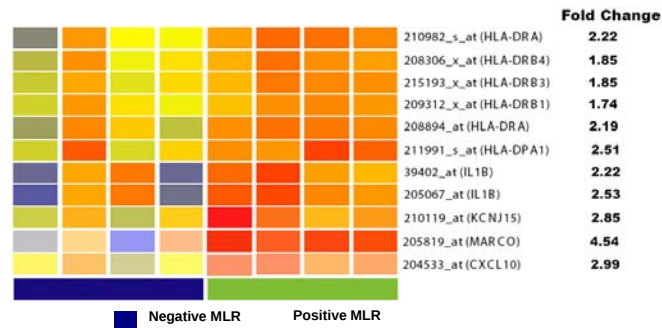


Figure 14. SLE monocytes that induce CD4 T cell proliferation upregulate MHC class II molecules. The level of expression is similar to blood circulating mDCs. These SLE monocytes samples also overexpress transcripts encoded innate immunity molecules such as IL-1b; KCNJ15, a potassium rectifier channel which follows the transcription pattern of IL-1b; MARCO, a receptor involved in actin cytoskeleton rearrangements and down-regulation of antigen uptake function during DC maturation; and CXCL10, a ligand for CXCR3.

This microarray data was further confirmed at two levels: first, cell surface staining of SLE monocytes after 48-hours in culture with CD4 T cells showed that the expression level of class II molecules correlated with the capacity of these cells to induce CD4+ T cell proliferation (Figure 15); second, we quantified the cytokines in the supernatant of the 5 day monocyte-T cell cultures and found increased levels of IL-1b in 3 out of 4 cultures inducing CD4 T cell proliferation (Figure 16). IL-6, which may be induced by IL-1b (Yamaji and others 2008), was elevated in the same cultures. Levels of

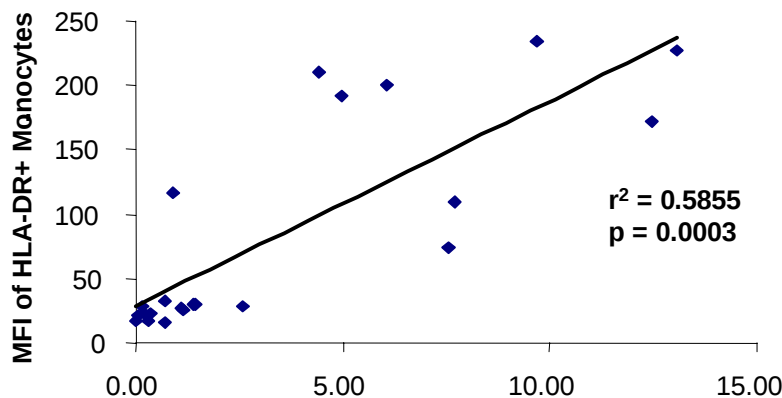


Figure 15. Expression level of HLA-DR molecules on SLE monocyte samples after contact with CD4 T cell for 48 hours. HLA-DR expression levels correlate with their capacity to induce CD4 T cells proliferation

IP-10 were elevated in $\frac{3}{4}$ MLR + cultures, but they did not reach statistical significance when compared with those that did not induce T cell proliferation.

Thus, these studies suggest that blood SLE monocytes require signals derived from T cells in order to acquire DC function. Additionally, they point towards an important role for innate immunity receptors and/or cytokines, i.e. MARCO and IL-1b, in conferring antigen-presenting capacity to monocytes from SLE patients. How the type I IFN-rich environment of SLE blood predisposes monocytes to respond to T cell signals and/or to produce the type of cytokines that we describe above remain to be elucidated.

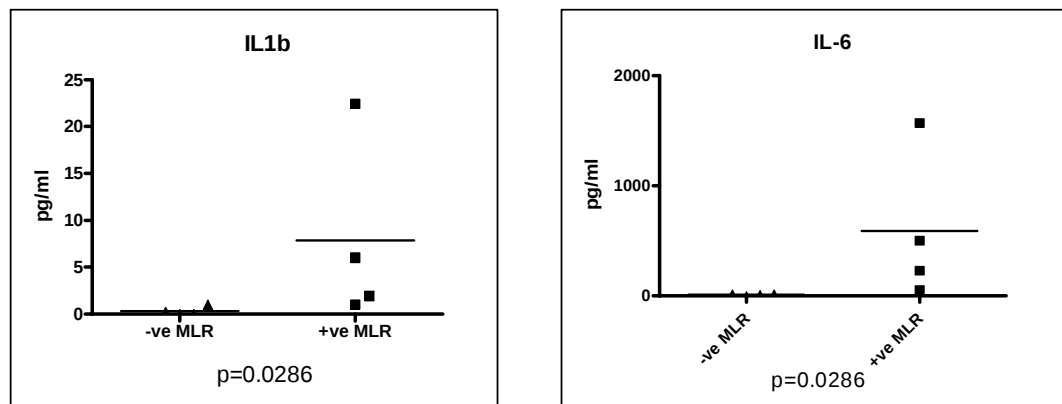


Figure 16. In 3 out of 4 cultures inducing CD4 T cell proliferation, there was an increased level of IL-1b in the culture supernatant, along with elevated levels of IL-6.

Characterization of the Effects of SLE Serum on Healthy Monocytes

An important observation from earlier work at our Institute was that the addition of SLE serum to healthy monocytes induced the differentiation of these cells into DCs (Blanco and others 2001). This effect could be reproduced by adding IFN- α to healthy human serum, but not to FCS. Thus, one or several components of human serum seem to be necessary to facilitate the DC-poietin activity of type I IFN. We surmised that studying the transcriptional program induced by SLE serum on healthy monocytes we might gain insight on these putative serum factor(s). This approach might also help us

recapitulate the events responsible for the skewing of monocytes into DCs during the initial stages of SLE.

Serum from Active, Untreated SLE Patients Induces a Transcriptional profile That Includes IFN and Non-IFN Related Signatures

Healthy monocytes were cultured for 6 hrs *in vitro* in the presence of 20% autologous serum or serum from three newly diagnosed, untreated SLE patients as described in Figure 17. Two of the three sera corresponded to patients we had also profiled their ex-vivo blood monocytes. Microarray analysis was then performed as described in materials and methods. Normalization to gene expression data from samples incubated with autologous serum yielded 2,968 transcripts differentially regulated by SLE serum. Functional characterization of these transcripts revealed a significant upregulation by SLE serum of genes involved in 1) apoptosis (TRADD, Fas, TRAIL, DR6, BIRC6, BNIP1, etc.), 2) adhesion (JUP, CD47, SLAMF7, L-selectin, Sialoadhesin etc.), 3) cell cycle and proliferation, 4) chemotaxis (CXCL10, CXCR4, CCR7, FPRL2 etc.), 5) immune function (NOD2, TLR7, TLR8, IL6, IL15, IL4R, IFNGR2, BLyS/BAFF, FcγRIa, FcγRIIIa etc) metabolism, 6) chromatin modification and nucleosome assembly, 7) RNA processing/modification, 8) signal transduction and transcription (STAT1, STAT2, JAK2, IRAK3, SOCS3, IRF5, IRF7, ID2, RUNX3 etc), 9) translation, 10) protein modification/folding, 11) transport (TAP1, TAP2, Tapasin etc.), 12) ubiquitination etc. Many genes within each functional group were found downregulated as well. RNA-processing and protein translation-encoding transcripts were among the most abundant in this category. Figure 18 shows some of these genes,

which are involved in various pathways, such as type-I IFN signaling, antigen presentation, apoptosis, extravasation and migration.

To our surprise, only 238 of the 2,968 SLE serum-induced transcripts (~8%) overlapped with the 1,629 transcripts found dysregulated in ex-vivo SLE blood monocytes. To determine which genes could be attributed to the effect of type I IFN, we 1) compared the SLE serum-induced transcripts with those resulting from in vitro exposure of healthy monocytes to IFN- α for 6 hours; 2) performed blocking experiments by pre-incubating SLE sera from the 3 patients with antibodies against IFN α/β and the type I IFN receptor.

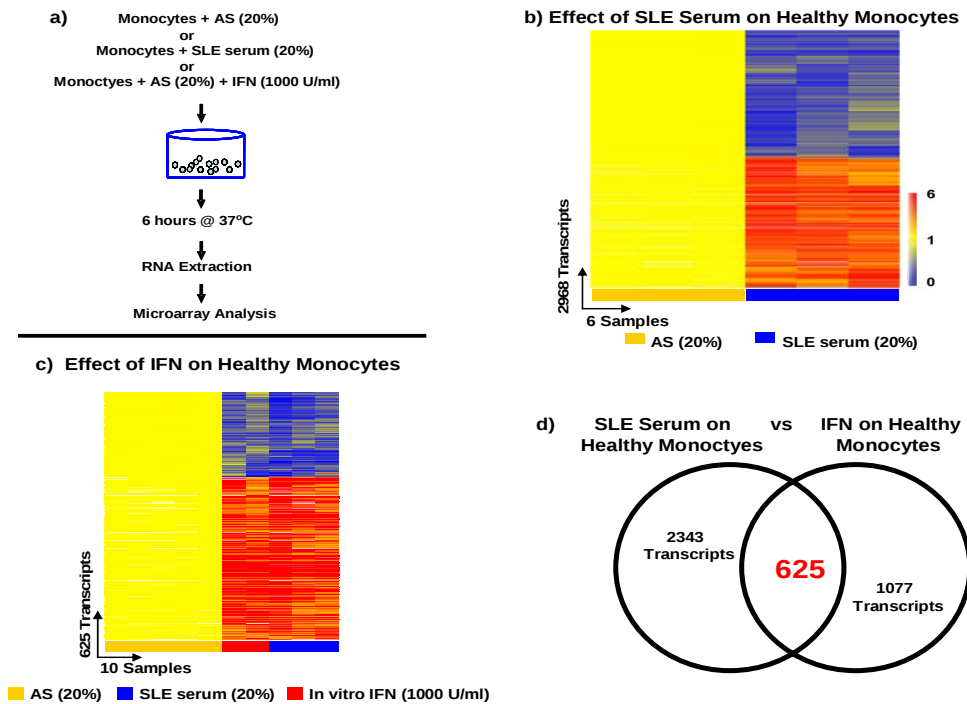


Figure 17. SLE serum induces significant changes in transcriptional program of healthy monocytes. (a) monocytes from normal donors incubated with sera from newly diagnosed SLE patients (20%) as well as with 1000U/ml of IFN α 2b to study the effect on normal monocytes. (b) SLE serum induces 2968 transcripts in normal monocytes compared to autologous serum. (c) & (d) 625/2968 transcripts induced by SLE serum regulated by type-I IFN.

Comparing the gene lists derived from exposing healthy monocytes to either SLE serum or IFN- α for 6 hr in vitro disclosed 625 common transcripts (~20% of all SLE serum-induced genes) (Figure 17c). Of these, less than 1/3 (194 transcripts) were equally dysregulated in freshly isolated blood SLE monocytes (Figure 19 a and b). Furthermore, the expression of only half of these transcripts (115/194) was significantly blocked by preincubating SLE serum with neutralizing antibodies against both IFN α/β and the type I IFN receptor (Figure 19 c).

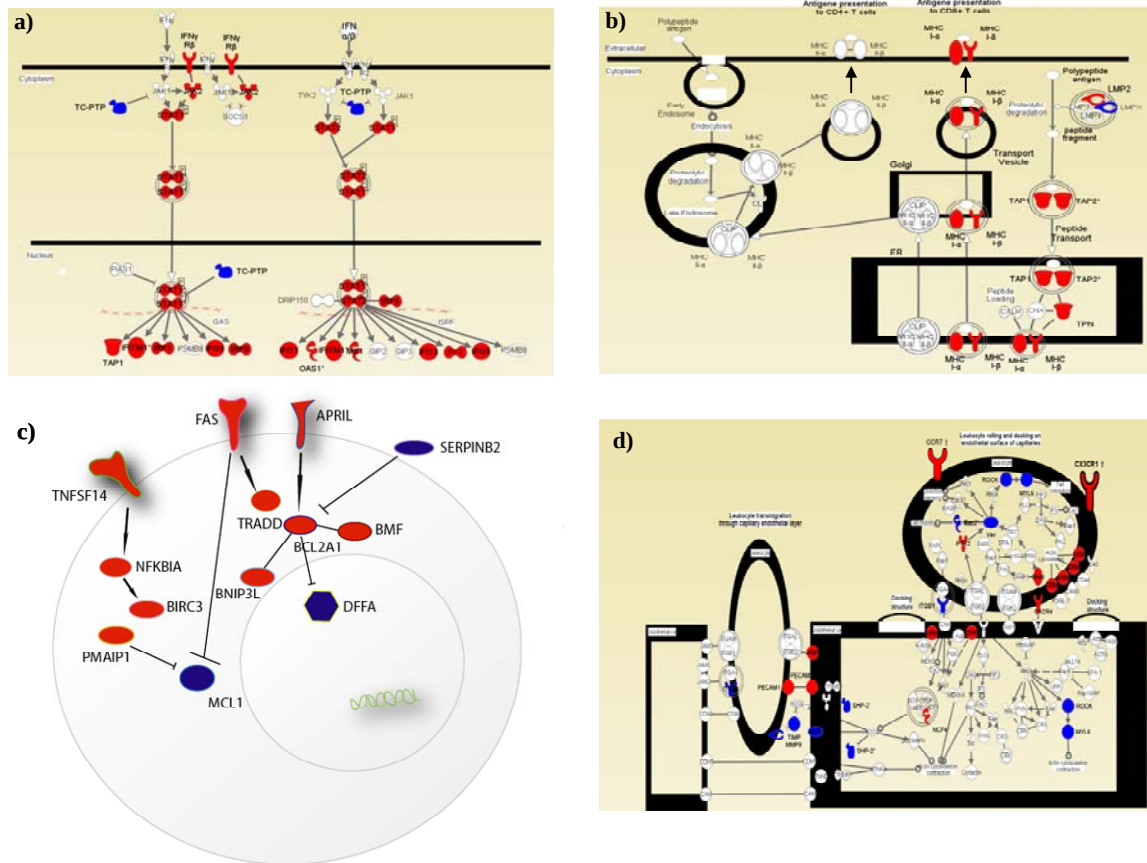


Figure 18. Pathways represented by genes induced by SLE serum in healthy monocytes. Genes involved in (a) type I IFN signaling, (b) antigen presentation, (c) apoptosis, and (d) extravasation and migration. Red color represent overexpression and blue color represent down regulation of particular molecule in ex vivo SLE monocytes.

Thus, exposure to SLE serum induces significant changes in the transcriptional program of healthy monocytes. Only a fraction of these changes, however, is also found dysregulated in the blood monocytes from SLE patients and can be attributed to type-I IFN effects.

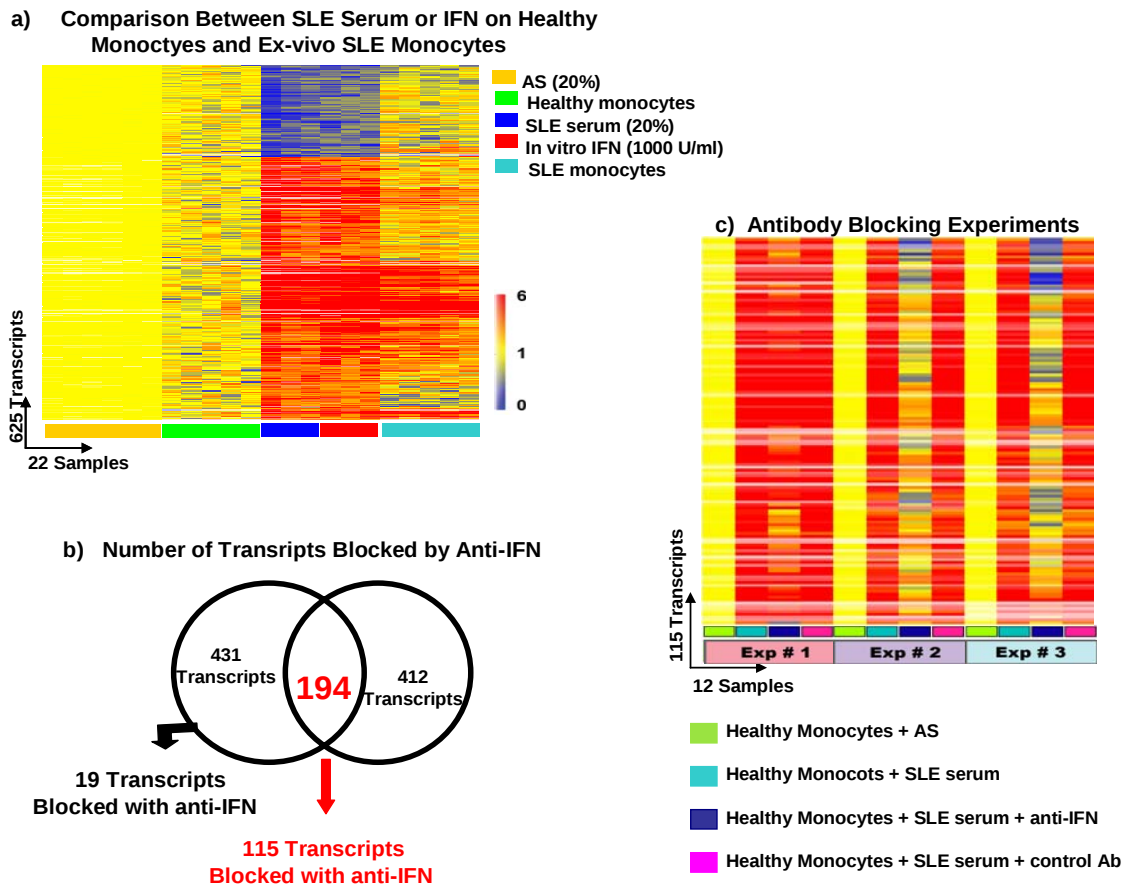


Figure 19. Comparison between SLE serum or IFN on healthy monocytes and ex vivo SLE monocytes
a) There are 625 common transcripts expressed between healthy monocytes exposed to SLE serum or IFN- α for 6 hours, but only a fraction of these are expressed in freshly isolated SLE monocytes; (b) Out of 625 transcripts induced by SLE serum and regulated by type I IFN, only 194 transcripts are shared with those induced by IFN on monocytes; c) Only 115 of those transcripts can be blocked with pre-incubating SLE serum with antibody against IFN α/β and the type I IFN receptor.

Reconciling In Vivo and In Vitro Data: SLE Serum Induces the Expression of Chemokine Receptors that Explain the Acquisition of DC Function by SLE Monocytes and Their Migration to Secondary Lymphoid Organs

Thus far our studies have provided little evidence that ex-vivo SLE blood monocyte in fact express DC-related molecules. They also revealed little overlap between the transcriptional programs of ex vivo SLE blood monocytes and healthy monocytes incubated with SLE serum. Among the molecules, however, that were induced in vitro by exposure to IFN- α and/or SLE serum we found two chemokine receptors, CCR7 and CX3CR1, which could reconcile our initial hypothesis and our experimental results.

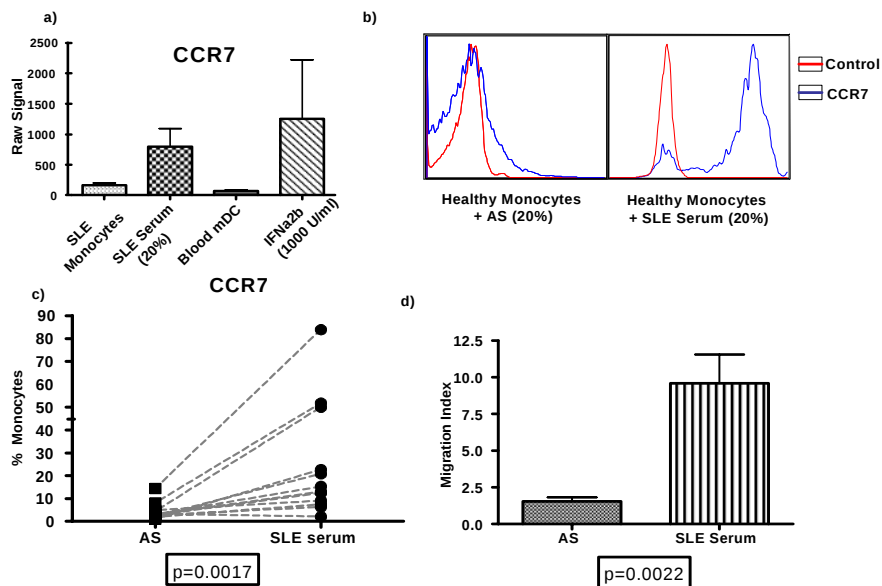


Figure 20. SLE serum induces functional chemokine receptor CCR7 at both the RNA and protein level. (a) SLE serum induce CCR7 transcript at RNA level which is dependent on the presence of type-I IFN in serum. (b) Chemokine receptor CCR7 expression at the protein level upon exposure to SLE serum for 24 hours. (c) Expression of CCR7 is significantly different on monocytes cultured with SLE serum compared to autologous serum (n= 12 experiments). (d) Chemokine receptor CCR7 expressed on monocytes is functional as evidenced by the fact that its ligand, CCL19, induces *in vitro* migration in a transmigration assay (n= 6 experiments).

CCR7 is expressed on mature DCs and T cells and is a homing receptor for these cells to migrate to the lymph node where its ligands (CCL19 and CCL21) are expressed (Dieu and others 1998; Saeki and others 1999; Sallusto and others 1999). CX3CR1 is a chemokine receptor for fractalkine, which is normally expressed in inflamed tissues. It has recently been shown that two subsets of monocytes can be classified based on expression of this receptor: (1) CX3CR1^{lo} CD14⁺⁺CD16⁻ monocytes, and (2) CX3CR1^{hi} CD14^{lo} CD16⁺ monocytes (Geissmann and others 2003). We surmised that in the initial stages of SLE, monocyte exposure to type I IFN and/or other components of SLE serum would efficiently upregulate these receptors and induce their migration to either lymph nodes or peripheral inflamed tissues. There, monocyte contact with T cells would induce the upregulation of molecules involved in antigen presentation (i.e. HLA class II) and

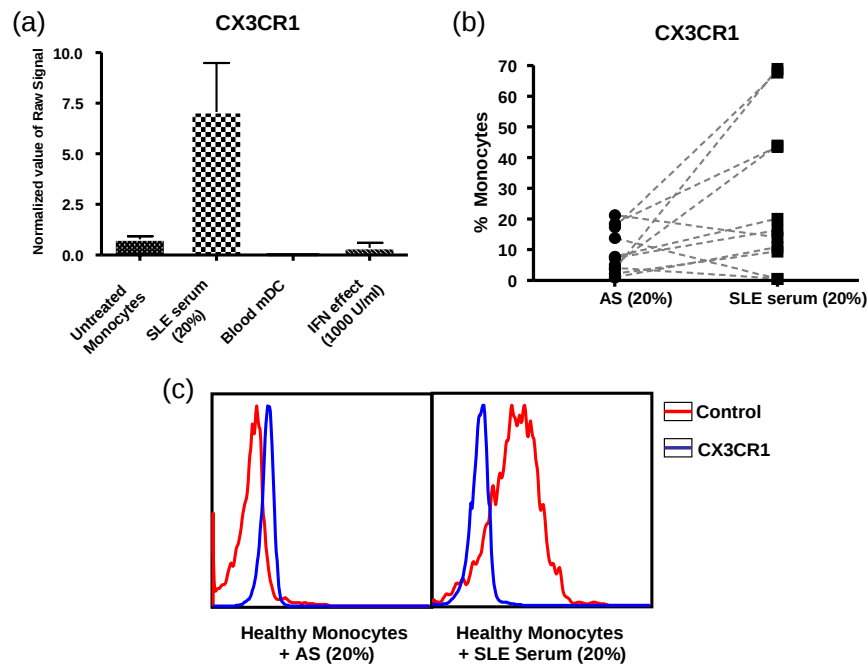


Figure 21. SLE serum induces expression of the fractalkine receptor, CX3CR1, at both the RNA and protein level. (a) SLE serum induces CX3CR1 transcript expression at the RNA level which is independent of the presence of type-I IFN in the serum. (b) The fractalkine receptor CX3CR1 expression at the protein level is dependent upon exposure to SLE serum for 24 hours. (c) After incubation for 24 hours, the majority of SLE sera induce CX3CR1 expression on the surface of healthy monocytes compared to autologous serum (n= 10 experiments).

give rise to an immune/autoimmune response. To address our hypothesis, we wanted to check 1) if these chemokine receptors were also upregulated at the protein level upon exposure to SLE serum, 2) if their upregulation would correlate with functional activity.

To address the first question, we performed flow cytometry on healthy monocytes exposed for 24 hr in culture to either autologous serum or the serum of 12 pediatric SLE patients. As CCR7 was upregulated at the transcriptional levels by both IFN- α and SLE serum, we found indeed a significant upregulation of the corresponding protein upon exposure to SLE serum ($p=0.0017$, Figure 20 a-c). Furthermore, we devised transwell experiments to follow the migration of healthy monocytes incubated with SLE serum towards one of the two CCR7 ligands. The results of these experiments supported that overexpression of CCR7 on the surface of monocytes did lead to their more efficient migration towards CCL19 (Figure 20d).

As opposed to CCR7, expression of CX3CR1 at the transcriptional level was only induced by SLE serum but not by exposure to IFN- α in vitro (Figure 21a). Exposure to a fraction of the SLE patient sera (8/12) did upregulate the expression of CX3CR1 at the protein level on healthy monocytes (Figure 21b and c). These results, however, did not reach statistical significance.

CHAPTER FOUR

Discussion

This project was designed to understand the alterations leading to monocyte differentiation and acquisition of DC function in SLE patients. Although monocytes represent a major source of precursor DCs, when freshly isolated from healthy human blood these cells do not behave as efficient antigen presenting cells. Blood monocytes from SLE patients however act as mDCs, and exposure of normal monocytes to SLE serum, but not to FCS, results in the generation of DCs (Blanco and others 2001).

Blood monocytes are quite heterogenous (Passlick and others 1989). The differential expression of CD14 and CD16 (also known as Fc γ RIII) was first used to define two major subsets in peripheral blood: the “classical” CD14^{high}CD16⁻ monocytes, typically representing up to 95% of the monocytes in a healthy individual, and the “non-classical” CD14^{low}CD16⁺ monocytes comprising the remaining fraction of monocytes (Passlick and others 1989; Ziegler-Heitbrock and others 1993). These subsets differ in many respects, including adhesion molecule and chemokine receptor (CCR) expression. CD14^{high}CD16⁻ monocytes express CCR2, CD62L (L-Selectin) and FC γ RI (CD64), whereas CD14^{lo}CD16⁺ monocytes lack CCR2, and have higher levels of MHC-II and FC γ RII (CD32) (Ziegler-Heitbrock and others 1993) (Geissmann and others 2003; Gordon and Taylor 2005). CD14^{lo} CD16⁺ monocytes are also thought to be more mature, macrophage like, and are regarded as pro-inflammatory because upon LPS stimulation produce more TNF- α than CD14^{high} CD16⁻ cells and produce little if any IL-10 (Belge

and others 2002). Both subsets express the receptor for fractalkine, CX₃CR1, but CD14^{lo}CD16⁺ monocytes characteristically express higher levels (Ancuta and others 2003; Geissmann and others 2003). Considerable heterogeneity is known to exist in the minor CD16⁺ monocyte fraction, as an “intermediate” population of monocytes that is CD14^{high} (as opposed to CD14^{lo}) and CD16⁺ differentiates in vitro differently than CD14^{lo}CD16⁺ monocytes (Grage-Griebenow and others 2001b).

Interest in CD16⁺ monocytes has been promoted by observations that this subset is elevated in blood during inflammatory conditions such as HIV dementia (Pulliam and others 1997), atherosclerosis (Schlitt and others 2004), rheumatoid arthritis (Baeten and others 2000), and cancer (Saleh and others 1995). In a number of studies, CD16⁺ monocytes have been called inflammatory monocytes. However, this designation awaits a functional confirmation.

Several studies have analyzed the differentiation of human monocyte subsets in vitro and these studies showed in some cases a predisposition of CD16⁺ monocytes to differentiate into antigen-presenting DCs (Grage-Griebenow and others 2001b; Randolph and others 2002). The extent to which human monocyte subsets differentiate into DCs in vivo is indeed too complex to predict, as both the phenotype of the cultured monocytes and factors present in the in vitro culture are expected to have a strong influence on the differentiation. For instance, CD14^{high}CD16⁺ monocytes differentiate into Langerhans cells, the typical epidermal DC population, with potent antigen-presentation functions in a modified tissue-engineered model of human epidermal equivalents (Schaerli and others 2005). However, in the absence of the epidermal environment, but in the presence of

vascular endothelial cells, CD16⁺ monocytes are more prone to become DCs (Randolph and others 2002).

The most popular model to study monocyte-derived DCs is to culture blood monocytes of either subset in the presence of GM-CSF and IL-4 (Sallusto and Lanzavecchia 1994) or other related cytokine cocktails (Piemonti and others 1995). It is not clear however whether GM-CSF/IL-4-treated monocyte-derived DCs have true counterparts in vivo. Thus, whereas the study of IL-4/GM-CSF-cultured monocyte-derived DCs is useful for studying DC biology, it is important to keep in mind that the pathway of differentiation that leads to the generation of these cells may not be recapitulated in vivo.

An important observation from earlier work at our Institute was that blood monocytes from a fraction of pediatric SLE patients function as DCs. We surmised that studying the phenotype of monocytes from the blood of newly diagnosed, active and previously untreated SLE patients might help us better define the DC characteristics of these cells. Thus, we used flow cytometry to characterize 1) the monocyte subpopulation distribution in pediatric SLE patients and healthy children, 2) the expression of molecules that might explain the acquisition of DC function by SLE monocytes. Using the conventional scheme of CD14 and CD16 expression, a complex picture of monocyte population distribution emerged. Indeed, 4 discrete populations could be recognized in the majority of blood samples: 1) CD14^{high} CD16⁻ CD64⁺ CD62L⁺ HLA-DR^{low}, 2) CD14^{high} CD16⁺ CD64⁺ CD62L⁺ HLA-DR^{high}, 3) CD14^{low} CD16⁺ CD64⁻ CD62L⁻ HLA-DR^{high} and 4) CD14^{low} CD16⁻ CD64⁻ CD62L⁻ HLA-DR^{low}. Furthermore, the complexity could be even higher, as a fifth population characterized by very high

expression of CD14 and negative CD16 surface expression could be identified in some healthy children. According to this phenotypic scheme, pediatric SLE patients displayed an expansion of CD14^{high} CD16⁺ cells ($p=0.01$) while the distribution of the remaining populations did not differ from controls.

CD14^{high} CD16⁺ monocytes most likely correspond to a minor subset of CD64(+) / 16(+) cells which were described in 2001 as being unique in combining typical DC and monocyte characteristics (Grage-Griebenow and others 2001b). These are high IL-12 production, high accessory capacity for antigen- or allogen-activated lymphocytes, and high expression of HLA-DR, CD86, and CD11c. More recently, the same group reported that upon LPS stimulation CD14^{high} CD16⁺ monocytes produce significantly more IL-10 than CD14^{high} CD16⁻ and CD14^{low} CD16⁺ monocytes at the protein and mRNA levels. In addition, CD14^{high} CD16⁺ cells produce significantly more IL-10 than their CD14^{low} CD16⁺ counterparts when activated with *S. aureus* or zymosan. Thus, CD14^{high} CD16⁺ monocytes seem to be functionally different from CD14^{low} CD16⁺ monocytes and might be considered anti-inflammatory at least in healthy individuals (Skrzeczynska-Moncznik and others 2008). Whether the expanded population that we observe in SLE blood is equivalent to this “anti-inflammatory” monocyte subset requires however further study. Indeed, as we will review below, exposure of healthy monocytes to IFN-alpha and SLE serum *in vitro* induces significant changes in some of the markers that are used to define monocyte subpopulations. CD14, CD64 and CD16 expression for example change dramatically under these conditions. Whether these *in vitro* changes represent true monocyte population shifts and how do these changes correlate with the expansion or contraction of monocyte population *in vivo* need to be further addressed.

Besides the surface markers that define known human monocyte subpopulations, we performed a phenotypic analysis of molecules known to be upregulated as immature DCs differentiate and acquire DC function. To our surprise, most of these molecules were similarly expressed in cells from healthy children and SLE patients. The two main exceptions included a mild upregulation of CCR7 and a significant down-regulation of HLA-DR molecules both especially within the CD14^{high} CD16- monocyte fraction from SLE patients.

The fact that none of the classic surface molecules involved in antigen presentation (i.e. HLA-DR, CD80, CD86) or in monocyte differentiation into DC (i.e. CD83) were upregulated in SLE blood monocytes led us to perform a more global analysis, i.e. gene expression profiling, to identify possible differences between healthy children and patient cells. Indeed, blood monocytes from 5 active, newly diagnosed patients who had never received oral or IV medications differentially expressed 1,629 transcripts. As PBMCs from >90% SLE patients express a type I IFN signature (Bennett and others 2003), we surmised that a large proportion of the genes found differentially expressed in SLE monocytes might be IFN-regulated. To identify these genes, we first exposed monocytes from 2 healthy donors to type I IFN in vitro and found that >37% of the transcripts dysregulated in SLE monocytes were induced by type I IFN in vitro. The remaining transcripts were not considered to be type I IFN regulated as either they were not up or down-regulated in culture at any time point during the 72hr of exposure to IFN- α , or their fold expression changed but their raw expression value in vitro did not reach the value that we selected as threshold to document true changes in expression. This, therefore, most likely represents a significant underestimation of the effects of IFN-

alpha. Indeed, many factors, may affect the transcriptional activity of monocytes in culture, and therefore only an in vivo experiment (i.e. administration of IFN alpha to a healthy volunteers with subsequent longitudinal follow up) would allow us to fully address this question.

Within the transcripts that we selected as *bona fide* type I IFN-regulated, we found dysregulation of most of the genes that previous work from our laboratory using PBMCs from SLE patients had identified as components of the IFN-signature (Bennett and others 2003). Significantly upregulated genes encoded apoptosis-inducing molecules such as TRAIL and FAS; adhesion molecules such as sialoadhesin, a monocyte/macrophage specific lectin, SLAMFM7 (CRACC), a member of the CD2 family of cell surface receptors implicated in the activation of NK cell-mediated cytotoxicity, ITGB7, a receptor for fibronectin, MADCAM1 and VCAM1, and claudin 23, a molecule that plays a major role in tight junction-specific obliteration of the intercellular space; ubiquitination such as culin 1, an essential component of the SCF (SKP1-CUL1-F-box protein) E3 ubiquitin ligase complex, which mediates the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription and, ISG15 and its deconjugating protease USP18; chemokines and chemokine receptors such as CXCL10 (IP10), CCR1, CCR5, CCL2 (MCP1) and CCL8 (MCP2); and Fc receptors such as CD64 (FcγRIA), which as described above is normally expressed on CD14^{high} monocytes. Within the list of genes that we could not formally ascribe as IFN alpha-regulated (in part due to the limitations of the in vitro experiments), there was a remarkable down-regulation of ribosomal protein- and HLA class II-encoding transcripts.

To identify genes which could explain the DC characteristics of SLE monocytes, we sought to compare the transcriptional profile of SLE blood monocytes with those of blood mDCs. Thus, mDCs were sorted from five healthy individuals and their transcriptional programs were compared to those of blood CD14⁺ monocytes isolated from the same donors. These studies showed that healthy blood mDCs differentially express >2,000 transcripts compared to monocytes. Among them, and as expected, HLA class II genes were significantly upregulated and CD14 was downregulated. None of the known co-stimulatory molecules that become upregulated during DC maturation (i.e. CD80, CD86 etc.) were differentially expressed at the transcriptional level however in healthy blood mDCs. Among Toll-like receptors (TLRs), TLR2, 4, 5 and 8 were significantly down-regulated while TLR-3 and 10 were upregulated. We found that a very small fraction of “mDC transcripts” were similarly expressed in blood SLE monocytes. This is not entirely surprising though, as blood mDC precursors may represent a totally independent DC subpopulation compared to DCs generated from monocyte precursors. None of the proteins encoded by the overlapping genes in these two cell types could however explain the DC function of SLE monocytes. Thus, we decided to explore the possibility that contact with T cells might be required in order for SLE monocytes to acquire an antigen-presenting transcriptional program and/or phenotype.

As previously published (Blanco and others 2001), not every SLE patient displays blood monocytes able to induce alloreactive CD4⁺ T cell proliferation. Thus, we screened SLE monocytes from a group of SLE patients in standard alloreactions and classified samples based on either capacity to induce CD4 T cell proliferation. The transcriptional profiles of MLR⁺ and MLR⁻ monocytes disclosed 265 transcripts

differentially regulated in these two groups. All SLE monocyte samples which induced CD4⁺ T cell proliferation upregulated MHC class II transcripts after 6 hr of culture with T cells at similar levels as blood mDC. Other MLR⁺ monocyte upregulated transcripts encoded innate immunity molecules such as IL-1b, KCNJ15, a potassium rectifier channel which follows the transcription pattern of IL-1b (Pascual and others 2005), MARCO, a receptor involved in actin cytoskeleton rearrangements and down-regulation of antigen uptake function during DC maturation (Pikkarainen and others 1999), and CXCL10, a ligand for CXCR3 that is induced by type I and type II IFN and may play a key role in IFN- γ mediated responses (Piali and others 1998). This microarray data was further confirmed at two levels: first, cell surface staining of SLE monocytes after 48-hours in culture with CD4 T cells showed that the expression level of class II molecules correlated with the capacity of these cells to induce CD4⁺ T cell proliferation; second, cytokines levels in the supernatant of the monocyte-T cell cultures disclosed increased levels of IL-1b in 3/4 cultures inducing CD4 T cell proliferation. IL6, which may be induced by IL-1b, was elevated in the same cultures. Thus, these studies suggest that blood SLE monocytes require signals derived from T cells in order to acquire DC function. Additionally, they point towards an important role for innate immunity receptors and/or cytokines, i.e. MARCO and IL-1b/IL-6, in conferring antigen-presenting capacity to monocytes from SLE patients. The capacity of activated T cells to induce IL-1 production in monocytes has been reported as an antigen independent pathway. Indeed, IL-1 could be induced in third-party HLA-DR nonspecific monocytes in cocultures of alloreactive T cell clones or blasts and HLA-DR-specific DCs. The induction was independent of a soluble factor, since dendritic cells and T blasts placed in a chamber

separate from third-party monocytes by a semipermeable membrane did not induce monocyte IL-1. These results suggest that a cell contact mechanism rather than an IL-1-inducing factor leads to IL-1 production (Bhardwaj and others 1988). How the type I IFN-rich environment of SLE blood predisposes monocytes to respond to T cell signals and/or to produce the cytokines that we describe above remain to be elucidated.

An important observation from earlier work at our Institute was that the addition of SLE serum to healthy monocytes induced the differentiation of these cells into DCs (Blanco and others 2001). This effect could be reproduced by adding IFN-alpha to healthy human serum, but not to FCS. Thus, one or several components of human serum seem to be necessary to facilitate the DC-poietin activity of type I IFN. We surmised that by studying the transcriptional program induced by SLE serum on healthy monocytes we might gain insight into these putative serum factor(s). This approach might also help us recapitulate the events responsible for the skewing of monocytes into DCs during the initial stages of SLE. We found that incubation with serum from active, untreated SLE patients induced the differential expression of ~3,000 transcripts on healthy monocytes. Functional characterization of these transcripts revealed a significant upregulation of genes involved in biological pathways such as apoptosis, adhesion, chemotaxis, pattern recognition receptors, Fc receptors, RNA and protein modification, signaling and transcription. All these categories included both well known type I IFN-inducible as well as type I IFN independent genes. The induction of pro-apoptotic genes may explain the death-inducing capacity of SLE serum, which seems to be at least partially independent of the effects of IFN alpha. Indeed, while monocytes remain alive in culture for up to 3 days when exposed to IFN alpha in the presence of human serum, SLE serum exposed

monocytes do not survive more than 24 hr in vitro (data not shown). This is not surprising, as SLE serum induces significant transcriptional changes in apoptosis inducing molecules many of which are IFN- α independent. Among genes with well defined immune function, SLE serum also upregulates innate immunity receptors such as NOD2, TLR7 and TLR8. This might cause SLE monocytes to become hyper-responsive upon interaction with pathogens and/or immune complexes containing nucleic acids (Vallin and others 1999b). Indeed, SLE serum also induces the upregulation of transcription of Fc γ receptors, especially Fc γ RIa, Fc γ RIIIa. Among genes involved in signal transduction, SLE serum (and IFN- α as well) upregulates the transcription of IRF-5, a candidate susceptibility gene for SLE (Graham and others 2006; Sigurdsson and others 2005). SLE serum also induced the upregulation of genes encoding molecules involved in nucleosome and chromatin modification, RNA processing and ubiquitination. It did not upregulate HLA class II-encoding transcripts but genes encoding molecules involved in HLA class I transport, especially TAP1, TAP2 and Tapasin. Finally, among the most differentially regulated genes we found chemokine and chemokine receptors such as CXCL10, CXCR4 and CCR7.

To our surprise, only a minority of SLE serum-induced transcripts (~8%) overlapped with the transcripts found dysregulated in ex-vivo SLE blood monocytes. Of these common genes, less than 1/3 (194 transcripts) were induced by IFN α . Furthermore, the expression of only half of these transcripts (115/194) was significantly blocked by preincubating SLE serum with neutralizing antibodies against both IFN α/β and the type I IFN receptor. Thus, exposure to SLE serum induces significant changes in the transcriptional program of healthy monocytes. Only a fraction of these changes,

however, is also found dysregulated in the blood monocytes from SLE patients and can be attributed to type-I IFN effects. Caution should however be applied to the interpretation of these studies. First, our selection criteria for considering a transcript to be IFN-regulated in vitro were quite stringent. Second, we only tested the transcriptional program induced by in vitro exposure to recombinant IFN-alpha 2b. It is very likely that other closely related type I IFN molecules, including different alpha subclasses, do give rise to different transcriptional changes. Finally, even though we tried to neutralize all possible type I IFN molecules by adding anti-type I IFN receptor antibodies to SLE serum, we did not attempt to block the IFN- λ receptor which also gives rise to overlapping yet unique downstream signaling events. Finally, it has been proposed that an IFN signature may be triggered in monocytes through activation of receptors which induce STAT-1 phosphorylation independently of type I IFN receptor engagement. In particular, signals delivered via both Fc γ RIIIA and Fc γ RIIA seem to induce such transcriptional program (Dhodapkar and others 2007). Immune complexes from SLE serum could therefore be responsible for this type of transcriptional response. Whether in fact the CD16+ blood monocyte fraction is more likely to express the IFN signature in healthy subjects and/or SLE patients remains to be clarified.

Our studies so far provided little evidence to support that ex-vivo SLE blood monocyte express DC-related molecules. They also revealed little overlap between the transcriptional programs of ex vivo SLE blood monocytes and healthy monocytes incubated with SLE serum. Furthermore, not all the transcriptional changes induced by incubating healthy monocytes with SLE serum were translated into true phenotypic changes at the protein level. For example, surface staining of monocytes after 24 hr

incubation with SLE serum revealed profound down-regulation of CD16 and mild downregulation of CD64 even though both transcripts were upregulated at the RNA level. This could be explained however by receptor occupancy by serum Ig and/or Immune complexes. As our laboratory had shown before, we confirmed the downregulation by SLE serum of CD14 and the upregulation of CD83, a bona fide DC maturation marker, on the cell fraction that downregulates CD14 in vitro (originally CD14^{high} monocytes, data not shown). On the same fraction, we observed a significant upregulation of CCR7. This chemokine receptor is expressed on mature DCs and T cells and is a homing receptor for these cells to migrate to the lymph nodes where its ligands (CCL19 and CCL21) are expressed (Willimann and others 1998). The SLE serum induced in vitro upregulation of CCR7 was indeed accompanied by a gain of function, as migration studies showed that healthy monocytes incubated with SLE serum did migrate more efficiently towards CCL19. CX3CR1 is a chemokine receptor for fractalkine, which is normally expressed in inflamed tissues. This receptor is preferentially expressed on CD14^{lo} CD16⁺ monocytes (Geissmann and others 2003). As opposed to CCR7, expression of CX3CR1 at the transcriptional level was only induced by SLE serum but not by exposure to IFN-alpha in vitro. Exposure to the majority of the SLE patient sera tested did upregulate the expression of CX3CR1 at the protein level on healthy monocytes.

We surmise that in the initial stages of SLE, monocyte exposure to type I IFN and/or other components of SLE serum would efficiently upregulate these receptors and subsequently induce the migration monocytes to either lymph nodes or peripheral inflamed tissues. There, our work supports a model where monocyte contact with T cells

would induce the upregulation of molecules involved in antigen presentation (i.e. HLA class II) and give rise to an immune/autoimmune response (figure 22). Indeed, what is left in the blood of patients with ongoing disease might represent recently-emigrated monocyte bone marrow precursors and/or exhausted cells that are not able to efficiently upregulate in vivo the receptors within pathways that mediate their recruitment into lymphoid and/or inflamed tissues. As we start to identify some of these pathways, we might be able to better dissect the important events underlying monocyte and DC alterations in patients with SLE. This might lead to the identification of efficient and safe therapeutic targets (figure 23).

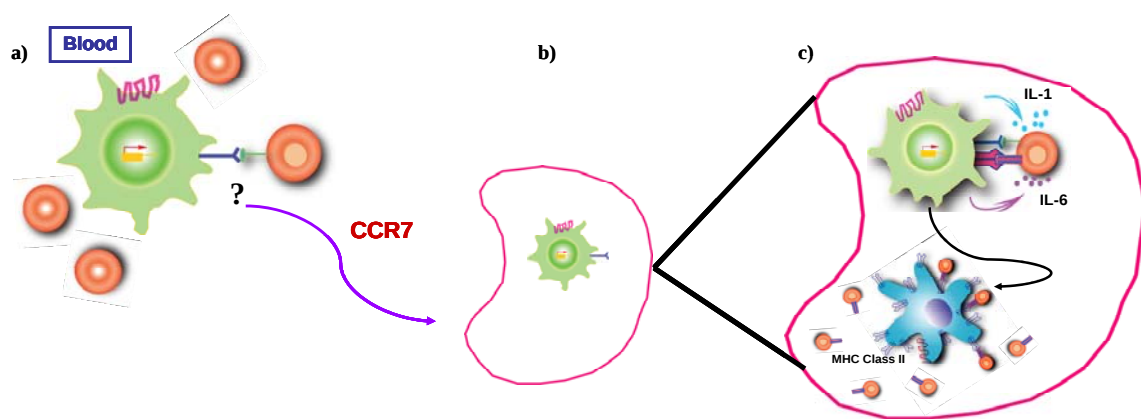


Figure 22. How lupus monocytes encounter T cells? SLE monocytes circulating in the blood express CCR7 due to type I IFN presence in SLE patients. They migrate to secondary lymphoid tissues where they come in contact with T cells, secrete IL-1 and IL-6 and induce expansion of T cells.

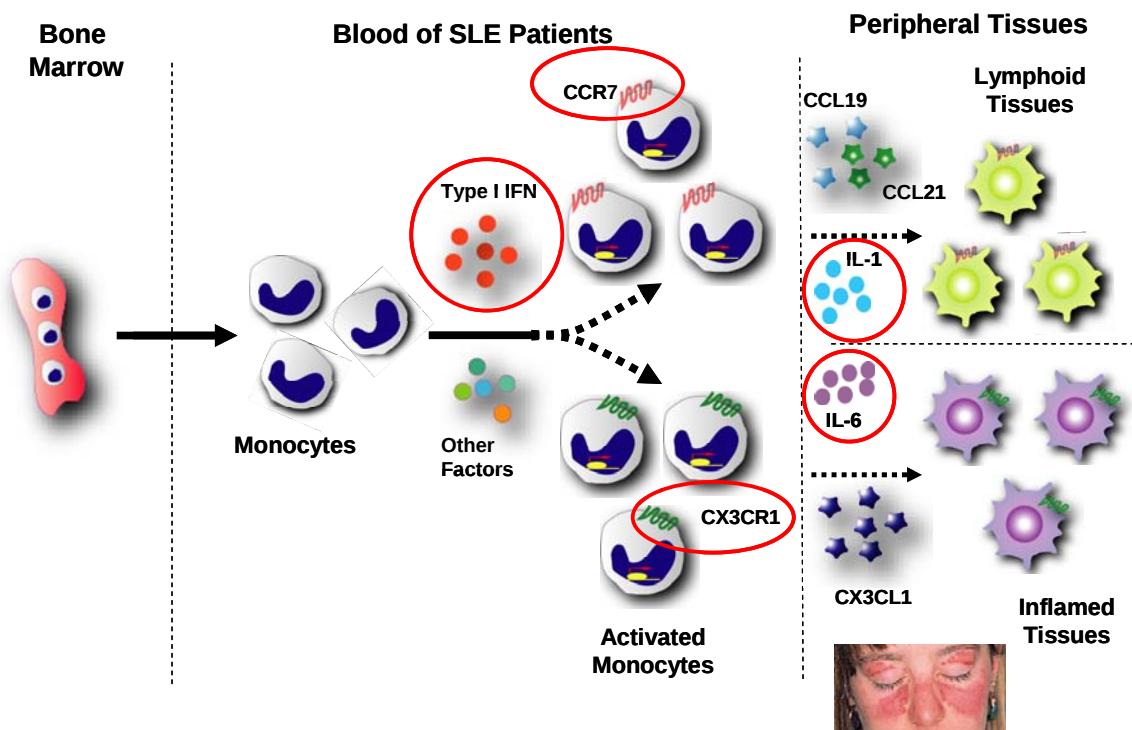


Figure 23. Potential therapeutic targets to treat SLE. Newly emigrated monocytes from bone marrow upon encountering type I IFNs or other factors in SLE microenvironment express CCR7 and/or CX3CR1 on their surface and migrated to lymphoid tissues or inflamed tissues where they may secrete IL-1 and IL-6. Red circles point at molecules of potential intervention to treat SLE.

APPENDICES

APPENDIX A

Supplementary figure

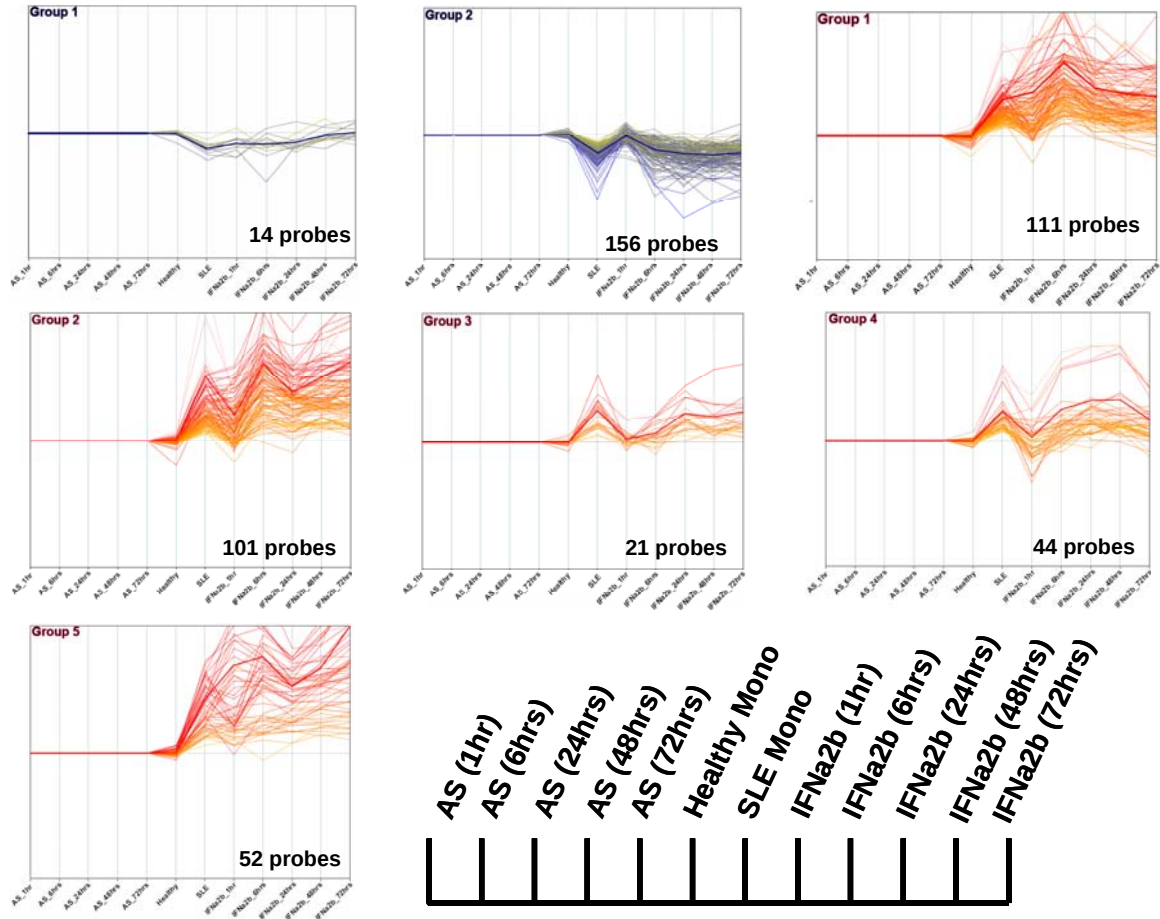


Figure A.1. Time kinetic expression pattern of IFN regulated genes

APPENDIX B

Gene lists

A.1. Differentially regulated genes in untreated SLE monocytes.

<i>Systematic</i>	<i>Gene Symbol</i>	<i>p-value</i>	<i>Average normalized values in SLE monocytes</i>
<i>Angiogenesis</i>			
212099_at	RHOB	1.47E-03	3.48
218534_s_at	AGGF1	3.47E-04	1.38
219439_at	C1GALT1	1.59E-03	1.44
<i>Apoptosis</i>			
200663_at	CD63	4.43E-03	1.90
200976_s_at	TAX1BP1	1.37E-02	0.67
201301_s_at	ANXA4	1.72E-03	2.36
201302_at	ANXA4	9.25E-03	1.87
201635_s_at	FXR1	1.02E-02	0.49
202688_at	TNFSF10	2.26E-03	2.76
202971_s_at	DYRK2	2.44E-02	0.51
204780_s_at	FAS	6.08E-03	1.90
207953_at	AD7C-NTP	2.27E-02	0.61
208485_x_at	CFLAR	1.58E-01	1.92
209310_s_at	CASP4	2.95E-02	0.66
209539_at	ARHGEF6	1.27E-03	0.66
210113_s_at	NLRP1	1.35E-02	0.49
210260_s_at	TNFAIP8	7.51E-03	1.44
211317_s_at	CFLAR	3.82E-01	1.56
213581_at	PDCD2	8.35E-03	0.66
215096_s_at	ESD	4.38E-03	0.65
216252_x_at	FAS	2.55E-03	2.06
219275_at	PDCD5	1.44E-03	0.63
224190_x_at	NOD1	8.94E-03	1.33
224414_s_at	CARD6	4.44E-04	1.79
226116_at	DFFA	9.71E-03	0.59
226364_at	HIP1	1.15E-01	2.16
226524_at	C3orf38	1.93E-03	2.18
229174_at	C3orf38	6.08E-03	2.62
241371_at	---	2.79E-02	1.99
37384_at	PPM1F	1.66E-02	0.55
39729_at	PRDX2	1.08E-03	0.51

Autophagy

218627_at	DRAM	2.32E-03	2.23
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Biosynthetic process

201268_at	NME2	2.57E-02	0.44
202562_s_at	C14orf1	5.71E-03	1.49
203217_s_at	ST3GAL5	6.51E-03	1.64
205633_s_at	ALAS1	1.71E-03	1.73
208788_at	ELOVL5	1.04E-02	0.76
212864_at	CDS2	1.25E-03	1.59
213725_x_at	XYLT1	4.34E-03	0.50
218147_s_at	GLT8D1	1.12E-03	0.65
218809_at	PANK2	1.51E-03	1.40
219017_at	ETNK1	1.74E-05	2.14
226432_at	ETNK1	2.79E-02	2.23
226702_at	LOC129607	2.65E-06	5.14

Catabolic process

204076_at	ENTPD4	1.35E-03	0.52
209668_x_at	CES2	3.52E-02	0.84
213129_s_at	GCSH	1.01E-05	0.50

Cell adhesion

201005_at	CD9	4.89E-01	1.34
201506_at	TGFB1	1.06E-02	0.54
201647_s_at	SCARB2	5.89E-03	2.18
204490_s_at	CD44	1.23E-03	0.54
205055_at	ITGAE	5.33E-03	0.50
205718_at	ITGB7	3.51E-02	2.36
209473_at	ENTPD1	6.83E-03	0.67
209835_x_at	CD44	1.58E-02	0.63
211075_s_at	CD47	2.53E-03	1.82
212014_x_at	CD44	2.11E-02	0.55
212063_at	CD44	1.57E-03	0.48
213241_at	PLXNC1	1.99E-03	0.73
217523_at	CD44	1.22E-02	0.33
219519_s_at	SIGLEC1	1.01E-05	88.12
222108_at	AMIGO2	7.90E-03	2.86
222838_at	SLAMF7	3.51E-04	5.32
223303_at	URP2	3.21E-04	1.86
224374_s_at	EMILIN2	8.09E-04	1.43
224983_at	SCARB2	3.39E-03	1.72
228707_at	CLDN23	5.94E-04	9.26
229867_at	BTBD9	1.54E-01	0.44
244229_at	PARVG	3.56E-03	0.52
44673_at	SIGLEC1	1.80E-04	15.43

Cell communication

212841_s_at	PPFIBP2	1.85E-03	0.64
227151_at	SH3PX3	7.20E-03	0.57
227250_at	KREMEN1	9.07E-03	3.13

Cell cycle

201408_at	PPP1CB	2.31E-03	0.50
201482_at	QSOX1	8.78E-03	1.44
201700_at	CCND3	3.54E-03	2.45
202191_s_at	GAS7	2.73E-03	0.49
203659_s_at	TRIM13	4.38E-04	0.58
204053_x_at	PTEN	4.17E-03	0.61
207614_s_at	CUL1	4.10E-04	4.13
207839_s_at	C9orf127	5.38E-05	0.51
208250_s_at	DMBT1	9.72E-03	0.64
208796_s_at	CCNG1	5.58E-02	0.71
209588_at	EPHB2	9.70E-03	1.88
211040_x_at	GTSE1	1.86E-03	0.57
211711_s_at	PTEN	2.18E-03	0.67
212308_at	CLASP2	3.66E-03	0.77
212672_at	ATM	9.76E-03	0.55
212698_s_at	SEPT10	7.22E-03	0.46
212913_at	MSH5	6.88E-03	0.61
212997_s_at	TLK2	2.42E-03	1.55
213331_s_at	NEK1	5.79E-03	1.55
215997_s_at	CUL4B	3.38E-02	0.52
222163_s_at	SPATA5L1	1.58E-03	1.58
224578_at	RCC2	1.57E-03	1.92
225285_at	BCAT1	1.82E-02	0.41
225665_at	ZAK	4.03E-02	0.48
225814_at	XRN1	1.89E-03	1.79
226517_at	BCAT1	2.10E-03	0.43
226917_s_at	ANAPC4	3.16E-04	0.80
228810_at	CCNYL1	4.66E-03	1.55
228923_at	S100A6	2.90E-02	0.48
233632_s_at	XRN1	3.72E-03	2.47

Cell death

203232_s_at	ATXN1	8.40E-05	0.65
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Cell differentiation

204270_at	SKI	9.74E-04	0.10
204858_s_at	ECGF1	8.26E-03	2.43
204929_s_at	VAMP5	2.85E-02	1.71
206707_x_at	C6orf32	1.65E-03	1.46
210251_s_at	RUFY3	1.70E-02	0.49
217497_at	ECGF1	3.28E-03	1.72
218079_s_at	GGNBP2	2.36E-02	1.26
220299_at	SPATA6	3.00E-03	0.46
226725_at	SLFN5	4.49E-03	2.65
242086_at	SPATA6	3.25E-02	0.47

Cell migration/Cell motility

221815_at	ABHD2	1.28E-02	0.46
200996_at	ACTR3	1.30E-02	1.58
222976_s_at	TPM3	2.38E-03	1.39
225897_at	MARCKS	5.81E-02	1.91

Cell proliferation

201324_at	EMP1	4.55E-04	7.29
201325_s_at	EMP1	1.40E-04	8.86
203729_at	EMP3	2.16E-03	1.48
204698_at	ISG20	2.66E-03	11.10
208680_at	PRDX1	9.59E-03	1.37
209193_at	PIM1	6.19E-02	2.39
225435_at	SSR1	1.17E-03	0.40
33304_at	ISG20	1.04E-02	4.55
39817_s_at	C6orf108	3.62E-03	1.24

Cell wall catabolic process

226321_at	LYSMD3	2.07E-03	2.28
226748_at	LYSMD2	6.01E-03	2.23

Cell-cell signalling

220558_x_at	TSPAN32	6.65E-03	0.68
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Chemotaxis

233056_x_at	DLGAP4	7.41E-04	0.55
204533_at	CXCL10	7.57E-03	7.15
205098_at	CCR1	1.29E-03	3.27
206978_at	CCR2	2.93E-04	1.77
206991_s_at	CCR5	1.85E-03	2.39
207794_at	CCR2	1.41E-01	2.22
210163_at	CXCL11	2.26E-02	3.02
210772_at	FPRL1	5.60E-03	2.75
210773_s_at	FPRL1	2.40E-02	2.76
211919_s_at	CXCR4	2.85E-01	1.53
214038_at	CCL8	2.70E-03	10.96
216598_s_at	CCL2	1.24E-03	32.59
230422_at	FPRL2	2.98E-03	2.74
232629_at	PROK2	8.61E-01	1.15

Circulation

201798_s_at	FER1L3	5.06E-03	2.02
211864_s_at	FER1L3	4.24E-04	2.13

Cytoskeleton

200897_s_at	PALLD	5.68E-03	0.24
200907_s_at	PALLD	9.62E-03	0.28
200914_x_at	KTN1	1.88E-02	0.55
202183_s_at	KIF22	2.26E-04	0.49
203961_at	NEBL	2.76E-03	0.03
203962_s_at	NEBL	3.54E-03	0.11
208614_s_at	FLNB	3.31E-02	2.04
208623_s_at	VIL2	1.70E-02	1.46
215810_x_at	DST	4.55E-03	0.44
223068_at	EML4	2.90E-02	2.26
225878_at	KIF1B	1.20E-02	1.38
232098_at	DST	4.35E-02	0.47

Dephosphorylation

208121_s_at	PTPRO	2.29E-03	4.16
209296_at	PPM1B	4.00E-03	1.67
235061_at	PPM1K	1.32E-02	4.06

Development

201153_s_at	MBNL1	7.30E-03	0.78
207023_x_at	KRT10	7.37E-04	0.30
209864_at	FRAT2	7.96E-03	1.87
210633_x_at	KRT10	1.55E-03	0.32
213131_at	OLFM1	3.71E-04	0.20
213287_s_at	KRT10	1.67E-03	0.39
223849_s_at	MOV10	2.96E-04	3.56
226081_at	LZIC	1.53E-03	1.82
228762_at	LFNG	5.57E-03	1.97
229173_at	KIAA1715	2.12E-02	0.54
230480_at	PIWIL4	1.12E-02	1.44

DNA integration

221069_s_at	CCDC44	8.93E-03	1.58
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DNA repair

202330_s_at	UNG	1.27E-03	0.46
202907_s_at	NBN	1.17E-03	1.25
208694_at	PRKDC	1.22E-03	0.50
212926_at	SMC5	1.25E-03	0.62
228131_at	ERCC1	8.89E-03	0.59

DNA replication

204127_at	RFC3	3.04E-02	0.66
204528_s_at	NAP1L1	1.45E-02	0.37
205053_at	PRIM1	7.42E-03	1.55
207266_x_at	RBMS1	2.28E-02	1.50
208752_x_at	NAP1L1	1.81E-02	0.57
208753_s_at	NAP1L1	1.17E-02	0.50
208754_s_at	NAP1L1	1.37E-02	0.37
208901_s_at	TOP1	1.58E-03	1.52
214426_x_at	CHAF1A	4.59E-03	0.55
219041_s_at	REPIN1	2.48E-02	0.38
222629_at	REV1	3.03E-03	0.55

Glycolysis

201037_at	PFKP	1.52E-03	2.27
201251_at	PKM2	4.94E-02	2.20

Glycosylation

204192_at	CD37	1.12E-01	1.95
205505_at	GCNT1	1.77E-03	2.04
217787_s_at	GALNT2	3.67E-03	2.66
238303_at	STT3B	1.48E-01	0.47
239761_at	GCNT1	1.45E-02	1.81

G-protein coupled receptor protein signaling pathway

208702_x_at	APLP2	2.24E-03	1.91
211404_s_at	APLP2	1.95E-03	1.73
211985_s_at	CALM1	1.20E-02	2.06
214875_x_at	APLP2	1.53E-03	2.06
228520_s_at	APLP2	2.36E-03	0.68

Homeostasis

212185_x_at	MT2A	1.81E-02	2.14
228331_at	C11orf31	1.77E-02	0.51

Immune response/Defense response

200986_at	SERPINC1	8.93E-03	5.87
201315_x_at	IFITM2	6.13E-04	5.15
201601_x_at	IFITM1	1.66E-03	20.00
201641_at	BST2	7.23E-05	2.37
201762_s_at	PSME2	4.86E-03	1.78
202086_at	MX1	9.78E-05	11.37
202145_at	LY6E	1.67E-04	10.49
202269_x_at	GBP1	7.44E-03	3.70
202270_at	GBP1	2.26E-04	5.10
202411_at	IFI27	1.81E-04	330.93
202441_at	ERLIN1	1.37E-02	1.72
202859_x_at	IL8	1.95E-01	2.47
202869_at	OAS1	1.46E-03	2.49
202953_at	C1QB	5.77E-03	6.18
203153_at	IFIT1	2.13E-05	19.00
203538_at	CAMLG	5.38E-03	0.53
203595_s_at	IFIT5	3.94E-04	3.85
203596_s_at	IFIT5	5.62E-04	6.67
203932_at	HLA-DMB	1.40E-02	0.51
203948_s_at	MPO	9.93E-02	3.27
204006_s_at	FCGR3A	1.67E-01	1.91
204007_at	FCGR3B	9.33E-02	2.40
204415_at	IFI6	4.96E-05	12.83
204747_at	IFIT3	1.92E-04	6.97
204924_at	TLR2	1.23E-02	1.34
204972_at	OAS2	3.46E-05	7.27
204994_at	MX2	2.55E-04	4.36
205552_s_at	OAS1	1.91E-03	4.45
205660_at	OASL	3.82E-05	10.77
205789_at	CD1D	2.51E-03	0.60
205987_at	CD1C	1.65E-02	0.15
206513_at	AIM2	1.35E-02	1.95
206553_at	OAS2	2.22E-03	2.77
207113_s_at	TNF	7.47E-03	0.76
209417_s_at	IFI35	8.51E-04	4.65
209480_at	HLA-DQB1	4.24E-02	0.08
209795_at	CD69	9.42E-03	3.68
210166_at	TLR5	1.17E-02	0.65
210660_at	LILRA1	3.08E-02	0.59
210797_s_at	OASL	5.95E-05	9.17

211734_s_at	FCER1A	4.66E-02	0.16
211990_at	HLA-DPA1	5.51E-02	0.49
212195_at	IL6ST	1.65E-03	1.46
212203_x_at	IFITM3	1.43E-04	6.46
212657_s_at	IL1RN	2.50E-04	2.86
212659_s_at	IL1RN	3.08E-03	1.98
212671_s_at	HLA-DQA1	2.41E-01	0.56
212999_x_at	HLA-DQB1	5.02E-02	0.23
213537_at	HLA-DPA1	1.21E-02	0.43
213831_at	HLA-DQA1	3.43E-02	0.13
214022_s_at	IFITM1	8.61E-04	16.52
214059_at	IFI44	8.18E-04	11.50
214211_at	FTH1	1.75E-02	0.69
214453_s_at	IFI44	1.37E-05	6.20
214511_x_at	FCGR1B	5.81E-04	3.98
216020_at	IFIH1	3.60E-03	2.72
216243_s_at	IL1RN	5.29E-04	1.91
217502_at	IFIT2	1.30E-03	6.17
218232_at	C1QA	1.86E-02	3.04
218400_at	OAS3	3.12E-05	8.14
218520_at	TBK1	9.90E-04	1.57
218943_s_at	DDX58	2.86E-03	4.27
219209_at	IFIH1	6.71E-04	3.89
219364_at	DHX58	1.33E-03	4.46
219761_at	CLEC1A	7.60E-03	0.63
220307_at	CD244	1.13E-02	0.44
221085_at	TNFSF15	1.62E-02	0.26
222793_at	DDX58	1.21E-02	2.96
223434_at	GBP3	5.07E-03	2.82
224232_s_at	PRELID1	6.23E-03	1.54
226218_at	IL7R	2.10E-03	5.42
226757_at	IFIT2	2.46E-04	13.50
227354_at	PAG1	3.13E-03	1.34
227458_at	---	2.27E-03	4.61
228607_at	OAS2	9.89E-05	3.99
229450_at	IFIT3	5.13E-06	17.68
229625_at	GBP5	1.10E-02	4.09
231577_s_at	GBP1	2.92E-03	6.63
232666_at	OAS3	6.87E-03	2.77
235175_at	GBP4	5.79E-02	2.09
237107_at	PRKRA /	4.33E-03	0.58
238581_at	GBP5	3.60E-03	6.26
238900_at	HLA-DRB1	6.07E-02	0.13
239205_s_at	CR1	1.11E-01	1.99
60528_at	PLA2G4B	7.90E-04	0.67

Metabolic process

200648_s_at	GLUL	8.29E-04	2.13
201128_s_at	ACLY	2.19E-03	1.71
201662_s_at	ACSL3	3.27E-03	1.73
202739_s_at	PHKB	1.70E-02	0.73
202847_at	PCK2	1.80E-03	1.29

203058_s_at	PAPSS2	5.20E-04	0.44
203067_at	PDHX	1.32E-02	1.43
203127_s_at	SPTLC2	7.57E-03	1.73
203392_s_at	CTBP1	1.25E-02	1.39
203397_s_at	GALNT3	6.99E-04	2.44
203986_at	STBD1	4.86E-05	3.22
204224_s_at	GCH1	1.78E-03	2.13
205632_s_at	PIP5K1B	6.26E-03	0.67
206565_x_at	SMA4	5.38E-01	0.71
207275_s_at	ACSL1	5.85E-03	3.13
207621_s_at	PEMT	9.71E-03	0.58
208498_s_at	AMY1A	1.87E-02	0.33
208926_at	NEU1	2.27E-02	1.43
209213_at	CBR1	4.29E-03	2.66
209459_s_at	ABAT	8.19E-03	0.45
209460_at	ABAT	5.04E-02	0.47
210377_at	ACSM3	4.50E-02	0.29
210589_s_at	GBA	2.15E-03	1.95
211423_s_at	SC5DL	2.29E-04	1.35
212321_at	SGPL1	3.83E-04	0.57
213607_x_at	NADK	2.25E-04	1.34
213626_at	CBR4	3.16E-02	0.62
214440_at	NAT1	3.50E-04	2.38
215043_s_at	SMA5	5.83E-01	0.68
215599_at	SMA4	2.93E-03	0.36
216202_s_at	SPTLC2	2.00E-02	2.61
217922_at	MAN1A2	2.87E-02	0.68
218017_s_at	HGSNAT	1.69E-03	0.50
218421_at	CERK	6.39E-03	0.56
218557_at	NIT2	1.52E-02	0.84
218942_at	PIP4K2C	1.10E-02	1.44
219403_s_at	HPSE	1.10E-02	1.54
219590_x_at	DPH5	1.44E-02	0.64
220023_at	APOB48R	3.63E-01	1.55
220615_s_at	MLSTD1	9.78E-03	1.43
221059_s_at	COTL1	6.50E-03	0.59
221139_s_at	CSAD	5.63E-02	0.48
221484_at	B4GALT5	1.10E-01	2.24
221485_at	B4GALT5	1.38E-02	2.29
225440_at	AGPAT3	7.09E-04	1.77
225679_at	NAT12	7.75E-03	1.75
226039_at	MGAT4A	4.82E-02	1.72
226671_at	LAMP2	2.28E-02	0.65
226733_at	PFKFB2	7.85E-04	0.45
228077_at	MGC3207	7.94E-04	0.72
228376_at	GGTA1	8.16E-03	0.38
229958_at	CLN8	7.69E-03	0.45
231832_at	GALNT4	1.03E-02	1.48
233011_at	ANXA1	2.34E-02	2.75
235256_s_at	GALM	3.15E-03	3.10
241395_at	NIT1	1.01E-02	0.33
242281_at	---	1.91E-04	1.69

242963_at	SGMS2	1.12E-02	2.07
37278_at	TAZ	5.03E-03	0.64
43427_at	ACACB	8.42E-02	0.48
AFFX-BioDn-3_at	---	1.46E-03	0.70
AFFX-BioDn-5_at	---	4.83E-03	0.69

Methyltransferase activity

211732_x_at	HNMT	2.62E-02	0.46
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Myeloid cell differentiation

209481_at	SNRK	5.26E-03	1.66
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Nucleic acid metabolism

201695_s_at	NP	1.40E-02	2.48
203401_at	PRPS2	9.61E-03	1.30
204187_at	GMPR	1.98E-03	7.07
212175_s_at	AK2	3.80E-03	1.33

Nucleosome assembly

202303_x_at	SMARCA5	3.47E-02	1.92
208886_at	H1FO	1.39E-02	3.64
209398_at	HIST1H1C	6.29E-02	2.46
212205_at	H2AFV	3.85E-02	0.62
214290_s_at	HIST2H2AA3	5.41E-03	2.63
218280_x_at	HIST2H2AA3	4.06E-03	2.49
224301_x_at	H2AFJ	1.07E-02	2.04
33767_at	NEFH	2.24E-02	0.44

Nucleotide metabolic process

201892_s_at	IMPDH2	8.49E-03	0.37
213892_s_at	APRT	4.02E-02	0.66
221588_x_at	ALDH6A1	4.23E-03	0.68
221589_s_at	ALDH6A1	1.12E-03	0.67
223298_s_at	NT5C3	2.50E-03	3.68
225547_at	SNHG6	2.85E-03	0.67

Organelle organization and biogenesis

223446_s_at	DTNBP1	7.04E-03	2.66
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Phagocytosis

202877_s_at	CD93	8.18E-03	0.56
206157_at	PTX3	5.07E-02	1.88
216950_s_at	FCGR1A	1.11E-03	4.10
221528_s_at	ELMO2	2.89E-02	1.74
221676_s_at	CORO1C	1.27E-03	1.73
55692_at	ELMO2	1.35E-02	1.60

Plasma membrane repair

218660_at	DYSF	4.43E-03	2.56
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Platelet activation

202430_s_at	PLSCR1	1.32E-04	1.85
202446_s_at	PLSCR1	6.55E-05	2.96

Protein amino acid ADP-ribosylation

218543_s_at	PARP12	7.30E-04	4.04
219033_at	PARP8	7.02E-03	0.52
220104_at	ZC3HAV1	2.45E-04	3.00
223220_s_at	PARP9	5.90E-06	7.54
225634_at	ZC3HAV1	2.23E-03	2.08
227807_at	PARP9	9.31E-05	3.23
229138_at	PARP11	7.64E-03	2.01

Protein amino acid phosphorylation

202193_at	LIMK2	1.29E-02	2.26
202559_x_at	C1orf77	5.44E-04	1.39
205192_at	MAP3K14	2.71E-02	0.56
210582_s_at	LIMK2	1.01E-02	2.13
215154_at	ULK2	1.99E-02	0.60
227438_at	ALPK1	9.00E-05	3.46
238025_at	MLKL	1.50E-02	1.49

Protein biosynthetic process

212845_at	SAMD4A	7.01E-03	4.59
215495_s_at	SAMD4A	4.76E-03	2.29

Protein catabolism

219030_at	TPRKB	4.81E-03	0.57
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Protein complex assembly

224729_s_at	ATPAF1	1.41E-03	0.68
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Protein folding

200880_at	DNAJA1	4.68E-03	2.07
200881_s_at	DNAJA1	1.71E-03	1.72
201326_at	CCT6A	1.49E-03	0.60
202581_at	HSPA1B	1.25E-03	2.35
204517_at	PPIC	6.77E-02	0.32
207040_s_at	ST13	5.34E-04	0.57
208744_x_at	HSPH1	1.17E-03	3.61
208995_s_at	PPIG	3.57E-04	0.77
209593_s_at	TOR1B	7.53E-04	4.05
213097_s_at	ZRF1	8.91E-04	0.68
218168_s_at	CABC1	1.23E-02	0.57
219283_at	C1GALT1C1	7.08E-03	1.47
221782_at	DNAJC10	1.13E-02	0.56
224567_x_at	MALAT1	3.94E-03	0.49
224856_at	FKBP5	2.23E-03	2.34
225061_at	DNAJA4	3.56E-03	2.58
226175_at	TTC9C	1.67E-03	1.66
228189_at	BAG4	9.13E-03	2.13
228469_at	PPID	1.39E-04	1.52

229588_at	DNAJC10	5.22E-03	0.46
229603_at	BBS12	2.31E-04	12.01
230659_at	EDEM1	9.77E-03	0.49

Protein homooligomerization

201060_x_at	STOM	6.07E-04	4.24
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Protein metabolism

221497_x_at	EGLN1	7.16E-03	0.58
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Protein modification process

208939_at	SEPHS1	1.86E-04	1.21
228042_at	ADPRH	3.17E-04	2.68
230261_at	ST8SIA4	4.50E-04	2.28
242943_at	ST8SIA4	5.23E-03	2.99

Protein repair

225782_at	MSRB3	5.09E-03	4.27
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Proteolysis

201068_s_at	PSMC2	2.48E-03	1.64
201290_at	SEC11A	2.44E-04	0.58
201351_s_at	YME1L1	2.15E-02	1.40
201682_at	PMPCB	3.54E-02	0.75
202087_s_at	CTSL1	6.01E-04	2.85
202740_at	ACY1	1.00E-02	0.71
204279_at	PSMB9	8.63E-04	2.97
205559_s_at	PCSK5	2.75E-03	0.33
208470_s_at	HP	1.17E-01	3.82
209040_s_at	PSMB8	4.13E-03	1.66
214790_at	SEN6	2.32E-02	0.65
216304_x_at	YME1L1	5.82E-03	1.74
217933_s_at	LAP3	1.24E-04	2.81
219935_at	ADAMTS5	1.54E-02	0.10
225646_at	CTSC	2.97E-02	0.61
226038_at	LONRF1	6.82E-03	2.24
226760_at	MBTPS2	4.47E-03	2.15
227018_at	DPP8	2.74E-02	1.47
229357_at	ADAMTS5	1.70E-03	0.09
231234_at	CTSC	1.40E-02	0.23
231769_at	FBXO6	4.61E-02	2.81
235019_at	CPM	9.39E-03	0.46
235368_at	ADAMTS5	2.36E-04	0.16

Regulation of cell growth

213497_at	ABTB2	4.60E-03	2.17
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Regulation of cytokine production

239431_at	TICAM2	1.72E-02	1.92
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Regulation of rab GTPase activity

213982_s_at	RABGAP1L	3.80E-03	2.83
214779_s_at	SGSM3	1.99E-03	0.48
225121_at	TBC1D23	1.11E-02	1.55

Ribosome biogenesis and assembly

223397_s_at	NIP7	5.88E-04	2.94
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RNA processing

200033_at	DDX5	4.71E-04	0.76
200685_at	SFRS11	7.02E-04	0.45
201064_s_at	PABPC4	2.44E-03	0.45
201742_x_at	SFRS1	1.43E-01	1.74
201786_s_at	ADAR	4.47E-03	2.13
202251_at	PRPF3	3.80E-03	1.32
202750_s_at	TFIP11	1.98E-03	1.48
203820_s_at	IGF2BP3	2.77E-03	2.84
203865_s_at	ADARB1	5.39E-02	1.94
204031_s_at	PCBP2	5.29E-04	0.46
206111_at	RNASE2	3.57E-03	3.76
206851_at	RNASE3	1.19E-02	4.09
208113_x_at	PABPC3	8.08E-04	0.47
208610_s_at	SRRM2	5.39E-03	0.49
211185_s_at	SF3B1	2.87E-03	0.76
212058_at	SR140	1.09E-03	1.25
212384_at	BAT1	1.89E-02	0.32
212901_s_at	CSTF2T	3.13E-03	2.57
212905_at	CSTF2T	1.17E-03	1.72
213263_s_at	PCBP2	2.01E-02	0.52
213264_at	PCBP2	8.72E-04	0.45
213505_s_at	SFRS14	5.97E-03	0.71
213619_at	HNRPH1	4.14E-02	0.45
213687_s_at	RPL35A	4.09E-03	0.60
213718_at	RBM4	8.74E-03	0.53
213762_x_at	RBMX	5.26E-03	0.62
213998_s_at	DDX17	1.64E-01	0.46
214092_x_at	SFRS14	1.00E-03	0.75
214323_s_at	UPF3A	2.69E-02	0.65
214697_s_at	ROD1	3.61E-02	1.58
215823_x_at	PABP	1.84E-03	0.49
216559_x_at	HNRNPA1	2.38E-02	0.72
216667_at	RNASE2	2.16E-02	2.33
217353_at	HNRNPA1	6.99E-02	0.31
218496_at	RNASEH1	6.77E-03	0.61
218617_at	TRIT1	2.05E-03	0.66
220096_at	RNASET2	7.75E-02	0.50
221263_s_at	SF3B5	1.24E-02	0.62
221919_at	HNRNPA1	2.93E-02	0.40
222754_at	TRNT1	2.53E-02	1.59
222869_s_at	ELAC1	3.98E-03	1.99
223404_s_at	C1orf25	1.71E-04	2.55
224741_x_at	GAS5	6.29E-03	0.53

224841_x_at	GAS5	2.26E-03	0.49
225291_at	PNPT1	9.49E-04	4.26
226093_at	DCP1B	1.37E-01	1.32
226628_at	THOC2	3.46E-02	1.24
227990_at	SLU7	4.66E-03	1.24
229285_at	RNASEL	1.13E-03	2.11
230180_at	DDX17	2.90E-02	0.31
230742_at	RBM6	1.24E-02	0.42
231904_at	U2AF1	2.56E-02	0.58
232392_at	SFRS3	5.14E-02	0.53
235611_at	SFRS12	6.48E-05	0.41
236154_at	QKI	7.32E-03	0.58
236267_at	ZNF346	3.16E-03	0.77
244777_at	DCP2	1.44E-02	0.53
203614_at	UTP14C	7.85E-03	1.34
223490_s_at	EXOSC3	9.63E-02	2.00
227916_x_at	EXOSC3	5.60E-03	2.01

Signal transduction

200640_at	YWHAZ	6.29E-03	1.28
200744_s_at	GNB1	1.25E-02	1.34
200859_x_at	FLNA	1.33E-03	1.64
200923_at	LGALS3BP	2.27E-04	11.19
201642_at	IFNGR2	3.65E-03	2.08
201887_at	IL13RA1	3.40E-02	0.50
202073_at	OPTN	2.93E-03	3.41
202074_s_at	OPTN	2.18E-03	6.16
202377_at	LEPROT	1.78E-02	1.32
202530_at	MAPK14	6.24E-02	1.50
202543_s_at	GMFB	2.85E-02	1.30
202604_x_at	ADAM10	4.30E-05	1.60
202686_s_at	AXL	1.22E-02	4.67
202704_at	TOB1	5.16E-02	0.76
202760_s_at	AKAP2	1.82E-03	9.96
202912_at	ADM	5.25E-02	2.29
203011_at	IMPA1	2.33E-02	2.32
203236_s_at	LGALS9	7.28E-04	2.73
203485_at	RTN1	3.95E-02	0.17
203592_s_at	FSTL3	8.87E-03	1.53
203593_at	CD2AP	5.69E-03	2.50
203761_at	SLA	9.29E-03	1.86
204122_at	TYROBP	2.35E-03	0.84
204423_at	MKLN1	4.13E-03	1.83
204794_at	DUSP2	5.22E-01	0.84
204982_at	GIT2	5.82E-03	0.53
205294_at	BAIAP2	5.44E-03	0.53
205698_s_at	MAP2K6	2.73E-02	1.87
205801_s_at	RASGRP3	1.51E-04	10.03
205819_at	MARCO	7.73E-02	2.01
205841_at	JAK2	8.58E-03	1.93
205842_s_at	JAK2	9.17E-03	2.23
206025_s_at	TNFAIP6	2.14E-02	5.13

206026_s_at	TNFAIP6	2.31E-02	5.50
206170_at	ADRB2	7.89E-02	1.93
206237_s_at	NRG1	1.04E-02	0.16
206343_s_at	NRG1	7.25E-02	0.40
207721_x_at	HINT1	2.96E-02	0.68
208826_x_at	HINT1	2.49E-02	0.64
208865_at	CSNK1A1	1.12E-03	1.22
209288_s_at	CDC42EP3	8.31E-03	1.74
209392_at	ENPP2	5.52E-01	1.49
209568_s_at	RGL1	1.61E-02	4.02
209684_at	RIN2	3.04E-03	1.94
210279_at	GPR18	1.59E-03	9.58
210561_s_at	WSB1	2.08E-02	1.47
210724_at	EMR3	2.33E-03	0.12
211623_s_at	FBL	2.26E-02	0.63
212117_at	RHOQ	1.75E-02	0.53
212119_at	RHOQ	4.35E-04	0.56
212607_at	AKT3	2.47E-05	1.75
212706_at	RASA4	7.54E-03	0.24
212802_s_at	GAPVD1	1.94E-02	1.21
213222_at	PLCB1	3.74E-02	0.47
213746_s_at	FLNA	1.84E-02	1.18
213804_at	INPP5B	2.59E-02	0.57
213860_x_at	CSNK1A1	1.96E-02	1.63
214182_at	ARF6	2.81E-03	0.35
215383_x_at	SPG21	1.09E-03	0.65
215404_x_at	FGFR1	3.88E-03	0.57
217839_at	TFG	2.76E-02	1.30
217853_at	TNS3	3.02E-03	1.42
218238_at	GTPBP4	7.06E-03	1.60
218845_at	DUSP22	2.73E-02	0.67
218909_at	RPS6KC1	2.42E-03	1.62
219045_at	RHOF	1.40E-02	0.53
219607_s_at	MS4A4A	2.54E-03	7.72
220122_at	MCTP1	3.06E-04	0.48
220162_s_at	CARD9	2.97E-02	0.60
221345_at	FFAR2	8.06E-04	5.14
221748_s_at	TNS1	6.39E-02	2.11
222591_at	STYXL1	6.65E-02	0.39
222985_at	YWHAG	3.40E-03	1.39
222986_s_at	SCOTIN	9.97E-04	2.50
223358_s_at	PDE7A	8.07E-03	2.42
223620_at	GPR34	8.05E-03	0.37
223746_at	STK4	2.69E-03	0.47
223767_at	GPR84	1.01E-02	3.59
223993_s_at	CNIH4	9.35E-03	1.79
224357_s_at	MS4A4A	1.98E-03	5.17
224884_at	AKAP13	5.63E-04	2.34
225056_at	SIPA1L2	1.24E-02	1.74
225144_at	BMPR2	1.61E-04	2.34
225171_at	ARHGAP18	2.47E-04	2.29
225661_at	IFNAR1	2.24E-02	1.75

225710_at	GNB4	2.23E-03	1.55
226400_at	CDC42	2.13E-02	0.37
226551_at	RIPK1	4.83E-03	1.82
226694_at	AKAP2	2.33E-04	14.86
227425_at	REPS2	4.99E-02	0.63
227697_at	SOCS3	2.86E-01	2.39
227698_s_at	RAB40C	1.06E-02	0.71
228173_at	GNAS	3.66E-02	0.62
228306_at	CNIH4	3.05E-02	1.62
228318_s_at	CRIPAK	5.25E-03	0.47
228437_at	CNIH4	5.07E-03	1.71
228771_at	ADRBK2	7.94E-03	0.61
229787_s_at	OGT	1.24E-03	0.29
231166_at	GPR155	1.13E-02	0.44
234050_at	TAGAP	2.78E-02	2.09
239533_at	GPR155	3.23E-02	0.12
241795_at	RHEB	3.65E-02	0.58
243109_at	MCTP2	5.67E-01	1.37
243981_at	STK4	7.91E-03	0.44
244549_at	FEZ2	3.63E-02	0.36
38149_at	ARHGAP25	3.71E-03	2.28

Small GTPase mediated signal transduction

203581_at	RAB4A	8.83E-04	0.45
206272_at	SPHAR	1.05E-02	0.44

Spliceosome assembly

202691_at	SNRPD1	1.12E-02	1.27
203181_x_at	SRPK2	4.54E-03	0.51
210172_at	SF1	1.17E-01	0.53
219913_s_at	CRNKL1	7.44E-04	2.72

Synaptic transmission

208912_s_at	CNP	2.12E-02	2.21
210139_s_at	PMP22	5.07E-03	0.42

Transcription

200020_at	TARDBP	9.17E-04	1.80
200034_s_at	RPL6	2.28E-07	0.59
200773_x_at	PTMA	1.92E-02	0.79
200779_at	ATF4	1.07E-02	0.70
200887_s_at	STAT1	9.77E-04	2.43
201023_at	TAF7	2.49E-02	1.36
201139_s_at	SSB	2.86E-04	1.83
201416_at	SOX4	2.04E-03	0.51
201464_x_at	JUN	2.53E-02	2.84
201901_s_at	YY1	8.75E-03	0.63
202307_s_at	TAP1	7.30E-04	3.81
202445_s_at	NOTCH2	1.13E-03	0.52
202599_s_at	NRIP1	4.48E-02	1.84
202723_s_at	FOXO1	8.00E-04	0.44
202864_s_at	SP100	9.71E-03	1.31

203010_at	STAT5A	9.87E-04	1.55
203882_at	ISGF3G	2.19E-02	2.13
203927_at	NFKBIE	6.63E-04	0.52
203964_at	NMI	9.11E-05	1.72
204211_x_at	EIF2AK2	6.06E-03	3.32
204372_s_at	KHSRP	1.44E-01	0.62
204633_s_at	RPS6KA5	1.00E-02	0.33
205101_at	CIITA	1.98E-03	0.46
205176_s_at	ITGB3BP	3.19E-03	0.36
205437_at	ZNF211	1.16E-02	0.67
205497_at	ZNF175	6.32E-03	1.82
205930_at	GTF2E1	6.14E-03	2.26
206059_at	ZNF91	7.87E-04	0.52
206332_s_at	IFI16	4.58E-04	1.94
206503_x_at	PML	9.30E-04	3.77
206567_s_at	PHF20	5.25E-03	0.62
206715_at	TFEC	2.74E-03	1.68
206928_at	ZNF124	1.78E-02	0.39
207002_s_at	PLAGL1	4.75E-03	0.39
207233_s_at	MITF	1.87E-02	0.68
207376_at	VENTX	2.68E-02	0.57
207943_x_at	PLAGL1	2.80E-03	0.58
208012_x_at	SP110	3.73E-04	2.12
208066_s_at	GTF2B	1.27E-03	1.78
208137_x_at	ZNF611	1.05E-02	0.50
208436_s_at	IRF7	7.26E-04	3.39
208541_x_at	TFAM	1.72E-03	0.45
208635_x_at	NACA	4.13E-05	0.53
208644_at	PARP1	2.03E-03	1.44
208966_x_at	IFI16	1.03E-03	2.02
208991_at	STAT3	2.42E-03	1.50
208992_s_at	STAT3	6.08E-03	2.16
209153_s_at	TCF3	5.23E-02	0.47
209318_x_at	PLAGL1	3.12E-03	0.40
209331_s_at	MAX	9.45E-04	1.57
209357_at	CITED2	1.81E-02	2.53
209358_at	TAF11	2.58E-02	0.79
209750_at	NR1D2	2.18E-04	0.34
209762_x_at	SP110	1.22E-04	2.13
209930_s_at	NFE2	2.28E-03	2.46
209944_at	ZNF410	1.23E-03	1.38
209969_s_at	STAT1	8.18E-03	2.39
210281_s_at	ZMYM2	8.13E-03	0.44
210282_at	ZMYM2	1.54E-02	0.38
210778_s_at	MXD4	1.40E-03	0.34
211012_s_at	PML	1.09E-03	4.86
211013_x_at	PML	5.45E-04	3.90
211097_s_at	PBX2	1.43E-02	0.55
211267_at	HESX1	5.42E-05	19.04
212036_s_at	PNN	6.13E-03	0.65
212116_at	TRIM27	2.35E-03	1.40
212385_at	TCF4	3.77E-03	1.68

212454_x_at	HNRPDL	9.87E-03	0.49
212522_at	PDE8A	2.90E-02	0.66
212614_at	ARID5B	2.26E-03	4.33
213203_at	SNAPC5	2.62E-02	1.26
213293_s_at	TRIM22	4.08E-04	2.20
213294_at	---	2.23E-04	3.02
213359_at	HNRPD	1.37E-03	0.70
213400_s_at	TBL1X	1.16E-03	0.57
214179_s_at	NFE2L1	6.56E-03	1.44
214438_at	HLX	1.05E-01	1.95
214651_s_at	HOXA9	1.70E-02	2.22
214670_at	ZKSCAN1	4.05E-03	0.61
214686_at	ZNF266	2.64E-03	0.48
214715_x_at	ZNF160	4.59E-03	0.54
215022_x_at	ZNF33B	8.56E-02	0.40
215718_s_at	PHF3	1.57E-02	0.74
216037_x_at	TCF7L2	2.72E-02	1.43
216305_s_at	C2orf3	9.21E-03	0.42
217367_s_at	ZHX3	3.25E-02	0.46
217986_s_at	BAZ1A	2.35E-02	1.53
217995_at	SQRDL	2.08E-03	2.01
218058_at	CXXC1	2.07E-02	1.34
218149_s_at	ZNF395	2.10E-03	0.36
218188_s_at	TIMM13	2.07E-02	0.69
218344_s_at	RCOR3	3.10E-03	0.51
218452_at	SMARCAL1	1.71E-03	1.61
218486_at	KLF11	3.50E-02	0.55
218926_at	MYNN	1.79E-03	1.48
219163_at	ZNF562	3.53E-04	0.60
219484_at	HCFC2	1.16E-02	1.65
219518_s_at	ELL3	2.01E-03	2.28
221230_s_at	ARID4B	2.43E-02	1.35
221517_s_at	MED17	7.69E-03	1.64
221645_s_at	ZNF83	2.38E-04	0.26
221680_s_at	ETV7	1.87E-03	2.36
221763_at	JMJD1C	2.29E-03	0.61
222018_at	NACA	1.25E-02	0.46
222514_at	RRAGC	5.33E-04	1.47
222635_s_at	MED28	4.14E-02	2.10
222636_at	MED28	6.67E-02	2.00
222839_s_at	PAPOLG	5.90E-03	1.95
222846_at	RAB8B	5.14E-01	1.49
222981_s_at	RAB10	9.58E-04	1.76
223403_s_at	POLR1B	4.76E-05	1.67
223650_s_at	NRBF2	9.72E-02	1.79
223915_at	BCOR	1.70E-03	0.32
223980_s_at	SP110	4.15E-03	2.15
224206_x_at	MYNN	2.81E-02	1.44
224225_s_at	ETV7	1.54E-04	6.71
224701_at	PARP14	7.06E-04	4.74
224833_at	ETS1	1.95E-03	2.93
225076_s_at	ZNFX1	5.82E-04	2.39

225344_at	NCOA7	1.17E-03	4.62
225346_at	MTERFD3	7.32E-02	0.43
225416_at	RNF12	1.67E-03	3.00
225456_at	MED1	2.43E-03	1.78
225475_at	MIER1	6.93E-05	1.94
225555_x_at	CCNL2	3.75E-02	0.34
225595_at	CREBZF	3.78E-02	0.35
225636_at	STAT2	4.55E-03	1.63
225641_at	MEF2D	5.92E-03	0.52
225816_at	PHF17	2.43E-02	0.46
225951_s_at	CHD2	3.01E-02	0.64
226275_at	MXD1	1.96E-02	2.21
226633_at	RAB8B	3.19E-03	1.48
226646_at	KLF2	2.41E-04	2.30
226711_at	FOXP2	7.74E-04	1.41
226982_at	ELL2	3.46E-03	0.70
227150_at	MTF1	4.96E-03	1.82
227335_at	DIDO1	1.64E-02	2.22
227344_at	IKZF1	4.21E-04	1.91
227872_at	POLR3A	1.99E-02	1.88
228170_at	OLIG1	2.31E-02	0.36
228230_at	PRIC285	7.38E-03	2.50
228361_at	E2F2	4.94E-03	2.28
228439_at	BATF2	3.39E-03	2.46
228487_s_at	RREB1	5.66E-02	0.37
228846_at	MXD1	3.22E-02	2.57
229743_at	ZNF438	5.19E-04	1.52
229750_at	POU2F2	4.17E-02	0.77
230226_s_at	JARID1A	4.70E-03	1.82
232231_at	RUNX2	7.13E-04	0.59
232383_at	TFEC	1.22E-01	1.90
235196_at	CDC73	4.61E-03	2.33
235233_s_at	---	7.50E-03	1.76
235308_at	ZBTB20	4.07E-02	0.51
235508_at	PML	1.28E-02	2.22
239412_at	IRF5	1.28E-01	1.86
239582_at	PML	1.11E-02	1.56
243683_at	MORF4L2	5.23E-02	0.23
244443_at	CHD2	1.23E-03	0.30
40569_at	MZF1	3.38E-02	0.41
M97935_3_at	STAT1	6.56E-05	3.03
M97935_MA_at	STAT1	4.26E-03	5.20
M97935_MB_at	STAT1	2.45E-03	4.15

Transketolase activity

208700_s_at	TKT	1.03E-03	0.61
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Translation

200013_at	RPL24	8.45E-04	0.62
200017_at	RPS27A	5.72E-03	0.51
200022_at	RPL18	1.59E-03	0.50
200023_s_at	EIF3S5	7.74E-05	0.51

200024_at	RPS5	4.21E-03	0.47
200026_at	RPL34	2.02E-04	0.52
200029_at	RPL19	5.35E-03	0.65
200036_s_at	RPL10A	8.05E-03	0.45
200038_s_at	RPL17	3.80E-04	0.67
200061_s_at	RPS24	1.55E-04	0.64
200089_s_at	RPL4	4.91E-04	0.49
200091_s_at	RPS25	1.03E-03	0.66
200092_s_at	RPL34	2.23E-04	0.71
200094_s_at	EEF2	8.20E-06	0.36
200099_s_at	RPS3A	2.65E-05	0.50
200628_s_at	WARS	7.26E-02	2.18
200629_at	WARS	2.84E-02	2.02
200705_s_at	EEF1B2	3.62E-04	0.38
200715_x_at	RPL13A	7.09E-04	0.54
200725_x_at	RPL10	3.04E-04	0.55
200763_s_at	RPLP1	2.78E-03	0.61
200817_x_at	RPS10	3.29E-03	0.58
200858_s_at	RPS8	5.32E-03	0.54
200869_at	RPL18A	3.90E-03	0.50
200888_s_at	RPL23	3.09E-03	0.51
200909_s_at	RPLP2	6.01E-03	0.54
200926_at	RPS23	8.52E-06	0.47
200937_s_at	RPL5	1.52E-02	0.51
200949_x_at	RPS20	6.13E-03	0.62
201027_s_at	EIF5B	2.39E-03	1.53
201033_x_at	RPLP0	1.70E-03	0.44
201154_x_at	RPL4	4.08E-04	0.42
201258_at	RPS16	3.03E-03	0.46
202028_s_at	RPL38	6.44E-03	0.43
203113_s_at	EEF1D	6.57E-03	0.57
203800_s_at	MRPS14	3.61E-02	1.32
208645_s_at	RPS14	1.38E-02	0.63
208646_at	RPS14	1.26E-02	0.55
208692_at	RPS3	2.97E-03	0.73
208705_s_at	EIF5	7.05E-05	0.64
208768_x_at	RPL22	7.26E-04	0.58
208929_x_at	RPL13	5.03E-03	0.52
209134_s_at	RPS6	2.57E-03	0.69
209203_s_at	BICD2	4.92E-02	0.53
210949_s_at	EIF3C	6.51E-03	0.70
211542_x_at	RPS10	2.78E-03	0.63
211710_x_at	RPL4	5.56E-04	0.47
211720_x_at	RPLP0	2.51E-03	0.44
211937_at	EIF4B	4.70E-04	0.31
211938_at	EIF4B	1.88E-03	0.50
211956_s_at	EIF1	3.89E-05	0.48
211962_s_at	ZFP36L1	2.50E-02	0.46
211972_x_at	RPLP0	7.53E-04	0.48
212042_x_at	RPL7	2.08E-04	0.51
212044_s_at	RPL27A	5.96E-03	0.55
212191_x_at	RPL13	9.47E-03	0.44

212270_x_at	RPL17	2.67E-03	0.64
212537_x_at	RPL17	2.70E-03	0.55
212578_x_at	RPS17	9.53E-03	0.51
212734_x_at	RPL13	7.40E-03	0.55
213080_x_at	RPL5	7.05E-04	0.43
213347_x_at	RPS4X	4.95E-04	0.56
213350_at	RPS11	4.56E-03	0.41
213750_at	RSL1D1	2.25E-03	0.43
213969_x_at	RPL29	6.58E-03	0.54
214042_s_at	RPL22	7.28E-04	0.47
214167_s_at	RPLP0	2.33E-04	0.33
214351_x_at	RPL13	2.25E-02	0.47
214394_x_at	EEF1D	4.10E-03	0.55
214919_s_at	EIF4EBP3	1.82E-02	0.69
215220_s_at	TPR	1.97E-02	0.22
216348_at	RPS17	3.11E-02	0.51
216505_x_at	RPS10	1.18E-02	0.59
217256_x_at	hCG_1789827	1.24E-02	0.53
217266_at	RPL15	1.96E-02	0.49
217466_x_at	RPS2	3.11E-03	0.51
217559_at	RPL10L	2.64E-03	0.46
217719_at	EIF3EIP	4.66E-04	0.30
217747_s_at	RPS9	1.15E-02	0.75
217753_s_at	RPS26	4.88E-03	0.42
217846_at	QARS	5.32E-06	0.53
218001_at	MRPS2	8.10E-04	0.69
218253_s_at	LGTN	2.40E-03	0.51
218265_at	SECISBP2	6.18E-02	0.68
218472_s_at	PELO	2.72E-03	2.39
219599_at	EIF4B	4.14E-04	0.22
220960_x_at	RPL22	2.31E-03	0.62
221475_s_at	RPL15	3.72E-04	0.45
221476_s_at	RPL15	9.78E-04	0.47
221539_at	EIF4EBP1	5.00E-03	0.49
221726_at	RPL22	8.96E-03	0.39
221775_x_at	RPL22	5.84E-04	0.56
221943_x_at	RPL38	9.84E-03	0.50
222465_at	C15orf15	2.85E-02	0.74
222775_s_at	MRPL35	1.41E-03	1.83
222997_s_at	MRPS21	5.32E-02	0.79
223154_at	MRPL1	6.24E-03	1.62
224330_s_at	MRPL27	1.82E-03	2.11
224763_at	RPL37	9.09E-03	0.47
224930_x_at	RPL7A	2.95E-04	0.46
225190_x_at	RPL35A	1.02E-02	0.58
225206_s_at	MTRF1L	4.47E-02	1.33
225392_at	GFM2	1.06E-02	1.38
225546_at	EEF2K	8.26E-03	0.52
226131_s_at	RPS16	1.38E-03	0.63
227708_at	EEF1A1	2.59E-02	0.60
232063_x_at	FARSB	1.75E-02	0.46
232899_at	RPL23AP7	7.32E-03	0.67

233970_s_at	TRMT6	3.36E-02	2.11
234873_x_at	RPL7A	9.77E-04	0.42
238461_at	EIF4E3	2.29E-01	1.82
242550_at	EIF3B	1.42E-02	0.69

Transport

200086_s_at	COX4I1	5.09E-04	0.66
200657_at	SLC25A5	5.67E-03	0.74
200721_s_at	ACTR1A	3.27E-03	1.28
201106_at	GPX4	4.40E-02	0.62
201412_at	LRP10	1.06E-03	1.50
201716_at	SNX1	8.33E-03	1.32
201812_s_at	TOMM7	7.81E-03	0.45
201832_s_at	VDP	1.65E-02	1.09
201917_s_at	SLC25A36	1.15E-02	0.63
202068_s_at	LDLR	5.87E-02	2.27
202082_s_at	SEC14L1	5.55E-03	0.38
202114_at	SNX2	2.38E-03	1.30
202497_x_at	SLC2A3	2.60E-02	2.61
202698_x_at	COX4I1	1.15E-04	0.66
202800_at	SLC1A3	1.79E-02	2.89
202855_s_at	SLC16A3	3.63E-06	3.15
202958_at	PTPN9	7.37E-04	1.49
203164_at	SLC33A1	6.14E-03	0.63
203244_at	PEX5	7.63E-03	1.36
203509_at	SORL1	2.67E-04	0.37
203605_at	SRP54	8.27E-04	1.57
203771_s_at	BLVRA	1.56E-03	3.72
203773_x_at	BLVRA	1.23E-03	3.03
204043_at	TCN2	3.59E-03	2.39
204125_at	NDUFAF1	2.38E-03	1.70
204204_at	SLC31A2	2.14E-03	1.82
204477_at	RABIF	1.60E-02	0.68
204587_at	SLC25A14	2.44E-02	0.70
205241_at	SCO2	1.70E-03	1.85
205306_x_at	KMO	5.42E-03	3.57
205716_at	SLC25A40	8.93E-03	0.65
205770_at	GSR	1.35E-02	2.32
206371_at	FOLR3	4.08E-02	0.54
206491_s_at	NAPA	2.54E-03	2.15
206600_s_at	SLC16A5	3.74E-02	0.51
206765_at	KCNJ2	1.02E-02	1.96
207335_x_at	ATP5I	1.26E-01	0.59
207843_x_at	CYB5A	8.76E-04	1.85
208097_s_at	TXNDC1	1.92E-01	1.82
208517_x_at	BTF3	4.44E-05	0.64
208581_x_at	MT1X	1.60E-02	2.93
208717_at	OXA1L	2.93E-03	0.62
208731_at	RAB2A	2.28E-03	1.66
208751_at	NAPA	1.69E-05	2.88
208898_at	ATP6V1D	1.68E-02	1.31
208921_s_at	SRI	6.66E-03	1.48

209143_s_at	CLNS1A	1.69E-03	0.77
209146_at	SC4MOL	2.17E-03	3.68
209218_at	SQLE	1.78E-03	2.57
209267_s_at	SLC39A8	3.16E-02	3.48
209303_at	NDUFS4	1.38E-03	0.69
209366_x_at	CYB5A	7.00E-04	1.85
209546_s_at	APOL1	5.57E-05	1.90
210119_at	KCNJ15	1.26E-02	1.58
210412_at	GRIN2B	2.06E-02	0.51
211138_s_at	KMO	9.07E-03	3.50
211600_at	---	3.78E-02	0.47
211729_x_at	BLVRA	7.06E-03	2.22
211939_x_at	BTF3	8.97E-06	0.58
211953_s_at	RANBP5	1.35E-02	0.51
211954_s_at	RANBP5	1.28E-03	0.48
211955_at	RANBP5	4.30E-04	0.45
212085_at	SLC25A6	9.47E-03	0.44
212160_at	XPOT	1.61E-02	0.83
212472_at	MICAL2	4.36E-03	0.82
212773_s_at	TOMM20	3.86E-03	0.48
214255_at	ATP10A	1.69E-03	3.71
214594_x_at	ATP8B1	1.72E-03	0.50
214934_at	ATP9B	1.00E-03	0.64
215203_at	GOLGA4	1.87E-03	0.43
216236_s_at	SLC2A3	7.37E-02	2.01
217789_at	SNX6	3.71E-02	1.66
217897_at	FXVD6	1.46E-02	2.16
218052_s_at	ATP13A1	1.04E-03	1.69
218085_at	CHMP5	1.04E-04	2.12
218103_at	FTSJ3	1.24E-02	1.35
218139_s_at	C14orf108	4.49E-03	1.60
218254_s_at	SAR1B	9.59E-03	1.60
218485_s_at	SLC35C1	2.52E-02	0.82
218498_s_at	ERO1L	2.56E-03	3.05
219007_at	NUP43	7.34E-02	0.69
219155_at	PITPNC1	8.17E-03	0.54
219344_at	SLC29A3	1.08E-02	0.61
219356_s_at	CHMP5	4.08E-06	2.53
219545_at	KCTD14	2.05E-03	25.47
219684_at	RTP4	1.20E-04	3.99
219716_at	APOL6	5.59E-04	6.84
220416_at	ATP8B4	9.16E-04	1.77
220576_at	PGAP1	3.06E-02	3.31
221504_s_at	ATP6V1H	3.89E-04	1.57
222453_at	CYBRD1	5.00E-02	0.42
222472_at	AFTPH	1.11E-02	1.54
222552_at	GOLT1B	4.84E-02	1.68
222763_s_at	WDR33	4.31E-03	1.82
223057_s_at	XPO5	1.35E-05	2.38
223350_x_at	LIN7C	6.71E-04	1.72
223441_at	SLC17A5	5.67E-04	1.71
223464_at	OSBPL5	2.28E-03	1.70

225084_at	EXOC5	1.44E-03	1.46
225092_at	RABEP1	7.07E-02	1.75
225113_at	AGPS	1.04E-02	1.96
225250_at	STIM2	1.33E-04	0.64
225306_s_at	SLC25A29	1.09E-02	0.46
225378_at	VPS37A	3.87E-03	1.67
225447_at	GPD2	3.92E-04	3.24
225535_s_at	TIMM23	2.88E-05	2.00
225638_at	C1orf31	2.41E-03	1.78
225765_at	TNPO1	1.64E-02	2.04
226259_at	EXOC6	2.66E-03	2.15
226390_at	STARD4	1.09E-01	1.79
226422_at	ERGIC2	5.56E-04	1.54
227046_at	SLC39A11	3.67E-03	1.53
227214_at	GOPC	3.32E-03	1.50
227791_at	SLC9A9	1.16E-02	1.48
228164_at	AP4E1	3.32E-04	1.86
228299_at	KCTD20	7.94E-03	0.74
228738_at	D2HGDH	1.05E-02	0.65
230413_s_at	AP1S2	1.17E-02	0.50
230707_at	SORL1	1.29E-03	0.40
230759_at	SNX14	3.12E-03	0.38
230966_at	IL4I1	1.29E-02	1.86
232169_x_at	NDUFS8	8.79E-03	0.49
232691_at	SFXN5	1.99E-02	0.27
236254_at	VPS13B	7.13E-03	0.37
238199_x_at	LOC440552	5.79E-03	0.50
238886_at	TMED10	1.61E-02	0.38
239725_at	PGAP1	2.75E-01	1.85
241869_at	APOL6	1.98E-03	3.02
243880_at	GOSR2	9.99E-03	0.13
36994_at	ATP6V0C	1.18E-05	2.32
58916_at	KCTD14	1.65E-02	6.63

Ubiquitin cycle

201178_at	FBXO7	2.36E-03	1.39
201305_x_at	ANP32B	1.59E-02	0.51
201345_s_at	UBE2D2	1.38E-02	0.74
201546_at	TRIP12	4.76E-03	1.39
201649_at	UBE2L6	5.20E-04	3.08
201737_s_at	MARCH6	3.27E-02	0.48
201758_at	TSG101	1.75E-04	1.59
202317_s_at	UBE4B	1.20E-03	0.66
202779_s_at	E2-EPF	8.04E-04	2.08
203160_s_at	RNF8	1.44E-03	1.89
205483_s_at	ISG15	1.09E-04	10.62
205558_at	TRAF6	5.14E-04	1.57
205596_s_at	SMURF2	3.33E-02	0.55
206845_s_at	RNF40	3.23E-03	1.59
208760_at	UBE2I	1.01E-02	0.51
210024_s_at	UBE2E3	3.07E-02	0.69
210638_s_at	FBXO9	9.19E-02	1.27

211800_s_at	USP4	4.15E-02	0.84
217988_at	CCNB1IP1	5.25E-04	0.57
219035_s_at	RNF34	1.72E-03	1.97
219211_at	USP18	1.13E-04	23.37
219352_at	HERC6	2.49E-03	4.82
219863_at	HERC5	1.27E-04	7.60
222991_s_at	UBQLN1	4.63E-03	1.70
223163_s_at	ZC3HC1	1.78E-03	1.76
224369_s_at	FBXO38	3.42E-04	1.33
225132_at	FBXL3	5.07E-02	1.82
225234_at	CBL	2.53E-02	0.49
225414_at	RNF149	2.80E-01	1.68
225734_at	FBXO22	4.33E-03	1.81
225736_at	FBXO22	2.97E-04	2.95
226481_at	VPRBP	1.52E-03	2.25
226921_at	UBR1	7.44E-04	1.72
231948_s_at	UBE2F	2.90E-02	1.40
233360_at	UBE2I	1.48E-02	0.48
236235_at	ITCH	3.37E-03	0.54
239163_at	UBE2B	1.33E-02	0.33

Unknown

200042_at	C22orf28	1.30E-03	1.97
200649_at	NUCB1	1.57E-04	3.50
200651_at	GNB2L1	2.91E-03	0.58
200851_s_at	KIAA0174	3.30E-03	1.53
200943_at	HMGNI	1.03E-02	0.55
201297_s_at	MOBK11B	4.00E-03	1.37
201298_s_at	MOBK11B	1.27E-04	1.75
201361_at	TMEM109	1.54E-03	1.37
201380_at	CRTAP	8.45E-04	0.45
201701_s_at	PGRMC2	5.14E-03	0.54
201785_at	RNASE1	8.77E-02	2.10
201825_s_at	SCCPDH	1.52E-03	3.18
201826_s_at	SCCPDH	1.86E-01	1.70
201922_at	TINP1	3.93E-02	0.83
201977_s_at	KIAA0141	7.85E-04	0.60
201999_s_at	DYNLT1	3.48E-03	1.65
202231_at	EIF3M	3.88E-04	0.56
202279_at	C14orf2	1.01E-02	0.68
202579_x_at	HMGNI	2.45E-02	1.35
202594_at	LEPROTL1	1.10E-02	3.07
202816_s_at	SS18	2.53E-03	2.08
202837_at	TRAFD1	2.05E-02	3.33
202886_s_at	PPP2R1B	7.13E-03	1.52
203008_x_at	TXNDC9	2.72E-03	1.34
203068_at	KLHL21	7.57E-02	0.41
203143_s_at	KIAA0040	2.16E-02	1.58
203148_s_at	TRIM14	1.20E-04	2.71
203406_at	MFAP1	5.69E-03	1.86
203584_at	TTC35	7.15E-04	1.61
203799_at	CD302	2.50E-02	0.59

204439_at	IFI44L	1.59E-05	17.52
204568_at	KIAA0831	4.73E-02	0.69
204601_at	N4BP1	2.07E-03	2.42
204710_s_at	WIP12	1.28E-03	0.65
204715_at	PANX1	3.23E-03	1.89
204745_x_at	MT1G	6.48E-03	1.76
204804_at	TRIM21	1.72E-03	2.72
204808_s_at	TMEM5	3.36E-03	0.79
205308_at	C8orf70	1.60E-03	0.46
205583_s_at	CXorf45	2.52E-02	0.41
205953_at	LRIG2	1.41E-02	0.73
206090_s_at	DISC1	6.47E-04	1.44
206133_at	XAF1	4.07E-05	3.70
206461_x_at	MT1H	1.47E-02	2.54
206632_s_at	APOBEC3B	1.50E-02	12.34
207283_at	RPL23AP13	7.81E-03	0.50
207730_x_at	---	2.60E-03	0.47
207996_s_at	C18orf1	1.30E-02	0.51
208073_x_at	TTC3	8.47E-03	0.60
208087_s_at	ZBP1	2.25E-03	4.51
208450_at	LGALS2	9.42E-02	0.37
208661_s_at	TTC3	3.00E-03	0.39
208662_s_at	TTC3	4.30E-06	0.38
208663_s_at	TTC3	9.32E-04	0.42
209006_s_at	C1orf63	1.09E-02	0.44
209007_s_at	C1orf63	4.02E-04	0.40
209155_s_at	NT5C2	3.19E-04	1.70
209307_at	SWAP70	2.95E-03	2.04
209536_s_at	EHD4	5.27E-02	1.94
209860_s_at	ANXA7	1.04E-03	1.26
210097_s_at	NOL7	2.05E-02	0.73
210645_s_at	TTC3	5.66E-03	0.49
210731_s_at	LGALS8	6.22E-03	0.67
211406_at	IER3IP1	9.39E-04	0.65
211433_x_at	KIAA1539	3.52E-02	1.25
211456_x_at	MT1P2	3.04E-03	2.67
211977_at	GPR107	3.64E-03	1.29
212008_at	UBXD2	1.33E-02	1.98
212045_at	GLG1	6.42E-04	1.33
212074_at	UNC84A	8.46E-03	0.60
212129_at	NIPA2	9.07E-03	1.39
212177_at	SFRS18	4.25E-03	0.64
212194_s_at	TM9SF4	1.82E-04	1.35
212199_at	MRFAP1L1	4.73E-02	1.83
212241_at	GRINL1A	1.83E-03	0.71
212261_at	TNRC15	1.30E-02	1.49
212333_at	FAM98A	2.35E-03	2.30
212380_at	KIAA0082	2.77E-03	2.01
212487_at	GPATCH8	1.92E-03	0.73
212543_at	AIM1	1.89E-02	1.41
212560_at	C11orf32	1.53E-04	0.26
212586_at	CAST	1.11E-02	0.78

212605_s_at	---	2.52E-03	0.51
212655_at	ZCCHC14	6.71E-03	0.56
212658_at	LHFPL2	1.21E-03	2.93
212686_at	PPM1H	6.45E-02	0.36
212825_at	PAXIP1	1.29E-02	0.73
213048_s_at	---	1.92E-03	0.47
213069_at	HEG1	6.36E-04	3.43
213113_s_at	SLC43A3	3.20E-03	1.35
213123_at	MFAP3	1.88E-02	1.56
213215_at	---	9.58E-04	0.53
213361_at	TDRD7	3.01E-04	3.19
213387_at	ATAD2B	8.35E-04	2.28
213508_at	C14orf147	7.98E-04	0.80
213703_at	LOC150759	2.00E-02	0.70
213797_at	RSAD2	2.22E-04	25.23
213839_at	KIAA0500	7.66E-05	0.57
214148_at	---	2.04E-03	0.55
214152_at	CCPG1	3.37E-02	0.61
214334_x_at	DAZAP2	6.30E-04	0.71
214395_x_at	---	6.89E-03	0.56
214722_at	NOTCH2NL	2.14E-02	0.34
214744_s_at	---	5.32E-04	0.61
214807_at	---	9.10E-04	0.51
214902_x_at	---	1.15E-03	0.66
215095_at	ESD	1.76E-03	0.51
215392_at	---	1.38E-02	0.41
215604_x_at	---	2.07E-02	0.50
215907_at	---	3.75E-03	0.44
216022_at	---	7.67E-05	0.33
216246_at	---	5.46E-03	0.33
216342_x_at	LOC390183	3.33E-03	0.53
216387_x_at	LOC390411	1.29E-02	0.61
216547_at	LOC127406	5.42E-03	0.65
216550_x_at	ANKRD12	4.70E-02	0.52
216565_x_at	LOC391020	2.52E-04	8.34
216570_x_at	RPL29	1.18E-02	0.55
216858_x_at	---	1.72E-02	0.41
217092_x_at	LOC646912	9.66E-04	0.51
217122_s_at	SLC35E2	2.48E-03	0.65
217142_at	LOC442215	8.04E-04	0.28
217165_x_at	MT1F	9.20E-03	2.71
217313_at	---	1.18E-02	0.62
217363_x_at	---	1.41E-02	0.32
217379_at	LOC442171	2.29E-05	0.35
217508_s_at	C18orf25	1.97E-02	1.31
217534_at	FAM49B	1.86E-02	0.51
217549_at	---	9.24E-03	0.70
217579_x_at	---	1.54E-02	0.47
217610_at	---	9.48E-04	0.56
217713_x_at	---	2.26E-03	0.53
217794_at	PRR13	1.57E-03	1.60
217802_s_at	NUCKS1	2.11E-02	0.52

217807_s_at	GLTSCR2	4.88E-03	0.59
217925_s_at	C6orf106	1.58E-03	1.63
217938_s_at	KCMF1	1.89E-04	0.75
218037_at	FAM134A	1.47E-02	1.31
218099_at	TEX2	3.52E-02	1.50
218249_at	ZDHHC6	8.63E-04	1.66
218283_at	SS18L2	2.23E-03	0.62
218297_at	C10orf97	2.54E-02	0.43
218319_at	PELI1	1.29E-03	0.56
218429_s_at	FLJ11286	2.24E-03	1.62
218446_s_at	FAM18B	2.01E-03	1.70
218465_at	TMEM33	1.06E-02	1.53
218535_s_at	RIOK2	8.01E-02	1.28
218587_s_at	KTELC1	4.51E-02	0.65
218694_at	ARMCX1	6.98E-04	0.52
218789_s_at	C11orf71	4.17E-03	1.37
218805_at	GIMAP5	2.15E-02	2.18
218838_s_at	TTC31	2.74E-03	0.65
218853_s_at	MOSPD1	2.50E-03	0.69
218979_at	RMI1	2.51E-02	1.86
218986_s_at	FLJ20035	8.93E-05	5.00
219014_at	PLAC8	4.23E-03	3.72
219062_s_at	ZCCHC2	1.68E-04	2.70
219093_at	PID1	6.51E-03	0.09
219108_x_at	DDX27	4.57E-03	0.67
219176_at	C2orf47	3.37E-04	2.07
219243_at	GIMAP4	1.39E-02	2.38
219297_at	WDR44	6.24E-03	1.91
219449_s_at	TMEM70	3.95E-05	1.32
219507_at	RSRC1	1.56E-02	0.62
219691_at	SAMD9	9.99E-04	3.31
219714_s_at	CACNA2D3	9.23E-03	0.19
219717_at	C4orf30	1.34E-03	0.60
219751_at	SETD6	1.67E-02	0.30
219777_at	GIMAP6	2.12E-02	2.05
219895_at	FAM70A	9.98E-03	4.33
220071_x_at	CEP27	1.04E-03	0.47
220486_x_at	TMEM164	2.63E-03	1.26
220577_at	GVIN1	2.52E-02	1.43
220692_at	HSPC047	3.72E-03	0.29
220755_s_at	C6orf48	5.34E-03	0.77
220942_x_at	C3orf28	1.08E-02	0.72
221012_s_at	TRIM8	6.26E-03	0.65
221042_s_at	CLMN	2.09E-02	0.50
221044_s_at	TRIM34	7.06E-04	2.66
221155_x_at	PRO1496	3.40E-02	0.40
221222_s_at	C1orf56	3.44E-04	0.48
221235_s_at	LOC644617	7.41E-03	0.72
221276_s_at	SYNC1	2.79E-04	0.39
221490_at	UBAP1	3.82E-04	1.48
221652_s_at	C12orf11	2.92E-03	1.70
221756_at	PIK3IP1	1.10E-01	0.37

221764_at	C19orf22	6.32E-04	2.59
221786_at	C6orf120	3.87E-04	1.64
221951_at	TMEM80	4.15E-03	0.63
221986_s_at	KLHL24	5.33E-03	0.36
222150_s_at	LOC54103	2.22E-02	0.63
222154_s_at	DNAPTP6	1.15E-04	7.06
222229_x_at	RPL26	8.92E-04	0.42
222399_s_at	TM9SF3	1.26E-01	1.80
222464_s_at	C10orf119	1.86E-03	1.62
222488_s_at	DCTN4	1.81E-02	1.82
222631_at	PI4K2B	5.04E-03	2.27
222654_at	IMPAD1	9.41E-04	2.05
222692_s_at	FNDC3B	2.09E-04	7.06
222699_s_at	PLEKHF2	1.88E-02	2.15
222707_s_at	ACTR8	2.26E-03	1.88
222816_s_at	ZCCHC2	1.22E-02	2.51
222872_x_at	OBFC2A	5.24E-02	2.00
223019_at	FAM129B	5.70E-03	2.28
223022_s_at	VTA1	1.24E-02	1.55
223041_at	CD99L2	5.40E-04	2.26
223060_at	C14orf119	1.56E-03	1.73
223077_at	TMOD3	6.63E-03	1.58
223097_at	ADPRHL2	2.23E-03	2.12
223178_s_at	NT5DC1	2.44E-02	0.43
223193_x_at	C3orf28	1.07E-02	0.56
223239_at	C14orf129	8.39E-05	2.47
223484_at	C15orf48	3.19E-02	4.38
223533_at	LRRC8C	2.32E-04	1.79
223577_x_at	PRO1073	2.26E-02	0.40
223599_at	TRIM6	1.07E-03	3.60
223626_x_at	FAM14A	8.20E-04	1.72
223707_at	MGC10850	2.98E-03	0.40
224082_at	---	2.52E-02	0.37
224375_at	---	4.86E-04	0.42
224397_s_at	TMTC1	1.81E-02	1.71
224413_s_at	TM2D2	2.74E-03	1.60
224569_s_at	IRF2BP2	4.82E-03	0.62
224610_at	SNHG1	2.03E-03	0.64
224628_at	C2orf30	1.06E-03	1.42
224690_at	C20orf108	3.23E-03	0.59
224697_at	WDR22	3.74E-02	2.40
224699_s_at	FAM62B	1.05E-04	1.80
224759_s_at	C12orf23	3.53E-03	3.31
224768_at	IWS1	5.60E-05	1.51
224806_at	TRIM25	3.96E-03	2.23
224820_at	FAM36A	9.22E-03	1.32
224850_at	ATAD1	2.77E-02	1.64
224875_at	C5orf24	3.64E-02	0.36
224900_at	ANKFY1	1.76E-04	2.10
224905_at	WDR26	1.37E-02	1.30
224923_at	TTC7A	1.02E-03	1.61
224938_at	---	1.35E-03	0.65

224956_at	NUFIP2	9.63E-03	2.18
225032_at	FNDC3B	2.82E-02	1.48
225091_at	ZCCHC3	3.08E-02	1.29
225123_at	---	3.37E-02	0.71
225136_at	PLEKHA2	4.68E-03	1.51
225155_at	SNHG5	2.42E-02	0.31
225225_at	KRTAP4-7	4.42E-03	0.61
225274_at	---	4.75E-02	0.57
225319_s_at	FAM104A	3.61E-04	1.31
225396_at	---	9.38E-03	0.41
225415_at	DTX3L	5.27E-05	4.54
225451_at	GRIPAP1	5.17E-03	2.07
225466_at	FLJ36874	4.44E-03	2.23
225468_at	FLJ36874	1.19E-03	2.56
225507_at	SFRS18	3.80E-03	0.60
225604_s_at	C9orf19	4.77E-02	2.06
225644_at	CCDC117	6.29E-02	1.97
225672_at	GOLGA2	1.52E-02	1.32
225716_at	---	4.03E-02	0.54
225773_at	RSPRY1	2.11E-03	1.65
225823_at	P117	9.69E-05	1.61
225834_at	GCUD2	2.14E-02	1.60
225869_s_at	UNC93B1	1.12E-02	1.62
225872_at	SLC35F5	8.86E-03	1.78
225918_at	LOC146346	2.43E-03	0.49
225922_at	KIAA1450	1.93E-05	1.68
225929_s_at	RNF213	2.23E-05	3.34
225931_s_at	RNF213	2.47E-03	3.06
225963_at	KLHDC5	1.51E-02	0.71
226000_at	CTTNBP2NL	3.17E-02	1.91
226025_at	ANKRD28	7.96E-03	2.59
226062_x_at	FAM63A	2.24E-03	0.46
226077_at	RNF145	1.30E-03	2.93
226103_at	NEXN	1.60E-04	6.96
226117_at	TIFA	2.79E-03	3.44
226155_at	KIAA1600	1.13E-02	1.50
226201_at	SF3A2	4.92E-05	2.59
226242_at	C1orf131	6.13E-06	1.84
226250_at	---	3.38E-03	0.64
226264_at	SUSD1	5.61E-03	1.78
226322_at	TMTC1	2.83E-03	2.46
226353_at	SPPL2A	5.85E-03	1.79
226416_at	THEX1	8.36E-04	1.49
226419_s_at	FLJ44342	2.05E-02	0.46
226438_at	---	4.60E-02	1.85
226515_at	CCDC127	6.63E-02	2.14
226555_at	FLJ20309	3.27E-04	1.40
226558_at	LOC653071	5.05E-02	0.28
226603_at	SAMD9L	5.17E-05	9.54
226656_at	CRTAP	5.55E-03	0.43
226675_s_at	MALAT1	1.82E-02	0.45
226743_at	SLFN11	1.27E-02	1.96

226750_at	LARP2	2.91E-02	0.69
226773_at	---	2.25E-04	3.16
226842_at	LOC90110	1.98E-03	0.87
226880_at	NUCKS1	1.07E-03	0.53
226924_at	LOC400657	2.10E-02	1.42
226925_at	ACPL2	1.32E-02	1.89
226975_at	RNPC3	1.24E-03	0.41
226990_at	CAPRIN1	7.40E-03	1.29
227044_at	---	8.49E-02	0.40
227152_at	C12orf35	1.08E-03	0.49
227211_at	PHF19	1.50E-03	0.57
227305_s_at	SMCR8	8.58E-05	1.35
227385_at	PPAPDC2	4.96E-03	2.48
227510_x_at	PRO1073	1.02E-02	0.48
227548_at	ORMDL1	6.44E-03	0.47
227565_at	---	2.21E-03	0.53
227586_at	TMEM170	2.56E-02	1.42
227603_at	---	8.47E-03	0.52
227609_at	EPSTI1	1.53E-07	11.89
227638_at	KIAA1632	9.06E-03	1.74
227687_at	HYLS1	3.17E-03	1.82
227762_at	---	8.22E-03	0.35
227765_at	---	4.99E-03	0.47
227856_at	C4orf32	1.51E-02	1.63
227885_at	LOC400236	6.90E-03	0.57
227965_at	---	1.27E-02	0.30
227979_at	---	3.54E-02	0.54
228071_at	GIMAP7	2.20E-02	1.80
228083_at	CACNA2D4	3.14E-03	0.55
228089_x_at	LOC374395	1.79E-03	1.81
228152_s_at	FLJ31033	8.24E-04	2.31
228174_at	---	2.11E-02	0.52
228314_at	LRRC8C	2.55E-06	1.57
228315_at	---	1.62E-02	0.50
228349_at	KIAA1958	1.56E-04	3.94
228369_at	TNRC5	3.24E-03	0.61
228466_at	MGC29891	1.21E-02	0.85
228495_at	CCDC75	2.01E-02	0.61
228531_at	SAMD9	1.36E-04	6.81
228532_at	C1orf162	9.12E-05	1.70
228582_x_at	---	1.71E-01	0.63
228617_at	XAF1	1.02E-04	3.78
228710_at	---	1.20E-02	0.56
228791_at	C15orf38	1.06E-02	0.34
228854_at	---	1.49E-02	0.46
228869_at	---	2.08E-04	1.78
228925_at	---	9.10E-03	0.58
228932_at	---	4.38E-03	0.71
228955_at	---	3.18E-02	2.18
228959_at	---	4.73E-05	0.49
228971_at	---	1.97E-03	0.41
228993_s_at	LOC92482	1.37E-03	0.47

229036_at	TNRC6B	3.26E-02	0.84
229059_at	C9orf109	1.37E-05	12.60
229076_s_at	---	1.07E-04	0.51
229101_at	LOC150166	7.65E-05	1.74
229145_at	C10orf104	2.22E-03	0.48
229193_at	---	1.06E-02	0.44
229200_at	LOC729810	3.87E-03	2.62
229214_at	---	9.42E-04	0.45
229231_at	LRRC37B	5.12E-03	1.45
229307_at	ANKRD28	9.41E-03	2.43
229384_at	---	5.02E-04	0.55
229420_at	---	3.23E-03	0.49
229699_at	---	8.62E-03	0.46
229710_at	---	1.31E-02	0.72
229841_at	---	4.30E-04	0.36
229893_at	FRMD3	3.43E-03	1.68
229903_x_at	RNPC3	8.04E-03	0.69
229949_at	---	2.34E-03	0.52
229968_at	---	3.34E-03	2.03
230000_at	RNF213	7.25E-02	2.00
230036_at	SAMD9L	8.81E-05	7.18
230166_at	KIAA1958	3.48E-03	5.00
230168_at	---	2.16E-02	0.67
230207_s_at	DOCK5	4.35E-03	0.40
230304_at	---	3.41E-03	0.37
230314_at	---	1.49E-03	1.85
230383_x_at	---	2.36E-02	2.32
230435_at	LOC375190	3.89E-02	0.70
230466_s_at	---	9.27E-04	0.33
230479_at	---	6.68E-04	0.35
230502_s_at	LOC149832	1.49E-02	0.45
230503_at	---	4.76E-02	2.65
230580_at	---	7.17E-02	0.41
230820_at	---	9.44E-02	0.34
230921_s_at	---	8.24E-02	0.43
230961_at	---	6.45E-03	0.47
230970_at	---	8.56E-02	0.34
230980_x_at	---	9.88E-03	0.46
231101_at	---	7.93E-03	0.45
231109_at	---	2.51E-02	0.37
231152_at	FLJ20309	5.17E-02	0.39
231164_at	LOC440331	6.62E-02	0.43
231215_at	---	1.57E-05	0.61
231252_at	FLJ23861	7.84E-03	0.45
231455_at	FLJ42418	9.77E-03	4.12
231513_at	---	6.86E-02	1.80
231658_x_at	LOC651600	1.95E-02	0.50
231735_s_at	PRO1073	2.33E-02	0.22
231838_at	C20orf119	3.54E-02	0.37
231925_at	---	2.65E-03	3.85
231939_s_at	BDP1	6.17E-03	0.29
231956_at	KIAA1618	2.30E-02	2.20

231999_at	ANKRD11	1.23E-02	0.70
232034_at	LOC203274	3.69E-02	2.34
232138_at	MBNL2	1.75E-02	0.35
232155_at	KIAA1618	3.91E-04	7.86
232297_at	---	1.10E-02	0.51
232347_x_at	---	2.21E-03	0.53
232356_at	---	1.78E-01	0.63
232369_at	---	2.17E-03	0.47
232375_at	---	6.37E-03	2.87
232406_at	---	3.96E-03	0.44
232576_at	---	1.93E-02	0.37
232681_at	---	2.01E-03	0.50
232939_at	---	1.21E-01	0.47
232964_at	WBSCR19	7.02E-03	0.37
232978_at	---	5.68E-03	0.59
233053_at	---	6.35E-03	0.42
233223_at	---	7.60E-05	0.44
233224_at	---	4.27E-03	0.50
233406_at	---	1.70E-03	0.26
233425_at	ZCCHC2	3.80E-02	2.12
233824_at	---	1.18E-02	0.55
233880_at	RNF213	1.00E-03	2.92
233893_s_at	KIAA1530	2.18E-03	0.63
234156_at	---	1.16E-02	0.62
234196_at	---	2.52E-02	0.25
234512_x_at	LOC728179	1.31E-03	0.51
234574_at	---	4.48E-03	0.51
234731_at	---	1.16E-01	0.60
234807_x_at	---	2.85E-03	0.45
234991_at	---	1.79E-02	0.21
235009_at	FAM44A	5.45E-03	0.54
235112_at	---	1.23E-02	2.80
235146_at	---	6.04E-02	0.63
235157_at	---	3.50E-02	2.44
235203_at	---	4.21E-03	0.37
235274_at	---	1.17E-02	0.44
235276_at	EPSTI1	7.74E-05	8.29
235376_at	---	3.68E-02	0.59
235443_at	---	2.62E-02	0.45
235466_s_at	DISP1	4.17E-03	0.42
235589_s_at	---	1.76E-02	0.62
235643_at	SAMD9L	7.25E-04	5.07
235725_at	---	6.04E-03	0.58
235730_at	---	1.54E-02	0.33
235926_at	---	2.78E-03	0.39
235954_at	---	2.45E-03	0.42
236002_at	---	1.13E-02	0.57
236114_at	---	5.53E-01	1.43
236168_at	---	4.67E-01	1.36
236191_at	---	1.97E-01	2.88
236203_at	---	2.42E-02	0.20
236273_at	NBPF1	5.49E-02	0.64

236285_at	---	9.02E-04	8.92
236322_at	---	3.62E-02	0.43
236346_at	---	9.22E-03	0.55
236355_s_at	---	1.19E-01	0.41
236395_at	---	3.46E-02	0.60
236419_at	---	2.11E-02	0.26
236474_at	---	8.02E-03	0.37
236778_at	---	8.34E-04	0.34
236832_at	LOC221442	1.12E-02	0.57
236889_at	---	8.11E-02	0.25
236966_at	ARMC8	1.53E-02	0.60
236975_at	---	1.70E-02	0.38
237105_at	---	2.69E-02	1.85
237118_at	---	4.07E-02	0.22
237133_at	---	6.71E-04	0.13
237239_at	---	9.98E-03	0.50
237317_at	---	2.94E-02	0.46
237408_at	---	1.79E-02	0.51
237943_at	---	6.32E-02	0.22
238040_at	---	3.77E-04	0.37
238063_at	TMEM154	4.96E-02	0.64
238069_at	---	2.00E-03	0.35
238127_at	FLJ41484	1.78E-02	0.46
238271_x_at	---	4.96E-03	0.28
238292_at	---	3.94E-03	0.48
238348_x_at	---	1.07E-02	0.10
238439_at	ANKRD22	1.31E-02	8.27
238480_at	C18orf50	6.45E-03	2.81
238513_at	PRRG4	7.78E-02	1.85
238610_s_at	---	2.93E-03	0.36
238611_at	---	8.54E-03	0.30
238831_at	---	2.49E-01	0.47
238881_at	---	7.46E-03	0.45
238895_at	---	5.89E-04	0.41
238903_at	LOC137886	4.75E-03	0.65
238931_at	METT10D	1.83E-03	1.87
239033_at	---	9.55E-04	3.04
239049_at	---	1.12E-03	0.47
239050_s_at	---	6.69E-03	0.44
239131_at	---	1.77E-03	0.54
239196_at	ANKRD22	2.88E-02	3.67
239212_at	LTV1	3.26E-02	0.51
239231_at	---	4.63E-03	2.17
239237_at	---	3.54E-02	1.86
239314_at	RP11-50D16.3	1.47E-03	1.69
239450_at	---	8.20E-04	0.30
239516_at	---	2.59E-02	0.47
239557_at	---	3.46E-02	0.40
239646_at	---	8.79E-02	0.37
239815_at	---	6.22E-04	0.57
239963_at	---	1.06E-03	0.40
239979_at	---	2.22E-04	5.05

240019_at	---	8.90E-02	0.25
240020_at	---	2.85E-03	0.59
240044_x_at	TNRC6B	2.04E-02	0.31
240174_at	---	2.47E-02	0.33
240277_at	---	1.09E-01	0.50
240370_at	---	8.38E-03	0.44
241242_at	---	8.40E-03	0.41
241342_at	TMEM65	1.26E-02	1.80
241816_at	C14orf106	1.32E-03	0.47
241837_at	---	9.83E-03	2.99
241981_at	FAM20A	1.41E-01	2.18
242020_s_at	ZBP1	3.99E-03	9.89
242077_x_at	C6orf150	3.32E-02	0.44
242117_at	---	3.44E-02	0.45
242234_at	XAF1	2.27E-03	4.31
242261_at	---	3.82E-03	0.41
242289_at	---	1.25E-04	0.26
242304_at	WIBG	1.21E-02	0.78
242343_x_at	---	3.86E-02	0.37
242563_at	---	4.31E-02	0.48
242625_at	RSAD2	3.34E-05	28.35
242646_at	---	2.42E-03	0.61
242877_at	---	6.40E-02	0.27
243031_at	---	3.84E-03	0.50
243221_at	---	3.23E-01	2.22
243271_at	---	7.73E-04	7.92
243286_at	---	6.96E-02	2.33
243424_at	---	4.83E-02	0.47
243495_s_at	---	7.02E-02	0.38
243546_at	---	3.25E-02	0.32
243552_at	---	1.83E-02	0.25
243561_at	---	2.81E-02	0.45
243754_at	---	7.90E-03	4.21
243759_at	SFRS15	1.12E-02	0.47
243768_at	---	1.09E-02	0.45
243819_at	---	2.94E-03	0.35
243826_at	---	6.64E-02	0.22
243954_at	LOC285286	2.29E-01	0.40
243963_at	SDCCAG8	1.49E-02	0.32
243966_at	---	1.93E-03	0.55
244181_at	---	9.61E-02	0.22
244257_at	---	1.91E-03	0.34
244312_at	---	2.94E-02	0.38
244383_at	---	3.20E-02	0.31
244387_at	---	8.57E-01	1.15
244425_at	---	4.09E-02	0.46
244535_at	---	8.69E-02	0.49
244610_x_at	---	9.99E-03	0.38
244726_at	---	1.06E-02	0.35
244737_at	---	2.25E-01	0.81
244778_x_at	---	1.54E-02	0.49
244803_at	---	2.10E-02	0.56

244842_x_at	---	1.66E-02	0.81
244846_at	---	1.08E-02	0.32
32540_at	PPP3CC	3.15E-02	0.50
35254_at	TRAFD1	9.10E-03	1.62
64064_at	GIMAP5	1.30E-02	2.32
65472_at	---	9.88E-03	0.45

A.2. IFN inducible genes in normal monocytes at different time points.

		<i>Normalized value in IFN experiments</i>				
<i>Systematic</i>	<i>Gene Symbol</i>	<i>1 hr</i>	<i>6 hrs</i>	<i>24 hrs</i>	<i>48 hrs</i>	<i>72 hrs</i>
<i>Acrosome formation</i>						
228323_at	CASC5	0.50	1.53	0.80	2.45	0.89
<i>Acute-phase response</i>						
211719_x_at	FN1	0.79	3.02	0.52	0.50	0.51
212464_s_at	FN1	0.28	2.13	0.41	0.41	0.66
216442_x_at	FN1	1.46	2.80	0.56	0.43	0.60
<i>Angiogenesis</i>						
238034_at	CANX	0.79	0.68	0.51	0.34	0.29
219439_at	C1GALT1	1.33	4.64	5.02	3.24	3.29
209788_s_at	ERAP1	1.19	2.19	1.20	0.92	1.39
210385_s_at	ERAP1	0.86	2.54	1.93	0.74	0.87
210253_at	HTATIP2	0.49	1.59	0.94	2.09	2.70
39402_at	IL1B	0.91	0.51	2.54	1.75	1.26
206295_at	IL18	0.56	0.35	0.36	0.55	0.09
202859_x_at	IL8	0.42	0.49	0.72	0.39	1.08
211506_s_at	IL8	0.17	0.20	1.99	1.54	1.97
204575_s_at	MMP19	0.59	0.52	0.40	0.46	0.26
212298_at	NRP1	1.05	0.16	0.25	0.22	0.27
223422_s_at	ARHGAP24	2.21	0.66	1.34	2.25	0.98
225036_at	SHB	0.78	0.44	0.86	1.20	1.00
209500_x_at	TNFSF13	0.90	1.96	0.46	0.52	0.82
210314_x_at	TNFSF13	0.90	1.74	0.46	0.55	0.63
202509_s_at	TNFAIP2	0.79	1.05	1.04	0.57	0.43
210512_s_at	VEGFA	0.34	0.31	1.25	1.28	1.93
<i>Apoptosis</i>						
229174_at	---	1.89	3.43	1.55	1.49	2.49
208636_at	ACTN1	1.02	0.60	0.52	0.58	0.44
208637_x_at	ACTN1	1.35	0.53	0.46	0.56	0.46
201301_s_at	ANXA4	1.14	3.16	2.28	1.91	2.57
201302_at	ANXA4	1.17	2.88	2.08	1.48	2.01
225557_at	AXUD1	2.36	2.14	2.25	3.17	2.53
210538_s_at	BIRC3	1.44	2.40	2.58	1.28	0.85
228758_at	BCL6	0.69	0.88	0.33	0.55	0.69
203728_at	BAK1	0.52	3.77	2.03	3.41	1.54
211833_s_at	BAX	1.00	0.78	2.13	3.10	1.54
217955_at	BCL2L13	2.34	3.41	1.75	1.47	2.09
205681_at	BCL2A1	1.06	1.94	0.38	0.25	0.13
224737_x_at	CCAR1	1.09	0.47	1.17	0.90	0.91
220987_s_at	NUAK2	0.41	0.89	1.37	1.40	0.95
226524_at	C3orf38	1.53	2.65	1.91	2.14	1.91
215785_s_at	CYFIP2	0.95	0.90	1.04	2.08	1.76
203139_at	DAPK1	1.49	0.77	0.66	0.48	0.67

200046_at	DAD1	0.96	0.75	0.65	0.44	0.61
202969_at	DYRK2	0.54	0.80	1.10	0.42	0.67
202970_at	DYRK2	1.40	0.67	0.40	0.41	0.50
202971_s_at	DYRK2	1.02	0.67	0.94	0.28	0.71
218126_at	FAM82C	0.91	0.76	1.08	0.81	0.40
204780_s_at	FAS	2.29	2.75	3.65	3.24	4.32
204781_s_at	FAS	1.50	1.70	3.45	5.01	5.47
220643_s_at	FAIM	0.33	1.20	0.66	0.39	0.27
221601_s_at	FAIM3	0.63	0.97	0.30	0.28	0.32
212367_at	FEM1B	0.47	1.21	1.06	0.88	0.80
201636_at	FXR1	1.10	1.40	1.31	2.03	1.44
229519_at	FXR1	1.01	2.25	0.96	1.30	0.91
200799_at	HSPA1A	1.13	2.83	1.29	1.29	1.37
200800_s_at	HSPA1A	1.26	4.77	0.99	1.04	1.37
202581_at	HSPA1B	0.97	4.49	1.96	2.24	1.89
202389_s_at	HTT	1.17	0.49	0.79	0.51	0.77
48825_at	ING4	0.69	0.86	1.53	1.39	2.01
225330_at	IGF1R	0.84	0.37	0.43	0.39	0.38
202803_s_at	ITGB2	0.87	1.34	0.67	0.58	0.49
205207_at	IL6	9.04	1.24	1.81	0.66	3.12
207008_at	IL8RB	0.35	1.83	1.67	2.08	2.07
205841_at	JAK2	1.34	6.84	4.40	2.68	10.31
205842_s_at	JAK2	0.90	5.73	3.01	2.34	2.32
200798_x_at	MCL1	0.89	1.94	2.94	1.59	1.58
217963_s_at	NGFRAP1	0.80	0.70	0.46	0.99	1.67
239267_at	NEK6	0.47	1.38	1.37	1.34	0.42
207075_at	NLRP3	1.21	1.14	1.47	1.83	2.48
209230_s_at	NUPR1	1.22	2.89	21.24	18.47	7.18
204285_s_at	PMAIP1	2.07	2.81	1.08	1.56	1.47
204286_s_at	PMAIP1	3.31	2.09	1.61	5.38	6.58
219043_s_at	PDCL3	1.10	0.37	0.59	1.16	1.18
217996_at	PHLDA1	0.36	0.44	0.11	0.20	0.16
217997_at	PHLDA1	0.43	0.52	0.14	0.17	0.23
217999_s_at	PHLDA1	0.53	0.36	0.44	0.16	0.33
225842_at	PHLDA1	0.27	0.41	0.19	0.13	0.13
203063_at	PPM1F	0.78	0.41	0.42	0.61	0.67
37384_at	PPM1F	0.73	0.46	0.37	0.78	0.47
209539_at	ARHGEF6	1.00	0.87	0.50	0.56	0.77
209941_at	RIPK1	1.65	2.74	1.12	1.29	2.79
226551_at	RIPK1	3.26	2.06	2.36	1.69	1.28
209544_at	RIPK2	3.71	1.66	0.94	0.77	1.63
209545_s_at	RIPK2	2.66	3.26	1.72	1.27	1.44
228139_at	RIPK3	1.20	1.55	2.56	1.46	1.26
211509_s_at	RTN4	1.10	0.98	0.81	0.71	0.46
222986_s_at	SCOTIN	0.91	1.98	2.40	4.11	3.08
203528_at	SEMA4D	0.87	2.49	2.02	4.06	1.85
202693_s_at	STK17A	1.31	1.09	2.25	3.02	2.50
209722_s_at	SERPINB9	1.19	2.03	1.63	0.50	1.76
209723_at	SERPINB9	1.44	2.25	2.99	1.19	1.47
201739_at	SGK1	0.73	1.28	0.48	0.67	0.73
200804_at	TEGT	1.07	0.80	0.73	0.48	0.45
221253_s_at	TXNDC5	0.91	0.42	0.51	0.56	0.48

201446_s_at	TIA1	1.07	2.19	0.99	0.87	1.35
201450_s_at	TIA1	1.28	2.59	1.29	1.23	1.17
218403_at	TRIAP1	0.78	0.78	1.75	2.06	1.73
227102_at	TRIM35	7.73	1.45	2.09	1.38	1.53
202687_s_at	TNFSF10	10.36	60.60	15.15	22.88	41.50
202688_at	TNFSF10	20.36	56.40	13.44	16.85	45.06
214329_x_at	TNFSF10	10.85	48.73	14.67	16.34	49.82
231775_at	TNFRSF10A	1.34	1.00	1.64	2.21	3.48
227345_at	TNFRSF10D	2.98	0.80	0.84	1.20	0.82
218856_at	TNFRSF21	0.43	0.23	0.22	0.17	0.43
208296_x_at	TNFAIP8	1.09	1.78	1.62	2.13	1.87

Biosynthetic process

227361_at	---	3.47	0.93	1.14	2.09	1.64
239144_at	---	1.02	2.98	0.97	1.46	1.19
202539_s_at	HMGCR	0.46	0.67	0.81	0.87	0.69
202540_s_at	HMGCR	0.32	0.65	1.00	0.88	0.75
204119_s_at	ADK	1.17	0.67	0.36	0.55	0.49
201197_at	AMD1	0.98	1.39	1.92	1.72	2.05
209320_at	ADCY3	0.75	1.10	0.86	0.36	0.73
202912_at	ADM	1.35	1.66	3.51	2.70	1.47
225621_at	ALG2	0.47	1.21	1.38	1.25	0.75
203066_at	GALNAC4S-6ST	0.81	0.42	0.63	0.60	0.53
237502_at	CRLS1	0.22	0.45	0.75	0.13	2.42
235532_at	---	2.98	0.11	0.52	0.50	0.54
212862_at	CDS2	1.14	2.74	2.27	1.93	1.14
212864_at	CDS2	0.92	2.67	1.65	1.80	1.91
206932_at	CH25H	31.96	7.63	0.37	3.86	4.24
206656_s_at	C20orf3	0.69	0.60	0.62	0.32	0.34
225195_at	DPH3	1.28	1.60	1.59	2.01	1.12
219017_at	ETNK1	1.43	2.23	1.90	1.00	0.89
222262_s_at	ETNK1	2.25	1.93	2.72	0.85	0.56
226432_at	ETNK1	0.22	2.47	1.03	0.94	0.65
201995_at	EXT1	0.97	3.94	3.28	1.22	1.40
201275_at	FDPS	0.91	0.49	0.74	0.82	0.70
241954_at	FDFT1	0.82	1.09	0.89	0.49	1.03
230788_at	GCNT2	3.61	3.00	2.69	3.19	2.85
208336_s_at	GPSN2	0.46	0.96	0.31	0.72	0.76
218473_s_at	GLT25D1	0.96	0.30	0.64	0.61	0.85
226868_at	GLT8D3	1.71	0.32	0.60	0.73	0.51
227829_at	GYLTL1B	1.71	0.28	0.53	0.46	0.97
221942_s_at	GUCY1A3	1.62	2.81	3.37	7.92	5.27
203817_at	GUCY1B3	0.91	4.64	2.17	2.51	2.01
217869_at	HSD17B12	1.01	0.46	0.51	0.49	0.67
226702_at	LOC129607	6.80	16.19	10.04	18.84	29.20
201892_s_at	IMPDH2	0.84	0.24	0.52	0.59	0.60
228002_at	IDI2	0.70	0.38	0.42	0.35	1.08
220346_at	MTHFD2L	4.20	2.64	3.62	0.61	1.85
55081_at	MICALL1	0.66	0.76	2.39	1.16	0.69
203916_at	NDST2	2.36	0.82	0.65	0.99	0.91
229852_at	NMNAT1	0.50	0.45	0.97	0.82	0.54

201268_at	NME2	1.24	0.69	0.72	0.78	0.43
212739_s_at	NME4	0.90	1.49	0.39	0.49	0.75
218809_at	PANK2	1.55	1.96	1.73	2.22	1.82
235130_at	PANK2	1.07	2.11	3.35	2.31	1.65
238856_s_at	PANK2	1.11	1.84	1.64	1.80	2.13
219048_at	PIGN	0.47	0.34	0.40	0.40	0.48
202392_s_at	PISD	0.46	0.76	1.04	1.51	0.94
201433_s_at	PTDSS1	0.95	0.50	0.68	0.68	0.45
221005_s_at	PTDSS2	1.03	0.66	0.75	0.49	0.65
201013_s_at	PAICS	0.82	0.45	0.72	1.30	0.74
230097_at	GART	2.31	0.98	1.11	1.60	1.61
244822_at	GART	0.60	2.07	2.17	0.33	2.71
223062_s_at	PSAT1	2.61	0.43	0.60	1.56	0.32
220865_s_at	PDSS1	3.46	0.95	0.77	1.18	1.05
227629_at	PRLR	1.25	4.32	3.07	2.85	3.43
231981_at	PRLR	1.47	3.67	2.02	1.20	4.00
243755_at	PRLR	1.38	4.56	0.54	0.74	0.22
218083_at	PTGES2	0.68	0.38	1.06	0.40	0.87
238669_at	PTGS1	1.03	1.12	0.54	0.41	0.60
202671_s_at	PDXK	1.10	1.04	0.94	0.49	0.44
218019_s_at	PDXK	0.70	0.40	0.28	0.26	0.21
224888_at	SELI	1.29	3.38	1.32	1.05	1.17
208130_s_at	TBXAS1	1.06	0.34	0.30	0.41	0.50
202096_s_at	TSPO	1.15	1.11	0.27	0.30	0.30
236129_at	GALNT5	6.04	1.11	0.44	1.34	0.70
203031_s_at	UROS	0.99	0.19	0.50	0.37	0.47

Blood coagulation

203305_at	F13A1	0.98	0.77	0.31	0.37	0.54
213258_at	TFPI	0.41	0.18	0.15	0.19	0.08
208912_s_at	CNP	3.83	7.50	3.12	3.60	4.72
203381_s_at	APOE	1.97	3.44	0.13	0.13	0.21
203382_s_at	APOE	1.17	0.44	0.07	0.07	0.22
212884_x_at	APOE	1.16	0.70	0.42	0.24	0.19
225971_at	---	0.81	5.72	2.56	2.20	1.43
236629_at	C1orf69	0.86	0.82	0.42	0.47	0.45
225443_at	DCP1A	1.23	2.13	1.97	1.79	1.64
226093_at	DCP1B	1.66	0.77	1.43	2.69	2.35
235258_at	DCP2	1.08	1.51	1.94	2.10	1.55
225970_at	DDHD1	0.84	2.80	3.38	1.43	2.28
214909_s_at	DDAH2	0.97	1.17	0.67	0.67	0.48
207541_s_at	EXOSC10	0.76	1.02	1.43	1.66	2.05
202862_at	FAH	1.10	0.34	0.57	0.41	0.98
209531_at	GSTZ1	0.88	1.84	0.25	0.36	1.18
210007_s_at	GPD2	1.57	3.34	1.36	3.34	2.43
225447_at	GPD2	0.84	5.07	3.18	2.43	1.70
213129_s_at	GCSH	0.86	0.66	0.46	0.21	0.35
213133_s_at	GCSH	1.90	0.73	0.53	0.52	0.48
224741_x_at	GAS5	1.10	0.47	0.83	0.93	0.66
224841_x_at	GAS5	1.19	0.48	0.95	0.90	0.70
204224_s_at	GCH1	2.12	10.89	18.39	14.84	28.21
240287_at	IRG1	42.29	10.96	2.56	1.41	0.99

210029_at	INDO	15.39	27.27	27.88	4.69	3.87
226354_at	LACTB	2.39	1.41	1.57	1.48	1.30
226748_at	LYSMD2	1.21	3.47	3.61	3.94	3.63
219293_s_at	OLA1	0.88	0.44	0.60	0.72	0.77
222553_x_at	OXR1	1.04	2.07	1.69	0.98	1.09
203117_s_at	PAN2	0.80	2.38	0.43	0.94	0.73
212694_s_at	PCCB	1.24	0.44	0.64	0.73	0.82
213852_at	RBM8A	1.20	0.44	0.35	0.55	0.60
209605_at	TST	0.95	0.38	0.52	0.65	0.92
201368_at	ZFP36L2	0.33	1.18	1.01	0.92	0.95

Cell adhesion

201951_at	ALCAM	0.75	0.62	0.20	0.23	0.20
201952_at	ALCAM	1.15	0.94	0.24	0.22	0.23
204306_s_at	CD151	1.21	0.97	1.32	0.50	0.50
206120_at	CD33	1.12	0.66	0.26	0.48	0.54
204489_s_at	CD44	0.85	0.61	0.48	0.27	0.56
204490_s_at	CD44	0.90	0.56	0.62	0.54	0.45
209835_x_at	CD44	1.00	0.66	0.47	0.44	0.42
212014_x_at	CD44	0.79	0.78	0.43	0.35	0.48
212063_at	CD44	1.03	0.42	0.33	0.26	0.32
217523_at	CD44	0.70	0.46	0.57	0.52	0.72
211075_s_at	CD47	1.20	4.95	2.25	1.68	1.88
213857_s_at	CD47	0.94	4.22	2.31	1.73	2.42
226016_at	CD47	0.81	3.05	1.83	2.07	2.26
227259_at	CD47	1.10	3.44	1.87	1.89	1.92
222061_at	CD58	0.18	0.80	1.02	1.51	1.02
215925_s_at	CD72	0.99	1.63	4.84	8.59	6.92
201029_s_at	CD99	0.76	1.04	0.91	0.50	0.41
215691_x_at	C1orf41	1.27	1.08	1.71	0.90	2.03
228707_at	CLDN23	4.84	6.12	3.48	3.78	2.45
226817_at	DSC2	1.68	1.87	0.66	0.46	1.13
208024_s_at	DGCR6	0.82	2.17	0.75	1.87	2.06
209473_at	ENTPD1	0.98	0.57	0.51	0.47	0.57
207111_at	EMR1	1.28	3.09	1.13	0.32	0.50
225275_at	EDIL3	1.60	0.52	0.96	1.22	0.28
204359_at	FLRT2	0.77	0.32	0.06	0.08	0.15
240259_at	FLRT2	0.19	0.26	0.30	0.51	0.06
219920_s_at	GMPPB	0.82	1.11	0.69	0.82	0.37
227262_at	HAPLN3	2.70	1.39	1.21	0.72	0.47
203336_s_at	ITGB1BP1	0.72	1.02	0.79	0.59	0.47
201656_at	ITGA6	1.63	0.18	0.04	0.17	0.35
227297_at	ITGA9	0.27	0.72	0.79	0.19	0.13
205055_at	ITGAE	0.91	0.68	0.39	0.35	0.25
205786_s_at	ITGAM	0.93	0.85	0.47	0.19	0.10
201125_s_at	ITGB5	1.02	0.47	0.22	0.25	0.27
214020_x_at	ITGB5	3.22	0.37	0.13	0.10	0.22
205718_at	ITGB7	0.82	2.26	1.86	3.33	8.10
202638_s_at	ICAM1	3.40	1.00	2.28	1.12	0.55
204683_at	ICAM2	0.95	0.96	2.63	2.90	6.60
213620_s_at	ICAM2	0.86	1.38	2.57	3.41	5.03
201015_s_at	JUP	1.78	20.48	3.38	3.33	12.39

226534_at	KITLG	0.86	2.18	8.83	3.44	2.46
200771_at	LAMC1	1.40	0.37	1.44	0.81	0.62
219594_at	NINJ2	0.91	0.60	0.47	0.68	0.48
238720_at	OMG	0.79	1.41	2.72	3.81	4.44
233510_s_at	PARVG	0.19	0.94	0.66	0.32	0.70
244229_at	PARVG	0.29	0.76	1.20	0.74	1.02
201928_at	PKP4	1.16	0.42	0.70	1.02	0.88
209606_at	PSCDBP	0.80	0.91	1.31	1.65	2.31
203149_at	PVRL2	0.83	2.32	1.80	1.31	1.07
211178_s_at	PSTPIP1	1.29	0.64	0.42	0.69	1.12
201646_at	SCARB2	1.02	2.49	1.35	0.96	0.97
201647_s_at	SCARB2	1.38	3.46	2.24	1.00	0.76
215754_at	SCARB2	2.97	1.94	1.23	0.96	1.13
224983_at	SCARB2	1.49	2.54	1.43	0.93	0.87
216537_s_at	SIGLEC7	1.44	1.08	1.62	0.30	1.00
219159_s_at	SLAMF7	0.88	6.45	4.20	4.95	1.31
222838_at	SLAMF7	0.87	7.15	5.90	2.44	1.96
234306_s_at	SLAMF7	0.33	3.69	4.07	2.03	1.09
226893_at	ABL2	2.55	1.68	0.90	0.82	0.65
231907_at	ABL2	2.26	1.40	0.96	0.76	0.68
204619_s_at	VCAN	0.98	0.19	0.59	0.52	0.58
204620_s_at	VCAN	1.07	0.33	0.35	0.37	0.49
211571_s_at	VCAN	1.09	0.18	0.17	0.56	0.61
215646_s_at	VCAN	1.14	0.19	0.24	0.26	0.40
221731_x_at	VCAN	0.97	0.35	0.28	0.39	0.48

Cell aging

212687_at	LIMS1	0.95	0.82	0.47	0.55	0.47
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Cell communication

224817_at	SH3PXD2A	1.47	0.81	0.47	0.21	0.16
219062_s_at	ZCCHC2	1.42	3.75	3.93	2.83	2.83
222816_s_at	ZCCHC2	2.10	3.44	2.83	2.14	2.82
233425_at	ZCCHC2	4.12	4.52	4.49	1.62	1.95

Cell cycle

225814_at	XRN1	1.27	5.96	2.57	3.04	2.15
233632_s_at	XRN1	1.29	6.29	3.39	2.14	2.62
222538_s_at	APPL1	1.47	2.01	1.21	0.85	0.77
208722_s_at	ANAPC5	1.04	0.58	0.89	0.44	1.56
211036_x_at	ANAPC5	0.99	0.43	0.88	0.87	1.32
239651_at	ANAPC5	0.48	0.82	1.10	3.19	0.55
225285_at	BCAT1	0.70	0.18	0.19	0.08	0.13
226517_at	BCAT1	0.41	0.28	0.23	0.19	0.20
227322_s_at	BCCIP	0.95	0.44	0.88	1.38	1.32
201458_s_at	BUB3	0.69	0.99	1.45	1.25	2.02
203593_at	CD2AP	1.73	6.34	4.91	3.17	3.38
204170_s_at	CKS2	1.52	2.11	1.37	1.53	1.46
201938_at	CDK2AP1	0.85	1.20	0.64	0.50	1.03
221511_x_at	CCPG1	1.26	0.57	1.19	0.45	0.51
209194_at	CETN2	0.73	0.58	0.53	0.47	0.54
218723_s_at	C13orf15	0.68	0.71	0.26	0.12	0.17

219544_at	C13orf34	0.65	1.03	1.39	2.13	1.24
207614_s_at	CUL1	1.05	2.10	2.71	2.25	2.76
228899_at	CUL1	1.86	1.57	1.05	2.43	2.44
200953_s_at	CCND2	0.87	0.73	0.27	0.83	0.35
202769_at	CCNG2	0.79	3.54	1.02	0.39	0.46
225824_at	CCNK	0.85	1.33	2.40	2.49	1.97
204645_at	CCNT2	1.02	1.07	2.14	0.98	1.89
224847_at	CDK6	1.30	0.61	0.51	0.48	0.54
224851_at	CDK6	0.57	0.93	0.36	0.34	0.11
202284_s_at	CDKN1A	1.79	1.45	2.07	2.92	3.50
209717_at	EVI5	1.22	0.37	0.62	0.61	1.21
209588_at	EPHB2	1.25	2.68	1.19	1.22	1.45
209589_s_at	EPHB2	1.90	3.52	1.89	1.51	1.92
211165_x_at	EPHB2	0.23	4.14	1.01	0.82	2.33
225684_at	FAM33A	0.96	0.13	0.88	1.32	2.09
225686_at	FAM33A	0.71	1.20	0.37	1.57	2.58
223887_at	GPR132	0.48	0.67	1.39	0.64	0.51
213524_s_at	G0S2	0.69	0.52	0.18	0.25	0.42
203725_at	GADD45A	0.56	0.84	2.05	2.73	3.38
202191_s_at	GAS7	0.88	0.69	0.49	0.58	0.89
218239_s_at	GTPBP4	0.44	0.70	1.17	0.95	1.33
219863_at	HERC5	11.10	39.16	10.16	23.64	22.84
209581_at	HRASLS3	0.97	7.42	5.49	4.50	18.96
208930_s_at	ILF3	0.84	0.37	0.63	0.63	1.23
217805_at	ILF3	1.13	0.41	0.61	0.95	0.66
214383_x_at	KLHDC3	1.02	0.43	0.86	0.98	0.82
210102_at	LOH11CR2A	0.50	0.51	0.96	0.94	0.70
203094_at	MAD2L1BP	1.02	1.59	1.68	2.39	2.80
203740_at	MPHOSPH6	0.54	0.50	0.79	0.85	0.95
212299_at	NEK9	0.84	0.50	0.82	0.73	0.91
213331_s_at	NEK1	1.63	2.04	1.19	0.84	1.25
230592_at	NSL1	1.14	1.59	2.20	1.62	1.63
204024_at	OSGIN2	1.19	1.32	2.75	2.03	0.93
202212_at	PES1	1.10	0.35	0.75	0.75	1.29
218223_s_at	PLEKHO1	1.42	2.11	1.85	1.67	2.08
201939_at	PLK2	0.21	0.83	3.30	2.26	11.84
47069_at	PRR5	1.28	5.38	1.01	0.61	1.24
204566_at	PPM1D	0.82	0.97	2.33	2.64	2.71
200730_s_at	PTP4A1	1.06	1.83	2.07	1.95	1.79
200731_s_at	PTP4A1	0.95	2.11	2.17	1.69	2.38
200732_s_at	PTP4A1	1.40	1.49	1.14	2.70	1.44
200733_s_at	PTP4A1	1.18	2.03	3.24	1.86	2.77
228535_at	RAD1	0.41	0.30	0.79	0.69	0.32
204828_at	RAD9A	1.91	1.63	1.39	2.02	2.52
226503_at	RIF1	1.17	0.97	2.67	1.74	1.55
203185_at	RASSF2	0.80	0.62	0.43	0.51	0.41
226436_at	RASSF4	1.11	6.50	1.83	1.72	1.72
49306_at	RASSF4	0.99	3.42	1.34	1.36	1.41
218599_at	REC8	2.09	1.11	1.21	1.70	1.81
202388_at	RGS2	0.63	0.55	0.36	0.95	0.63
203132_at	RB1	1.03	1.37	1.83	1.56	2.45
218379_at	RBM7	2.12	1.65	1.25	1.12	1.02

212698_s_at	SEPT10	3.04	0.71	0.74	0.56	0.41
230071_at	SEPT11	1.90	1.75	0.55	0.80	0.22
223195_s_at	SESN2	0.50	0.79	2.68	1.19	1.88
223196_s_at	SESN2	0.58	1.09	1.87	1.36	2.11
218833_at	ZAK	0.98	0.81	1.23	0.95	0.21
223519_at	ZAK	0.95	0.69	0.38	0.67	1.04
225662_at	ZAK	0.64	0.35	0.44	0.48	0.37
225665_at	ZAK	1.01	0.42	0.38	0.34	0.33
242290_at	TACC1	0.26	1.23	0.82	1.07	1.35
208649_s_at	VCP	0.65	0.75	0.79	0.47	0.69
203940_s_at	VASH1	1.09	0.36	0.34	0.54	0.60
212601_at	ZZEF1	0.96	0.47	0.60	0.70	0.94

Cell differentiation

219648_at	MREG	0.77	1.60	0.39	0.14	0.08
232682_at	MREG	0.95	1.46	0.95	0.38	0.24
235879_at	MBNL1	0.70	1.46	1.14	1.52	2.19
226725_at	SLFN5	5.20	3.45	2.78	2.90	3.18
238430_x_at	SLFN5	4.20	4.41	1.77	1.95	2.05
243999_at	SLFN5	2.79	2.50	1.43	1.74	1.45

Cell growth

213497_at	ABTB2	0.66	4.34	4.06	4.25	1.87
202551_s_at	CRIM1	0.34	0.39	0.98	1.02	0.75
228496_s_at	CRIM1	0.34	1.06	0.90	0.85	1.03
201185_at	HTRA1	0.75	0.21	0.24	0.11	0.23
201162_at	IGFBP7	0.74	0.62	1.04	0.85	2.43
201163_s_at	IGFBP7	1.02	0.97	1.36	1.67	2.14
236235_at	ITCH	2.23	1.52	0.99	0.56	0.70
243683_at	MORF4L2	1.33	0.85	0.51	1.04	3.17
202841_x_at	OGFR	1.32	2.25	1.41	1.75	1.04
238327_at	LOC440836	1.05	2.91	1.47	2.02	3.15
212281_s_at	TMEM97	0.74	1.61	0.40	0.47	0.49
212282_at	TMEM97	1.86	0.41	0.52	0.68	0.48

Cell migration/Cell motility

205566_at	ABHD2	1.16	0.39	0.60	0.51	0.66
221815_at	ABHD2	0.99	0.10	0.22	0.18	0.22
225337_at	ABHD2	0.96	0.27	0.23	0.08	0.16
228490_at	ABHD2	0.89	0.53	0.83	0.64	0.42
63825_at	ABHD2	0.89	0.51	0.32	0.33	0.41
200920_s_at	BTG1	0.49	0.46	0.30	0.50	0.55
200921_s_at	BTG1	0.55	0.54	0.47	0.53	0.45
204271_s_at	EDNRB	2.53	0.46	0.24	0.68	0.83
212305_s_at	MIA3	1.42	2.31	2.10	2.03	1.10
226103_at	NEXN	7.82	254.2	4.51	58.83	172.78
228225_at	PXMP3	0.40	0.63	0.69	0.94	0.88
204351_at	S100P	0.66	0.37	1.67	0.83	0.84
205607_s_at	SCYL3	6.65	1.11	1.17	1.38	1.23
41329_at	SCYL3	2.67	1.96	1.48	1.50	1.70
209129_at	TRIP6	0.92	1.66	2.23	2.92	2.12
211987_at	TOP2B	1.17	0.68	0.50	0.51	0.74

225098_at	ABI2	1.24	0.67	0.46	0.41	0.88
225112_at	ABI2	0.86	0.57	0.57	0.44	0.47
201511_at	AAMP	1.32	0.98	1.03	0.93	0.46
200728_at	ACTR2	0.88	0.74	0.56	0.54	0.46
201005_at	CD9	0.54	0.41	0.25	0.36	0.39
204533_at	CXCL10	161.9	103.5	26.33	28.43	101.97
209906_at	C3AR1	1.51	2.08	1.65	1.63	1.67
223001_at	DC2	0.90	0.52	0.57	0.51	0.38
209392_at	ENPP2	28.87	104.5	9.35	35.82	15.94
210839_s_at	ENPP2	8.01	9.75	3.21	13.39	4.06
224097_s_at	F11R	0.95	1.25	2.19	2.35	0.99
200859_x_at	FLNA	0.68	0.61	0.80	0.41	0.33
214752_x_at	FLNA	0.69	0.66	0.86	0.45	0.34
210772_at	FPRL1	1.29	2.69	0.94	0.31	1.75
214560_at	FPRL2	1.25	1.50	2.09	3.18	1.96
230422_at	FPRL2	0.60	2.10	2.05	2.66	2.57
205206_at	KAL1	1.12	0.64	0.86	0.74	0.34
203037_s_at	MTSS1	0.97	0.50	0.32	0.24	0.79
204423_at	MKLN1	0.96	1.27	1.97	1.69	2.43
201668_x_at	MARCKS	1.02	2.61	4.31	2.87	5.99
201669_s_at	MARCKS	0.88	2.06	3.47	2.56	2.51
201670_s_at	MARCKS	0.72	2.80	5.80	4.22	3.53
213002_at	MARCKS	0.77	1.84	2.51	2.60	2.95
225897_at	MARCKS	0.72	4.26	4.19	3.27	2.88
210845_s_at	PLAUR	0.98	0.81	0.71	0.61	0.41
211924_s_at	PLAUR	1.08	0.76	0.55	0.20	0.24
214866_at	PLAUR	1.07	0.76	0.85	0.98	0.46
223220_s_at	PARP9	3.52	18.09	9.46	10.46	10.94
227807_at	PARP9	3.26	9.32	4.39	6.35	9.64
208641_s_at	RAC1	0.91	1.13	1.48	1.21	2.04
204563_at	SELL	0.81	4.39	10.54	8.34	6.64
202363_at	SPOCK1	1.19	1.35	0.57	0.31	0.67
201108_s_at	THBS1	0.90	0.64	0.39	0.16	0.34
201110_s_at	THBS1	0.62	0.18	0.41	0.42	1.37
239336_at	THBS1	0.40	0.77	0.79	0.50	0.83
205844_at	VNN1	0.99	0.16	0.13	0.22	0.30
205922_at	VNN2	0.89	0.69	0.26	0.45	0.45
201426_s_at	VIM	0.83	0.74	0.40	0.31	0.27

Cell proliferation

205239_at	AREG	2.89	1.01	0.40	0.18	1.52
213134_x_at	BTG3	1.42	1.44	1.63	1.52	2.77
204392_at	CAMK1	0.83	0.59	0.50	0.82	1.02
209716_at	CSF1	2.38	0.80	0.67	1.05	0.54
201278_at	DAB2	0.70	0.50	0.26	0.26	0.67
201279_s_at	DAB2	0.16	0.28	0.18	0.39	0.60
201280_s_at	DAB2	0.37	0.38	0.16	0.28	0.77
210757_x_at	DAB2	0.54	0.67	0.30	0.20	0.65
240873_x_at	DAB2	2.38	0.66	0.05	0.12	0.34
201141_at	GPNMB	0.72	0.67	0.48	0.41	0.58
204984_at	GPC4	2.11	0.58	0.22	0.22	0.04
204698_at	ISG20	15.18	177.1	52.33	208.54	270.01

33304_at	ISG20	8.02	45.72	31.69	39.34	61.38
244261_at	IL28RA	5.76	0.50	0.21	0.32	0.13
205569_at	LAMP3	4.11	20.07	6.55	4.60	39.89
206267_s_at	MATK	0.56	0.43	0.12	0.05	0.09
221872_at	RARRES1	2.40	0.68	2.48	0.08	0.35
204070_at	RARRES3	0.93	3.46	4.10	3.61	4.35
202704_at	TOB1	1.00	1.23	2.00	2.92	2.93
228834_at	TOB1	0.69	1.69	2.10	2.45	3.03

Chemotaxis

216598_s_at	CCL2	8.67	10.84	3.10	14.43	3.06
208075_s_at	CCL7	2.58	8.69	5.43	0.74	1.45
214038_at	CCL8	115.5	117.8	22.79	79.30	108.24
205098_at	CCR1	1.13	1.90	2.78	2.42	1.85
205099_s_at	CCR1	1.30	2.04	2.86	2.77	2.50
206991_s_at	CCR5	1.22	2.15	1.94	1.42	1.38
206337_at	CCR7	1.85	3.93	2.87	2.35	7.96
204470_at	CXCL1	0.11	0.32	0.56	0.72	0.55
210163_at	CXCL11	79.85	242.2	74.26	25.02	5.69
211122_s_at	CXCL11	217.4	125.4	30.98	1.74	2.44
209774_x_at	CXCL2	0.13	0.59	0.67	0.55	0.60
207850_at	CXCL3	0.10	0.37	0.22	0.40	0.09
203915_at	CXCL9	7.11	7.36	0.90	1.06	0.71
209201_x_at	CXCR4	0.27	0.44	0.85	0.90	1.05
211919_s_at	CXCR4	0.23	0.46	0.82	1.01	1.24
217028_at	CXCR4	0.27	0.57	0.90	1.11	1.42
223451_s_at	CKLF	1.04	0.44	0.90	1.17	0.53
210659_at	CMKLR1	1.56	4.68	3.38	3.79	3.34
224733_at	CMTM3	0.83	0.81	0.96	0.69	0.36
225009_at	CMTM4	0.81	0.34	0.72	0.83	0.50
210397_at	DEFB1	8.63	18.34	3.08	3.28	5.37
221149_at	GPR77	1.78	0.84	1.02	2.52	1.12
209828_s_at	IL16	0.41	0.48	0.56	0.47	0.54
201136_at	PLP2	0.90	0.67	0.50	0.56	0.36
213603_s_at	RAC2	0.90	0.74	0.48	0.42	0.37

Chromatin assembly or disassembly

205062_x_at	ARID4A	0.87	0.68	2.27	1.04	1.32
224322_at	ARID4B	4.21	3.40	0.50	1.39	2.72
235959_at	ARID4B	2.82	0.36	0.73	1.19	0.55
201518_at	CBX1	1.03	0.48	0.72	0.80	0.97
228999_at	CHD2	0.45	1.14	1.32	1.13	1.62
239654_at	CHD9	1.32	0.74	0.45	0.90	1.02
214009_at	MSL3L1	1.68	2.24	1.49	1.67	1.62
236165_at	MSL3L1	2.69	1.65	1.03	0.91	1.20
201074_at	SMARCC1	0.78	0.48	0.76	0.88	1.04

Chromatin modification

231297_at	DOT1L	1.27	0.84	1.09	0.86	0.47
212375_at	EP400	1.04	0.48	0.80	1.03	0.85
203845_at	PCAF	1.01	4.21	2.60	1.43	1.89
239585_at	PCAF	1.23	2.30	1.25	0.73	1.14

224928_at	SETD7	0.76	0.52	0.64	0.69	0.32
<i>Chromosome organization and biogenesis</i>						
212569_at	SMCHD1	1.33	4.27	3.85	3.49	3.51
212577_at	SMCHD1	0.98	3.43	4.81	2.99	3.41
212579_at	SMCHD1	1.86	2.97	3.41	2.55	4.59
241620_at	SMCHD1	1.39	2.90	2.22	1.93	1.03
<i>Cilium biogenesis</i>						
203660_s_at	PCNT	0.74	0.39	0.40	0.71	0.87
<i>Cytokine production</i>						
203980_at	FABP4	4.88	1.20	0.03	0.04	0.03
220066_at	NOD2	1.22	1.73	2.33	2.20	1.36
206278_at	PTAFR	0.34	0.93	1.16	1.19	1.44
204787_at	VSIG4	1.13	0.46	0.09	0.12	0.17
<i>Cytokinesis</i>						
201022_s_at	DSTN	0.91	0.48	0.49	0.42	0.56
211926_s_at	MYH9	1.07	0.64	0.51	0.72	0.44
225620_at	RAB35	1.20	2.29	1.26	1.69	1.11
202677_at	RASA1	1.09	0.65	0.36	0.55	0.65
210621_s_at	RASA1	0.86	0.76	0.43	0.47	0.53
212415_at	SEPT6	0.89	2.54	0.92	1.04	0.99
212414_s_at	SEPT6	1.12	2.40	0.81	0.90	1.42
<i>Cytolysis</i>						
203414_at	MMD	0.81	0.53	0.35	0.38	0.38
<i>Cytoskeleton</i>						
217892_s_at	LIMA1	1.32	0.47	0.74	0.44	0.48
222457_s_at	LIMA1	0.80	0.94	0.20	0.75	0.53
212567_s_at	MAP4	0.89	0.76	0.45	0.70	1.09
233333_x_at	AVIL	1.16	2.26	1.03	0.87	1.06
218950_at	CENTD3	0.86	0.43	0.41	0.33	0.88
223513_at	CENPJ	1.54	3.91	1.07	1.18	1.43
241830_at	C20orf112	2.75	1.12	0.35	0.73	2.13
201719_s_at	EPB41L2	1.26	1.27	1.21	0.62	0.35
208622_s_at	EZR	1.02	2.07	2.23	0.58	1.98
208614_s_at	FLNB	0.85	0.36	0.53	0.23	0.23
218530_at	FHOD1	0.86	0.50	0.98	0.83	0.77
215602_at	FGD2	4.33	6.24	2.02	1.75	1.87
242445_at	FGD4	0.45	2.86	2.39	0.68	0.48
200696_s_at	GSN	1.06	1.05	0.51	0.36	0.35
230701_x_at	KIF9	1.30	0.89	0.82	0.46	0.50
231319_x_at	KIF9	0.76	0.07	0.15	0.61	0.45
208885_at	LCP1	1.10	0.81	0.75	0.48	0.50
200897_s_at	PALLD	1.39	0.48	0.52	0.40	0.31
200906_s_at	PALLD	0.94	0.35	0.43	0.52	0.28
200907_s_at	PALLD	1.17	0.56	0.48	0.39	0.26
201373_at	PLEC1	0.66	0.37	0.85	1.46	0.50
223085_at	RNF19A	0.93	2.31	1.90	1.46	1.35

200783_s_at	STMN1	1.11	0.84	0.29	0.58	0.59
209118_s_at	TUBA1A	1.64	2.57	1.02	1.19	0.60
204141_at	TUBB2A	0.79	2.76	1.62	0.40	0.39
210389_x_at	TUBD1	1.28	0.91	1.16	2.17	1.74
203690_at	TUBGCP3	1.30	0.47	0.77	1.11	1.15

Dephosphorylation

204720_s_at	DNAJC6	4.91	2.26	0.76	0.12	0.07
213511_s_at	MTMR1	1.14	2.20	1.29	1.11	1.34
216095_x_at	MTMR1	1.21	2.10	1.42	1.09	1.32

Development

229173_at	---	1.09	0.40	0.67	0.76	0.66
211986_at	AHNAK	0.73	0.91	0.22	0.16	0.20
219358_s_at	CENTA2	0.88	1.48	1.73	1.84	2.32
206707_x_at	C6orf32	1.30	3.63	2.99	1.14	1.28
207030_s_at	CSRP2	20.06	7.69	2.21	0.94	6.34
229813_x_at	DAZAP1	0.77	0.44	0.86	0.94	1.22
200606_at	DSP	3.13	10.27	2.63	1.78	1.55
215529_x_at	DIP2A	1.55	0.55	0.45	0.61	0.63
201324_at	EMP1	3.26	3.13	1.12	0.41	0.69
201325_s_at	EMP1	4.49	3.68	1.10	0.42	0.62
213895_at	EMP1	2.85	2.45	0.76	0.09	0.77
201540_at	FHL1	1.01	1.82	0.34	0.28	0.07
218603_at	HECA	0.69	1.06	1.14	1.55	2.04
230529_at	HECA	1.25	1.07	0.95	0.88	2.21
207023_x_at	KRT10	1.02	0.61	0.37	0.30	0.27
210633_x_at	KRT10	1.06	0.68	0.28	0.37	0.27
213287_s_at	KRT10	0.88	0.52	0.41	0.54	0.43
226087_at	LZIC	0.61	0.69	0.69	0.65	0.49
204249_s_at	LMO2	1.15	2.97	1.40	2.30	2.93
204153_s_at	MFNG	0.81	0.40	0.80	0.89	0.85
224722_at	MIB1	2.78	0.94	1.03	1.91	0.40
224726_at	MIB1	0.72	1.41	0.58	0.67	0.45
223849_s_at	MOV10	2.46	15.92	5.51	4.48	8.89
227327_at	MEGF8	0.36	0.63	0.78	0.77	0.41
209200_at	MEF2C	0.68	0.63	0.36	0.68	1.03
230462_at	NUMB	0.40	0.65	0.48	1.01	1.11
212230_at	PPAP2B	0.39	0.44	0.30	0.57	0.49
230480_at	PIWIL4	0.46	2.08	6.21	3.22	3.65
215281_x_at	POGZ	3.85	0.98	0.62	0.58	0.38
200919_at	PHC2	0.82	0.50	0.73	1.14	0.93
238693_at	PHC3	0.93	1.40	0.69	1.53	2.08
237180_at	PSME4	0.86	1.00	1.64	0.89	2.02
226310_at	RICTOR	3.15	5.24	7.89	2.21	2.31
226312_at	RICTOR	1.17	2.55	2.19	2.80	3.08
228248_at	RICTOR	1.41	3.36	3.29	2.94	2.63
209565_at	RNF113A	0.45	0.96	1.18	0.93	1.03
46665_at	SEMA4C	0.34	0.65	0.17	0.43	0.44
233252_s_at	STRBP	3.84	0.14	4.53	3.46	0.45
229331_at	SPATA18	0.49	0.34	5.53	3.33	3.16
218164_at	SPATA20	0.95	0.75	0.69	0.63	0.49

203887_s_at	THBD	0.61	0.22	0.14	0.16	0.27
201666_at	TIMP1	1.04	0.34	0.60	0.65	0.63
207499_x_at	UNC45A	1.64	2.79	0.31	2.60	2.11
204929_s_at	VAMP5	1.48	4.88	2.08	1.61	2.22
200867_at	ZNF313	0.86	1.78	2.20	3.49	3.00
200868_s_at	ZNF313	1.14	2.40	2.56	1.79	1.73
211678_s_at	ZNF313	1.04	1.89	2.32	1.87	2.77
227595_at	ZMYM6	0.61	0.39	0.60	0.45	0.85

DNA integration

219467_at	GIN1	0.48	0.96	1.19	1.36	1.88
222139_at	KIAA1466	4.61	4.44	2.57	3.48	7.51
203138_at	HAT1	0.91	0.45	0.66	0.73	0.80

DNA recombination

202055_at	KPNA1	0.77	1.05	1.62	2.49	2.61
202056_at	KPNA1	1.24	0.88	1.69	1.39	2.49
202059_s_at	KPNA1	0.95	1.13	1.70	2.09	1.75
213741_s_at	KPNA1	0.99	1.37	2.08	1.43	1.59

DNA repair

222104_x_at	---	0.68	1.50	0.68	0.61	2.22
X00351_5_at	ACTB	0.98	0.87	0.85	0.67	0.48
X00351_M_at	ACTB	0.91	0.86	0.72	0.61	0.44
210027_s_at	APEX1	1.03	0.62	0.66	0.45	0.63
225756_at	CSNK1E	2.39	0.63	0.44	1.00	0.76
242847_at	C11orf30	2.77	0.56	0.69	1.04	3.77
203719_at	ERCC1	0.68	0.49	0.55	0.81	0.86
202414_at	ERCC5	0.85	0.45	0.69	0.77	1.75
218397_at	FANCL	0.81	1.84	1.57	2.68	2.41
213344_s_at	H2AFX	2.12	1.42	0.70	1.20	0.84
213261_at	LBA1	1.53	3.35	1.93	1.36	1.37
209580_s_at	MBD4	0.45	0.95	1.26	0.99	1.10
214047_s_at	MBD4	0.49	0.82	0.92	1.01	1.24
217216_x_at	MLH3	0.50	0.92	3.41	0.52	1.18
202905_x_at	NBN	1.95	2.85	1.67	1.33	1.05
202906_s_at	NBN	2.96	3.74	1.42	0.85	1.40
202907_s_at	NBN	1.54	3.18	1.82	1.14	1.08
217299_s_at	NBN	2.35	1.91	3.56	1.61	1.38
203686_at	MPG	1.03	0.50	0.74	0.82	1.51
202239_at	PARP4	1.37	2.48	0.88	1.12	1.09
206503_x_at	PML	22.41	37.87	5.93	3.60	7.73
209640_at	PML	2.65	5.07	1.91	3.51	6.06
211013_x_at	PML	3.67	20.72	6.71	8.69	11.70
235508_at	PML	9.20	8.70	5.07	4.65	3.65
239582_at	PML	2.35	3.25	2.12	1.41	1.43
211012_s_at	PML	8.84	95.94	10.97	32.49	10.99
211014_s_at	PML	1.32	2.11	2.58	0.85	0.94
204146_at	RAD51AP1	0.80	1.96	3.06	1.45	2.56
209257_s_at	SMC3	1.00	0.72	0.72	2.02	1.27
205875_s_at	TREX1	2.64	3.37	3.03	3.13	3.36
34689_at	TREX1	3.15	4.07	2.57	2.91	2.82

205071_x_at	XRCC4	1.98	0.44	1.56	2.47	5.13
229119_s_at	ZSWIM7	0.86	0.81	0.45	0.75	0.89

DNA replication

221078_s_at	CCDC88A	1.80	0.67	0.81	0.33	0.54
225045_at	CCDC88A	0.46	1.01	1.09	0.61	0.63
205664_at	KIN	0.71	0.96	1.20	1.09	2.36
201969_at	NASP	2.13	0.57	0.95	0.98	1.26
201970_s_at	NASP	2.54	1.34	1.45	1.07	1.49
204528_s_at	NAP1L1	0.68	1.33	0.85	0.35	0.54
208752_x_at	NAP1L1	1.02	1.10	0.61	0.40	0.39
208753_s_at	NAP1L1	0.98	0.90	0.57	0.39	0.45
208754_s_at	NAP1L1	0.92	0.53	0.38	0.25	0.52
212967_x_at	NAP1L1	0.98	0.90	0.83	0.52	0.41
213864_s_at	NAP1L1	1.20	0.94	0.80	0.39	0.46
202466_at	POLS	1.62	2.40	2.34	2.22	2.91
200658_s_at	PHB	1.02	0.41	0.84	0.76	0.96
201202_at	PCNA	1.19	1.51	2.83	3.55	5.00
204023_at	RFC4	0.90	0.80	1.02	2.14	1.34
201528_at	RPA1	1.33	0.27	0.76	0.83	0.76
201529_s_at	RPA1	1.07	0.35	0.63	0.66	1.07
223342_at	RRM2B	0.56	0.97	2.00	1.90	2.34
225265_at	RBMS1	1.01	2.97	1.90	0.89	0.80
200631_s_at	SET	0.84	0.46	0.63	0.60	0.59
213047_x_at	SET	0.95	0.47	0.71	0.53	0.68
40189_at	SET	0.99	0.43	0.68	0.60	0.57
206272_at	SPHAR	0.81	0.55	0.56	0.45	0.54
225802_at	TOP1MT	0.86	3.13	0.33	0.74	0.43
200964_at	UBA1	0.48	1.32	0.86	0.76	0.79

Endocytosis

223454_at	CXCL16	0.86	1.13	1.08	0.54	0.44
208112_x_at	EHD1	0.49	0.34	0.31	0.62	0.19
209039_x_at	EHD1	0.54	0.50	0.48	0.30	0.72
230389_at	FNBP1	0.70	1.55	1.55	1.02	2.19
226364_at	HIP1	1.05	0.50	0.42	0.42	0.38
35776_at	ITSN1	0.94	3.44	2.01	0.96	1.35
211887_x_at	MSR1	7.99	16.31	3.64	2.22	1.01
214770_at	MSR1	0.74	5.03	3.72	1.48	0.64
204438_at	MRC1	0.67	0.35	0.32	0.30	0.65
202679_at	NPC1	2.46	1.18	1.08	0.69	0.70
205211_s_at	RIN1	0.95	0.79	2.08	1.39	1.51
209684_at	RIN2	5.37	7.71	2.35	1.78	2.69
233811_at	RIN2	6.04	5.45	2.50	1.87	4.78
220439_at	RIN3	0.74	0.63	0.56	0.23	0.68
225618_at	ARHGAP27	2.04	1.04	1.93	2.57	2.42
204150_at	STAB1	1.39	0.33	0.49	0.55	0.70
38487_at	STAB1	1.03	0.35	0.49	0.60	0.70

Exocytosis

240363_at	ANK1	1.41	0.50	0.80	0.95	0.75
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Glycolysis

205936_s_at	HK3	1.11	0.97	0.76	0.57	0.39
201037_at	PFKP	1.26	1.93	2.29	1.62	1.30
210050_at	TPI1	4.76	1.47	0.29	1.44	1.01
204192_at	CD37	0.35	1.52	1.28	1.03	0.21
205505_at	GCNT1	0.53	3.04	1.10	2.65	3.12
239761_at	GCNT1	0.93	2.60	1.37	2.15	2.77
221553_at	LOC728866	1.10	2.50	0.62	0.39	0.23
224899_s_at	LOC728866	1.03	1.67	0.65	0.39	0.31
236156_at	LIPA	29.36	52.26	11.86	29.50	24.13
221760_at	MAN1A1	1.50	1.74	0.43	0.52	0.33
235334_at	ST6GALNAC3	1.32	0.29	0.91	0.59	1.55
222569_at	UGCGL1	0.97	0.74	0.71	0.71	0.43
201722_s_at	GALNT1	0.74	0.45	0.70	0.53	0.53
201723_s_at	GALNT1	1.03	0.49	0.45	0.47	0.92
201724_s_at	GALNT1	1.00	0.40	0.65	0.63	0.52
223991_s_at	GALNT2	1.03	2.09	1.27	0.86	1.00
239930_at	GALNT2	1.17	0.68	0.55	0.37	0.69

GTPase activity

203020_at	RABGAP1L	1.92	4.36	4.05	4.59	4.60
213982_s_at	RABGAP1L	1.47	46.23	6.00	9.08	8.11
215342_s_at	RABGAP1L	1.12	2.84	3.22	3.53	3.87
213530_at	RAB3GAP1	0.88	1.51	2.12	2.07	1.79
203386_at	TBC1D4	0.94	0.31	0.47	1.28	1.23
212956_at	TBC1D9	1.05	0.37	0.56	0.69	1.01
238164_at	USP6NL	0.98	2.04	1.91	0.65	0.74

Homeostasis

200654_at	P4HB	0.79	0.48	0.57	0.33	0.30
200656_s_at	P4HB	1.02	0.49	0.76	0.28	0.49
205345_at	BARD1	5.46	2.35	1.39	2.22	2.12
229691_at	---	1.52	5.97	10.35	3.30	2.13
212185_x_at	MT2A	1.62	6.10	2.92	4.32	3.24

Immune response/Defense response

242907_at	---	1.77	7.96	2.73	2.66	4.32
205660_at	OASL	7.26	14.69	12.60	17.88	20.92
210797_s_at	OASL	5.29	9.16	9.32	11.54	8.96
206513_at	AIM2	3.32	6.17	4.19	7.73	6.45
205013_s_at	ADORA2A	0.45	0.73	0.47	1.31	1.61
204639_at	ADA	0.60	0.94	1.89	2.87	3.70
216705_s_at	ADA	0.53	0.97	1.64	2.56	4.02
207655_s_at	BLNK	0.86	19.52	2.22	2.31	2.00
232311_at	B2M	1.58	2.11	2.61	2.23	2.93
201641_at	BST2	1.42	9.68	4.45	3.26	4.05
208653_s_at	CD164	1.47	3.07	4.91	1.11	1.34
223834_at	CD274	4.07	3.10	2.58	2.45	1.44
224859_at	CD276	0.95	1.27	0.42	0.61	0.59
215346_at	CD40	1.63	2.36	2.16	1.65	0.89
201926_s_at	CD55	0.94	0.79	1.11	1.07	0.49
200985_s_at	CD59	1.74	1.45	0.80	0.72	0.32

212463_at	CD59	2.61	1.01	0.31	0.10	0.08
209795_at	CD69	44.49	21.25	64.66	27.35	8.91
204440_at	CD83	0.69	1.84	0.36	0.48	0.47
205988_at	CD84	1.00	0.83	0.72	0.59	0.45
205685_at	CD86	1.17	1.64	1.53	2.99	1.91
205686_s_at	CD86	1.33	2.28	1.43	1.69	1.58
210895_s_at	CD86	1.25	2.12	1.35	1.03	1.74
203591_s_at	CSF3R	0.91	1.18	0.78	0.40	0.53
244313_at	CR1	0.90	1.00	0.36	0.20	0.13
208910_s_at	C1QBP	1.03	0.49	0.54	0.69	0.76
214214_s_at	C1QBP	0.88	0.32	0.71	0.81	0.85
218232_at	C1QA	3.46	0.68	6.10	0.22	0.35
202953_at	C1QB	0.62	2.43	1.53	0.28	0.48
209666_s_at	CHUK	0.80	1.05	2.19	1.35	1.54
201653_at	CNIH	0.71	0.78	0.90	0.50	0.62
222934_s_at	CLEC4E	1.18	2.88	1.96	1.51	1.27
219890_at	CLEC5A	0.37	0.16	0.09	0.11	0.05
206914_at	CRTAM	0.46	0.91	1.23	1.20	0.81
218943_s_at	DDX58	34.59	46.91	38.95	11.62	14.09
222793_at	DDX58	3.55	17.65	10.50	10.71	13.23
242961_x_at	DDX58	5.11	12.25	6.88	7.77	7.70
219364_at	DHX58	15.89	126.8	10.73	25.64	10.03
211734_s_at	FCER1A	0.92	0.52	0.63	0.85	2.07
214511_x_at	FCGR1B	2.82	3.05	0.28	0.29	0.87
218831_s_at	FCGRT	0.81	1.12	0.45	0.68	0.63
219357_at	GTPBP1	1.51	2.50	2.24	2.55	1.94
204472_at	GEM	2.19	0.99	0.52	0.04	0.17
202269_x_at	GBP1	8.83	22.15	12.53	12.49	13.34
202270_at	GBP1	11.09	21.67	14.02	9.82	7.94
231577_s_at	GBP1	9.00	35.67	18.31	11.30	14.82
231578_at	GBP1	15.37	12.49	1.89	12.96	2.18
202748_at	GBP2	1.89	4.10	2.03	1.56	2.07
223434_at	GBP3	2.81	19.69	13.66	3.91	4.20
235175_at	GBP4	4.44	12.90	10.79	3.97	6.71
235574_at	GBP4	1.98	8.48	6.35	3.34	2.38
229625_at	GBP5	14.95	24.14	30.45	10.82	4.87
238581_at	GBP5	11.07	76.55	22.17	54.85	29.10
217436_x_at	LOC730399	0.91	1.71	2.25	1.45	1.48
206420_at	IGSF6	1.38	2.98	1.22	1.32	0.82
201598_s_at	INPPL1	1.11	0.74	0.71	0.49	0.56
201315_x_at	IFITM2	1.11	7.08	6.00	9.80	16.13
212203_x_at	IFITM3	1.33	14.62	6.22	12.74	20.11
219209_at	IFIH1	10.87	12.10	6.09	7.02	11.29
204415_at	IFI6	2.69	9.07	5.30	15.78	14.23
209417_s_at	IFI35	2.05	26.59	7.56	8.92	8.87
214059_at	IFI44	122.8	28.46	21.15	17.14	37.34
214453_s_at	IFI44	3.92	17.66	11.35	16.87	19.04
212657_s_at	IL1RN	4.06	5.48	1.78	1.71	0.73
212659_s_at	IL1RN	6.51	5.99	1.51	1.75	0.78
216243_s_at	IL1RN	7.64	5.62	2.21	1.74	0.85
202948_at	IL1R1	0.49	0.65	0.30	0.45	0.52
205403_at	IL1R2	0.66	4.72	1.70	9.92	31.32

211372_s_at	IL1R2	0.53	5.07	1.49	5.80	28.65
205992_s_at	IL15	1.12	11.55	5.99	3.14	3.00
217371_s_at	IL15	1.47	2.93	3.45	1.94	1.73
221658_s_at	IL21R	1.69	0.41	1.94	2.92	7.30
222062_at	IL27RA	0.87	0.63	0.67	0.43	0.35
243541_at	IL31RA	2.05	1.33	0.59	1.82	0.62
212196_at	IL6ST	2.54	1.22	1.14	0.93	1.35
226218_at	IL7R	1.49	3.25	2.90	2.51	1.64
208426_x_at	KIR2DL4	1.02	1.90	2.85	1.87	1.19
211245_x_at	KIR2DL4	1.01	1.56	2.39	1.42	1.13
200923_at	LGALS3BP	0.97	2.63	7.59	13.72	16.25
229937_x_at	LILRB1	1.30	2.49	2.62	1.87	2.11
207697_x_at	LILRB2	1.10	1.46	2.04	1.72	1.36
210146_x_at	LILRB2	1.12	1.41	2.28	1.37	1.21
210152_at	LILRB4	0.84	2.28	3.57	2.02	1.58
211581_x_at	LST1	1.09	0.87	0.54	0.50	0.40
211582_x_at	LST1	0.87	0.90	0.49	0.66	0.54
214181_x_at	LST1	1.04	0.91	0.48	0.79	0.72
202145_at	LY6E	1.32	16.79	15.72	18.02	16.96
205269_at	LCP2	1.79	2.91	3.15	2.37	4.01
205270_s_at	LCP2	1.82	2.29	2.40	3.01	2.98
244251_at	LCP2	1.24	1.56	1.43	1.80	2.79
244556_at	LCP2	2.00	4.23	1.62	1.06	1.17
211799_x_at	HLA-C	1.05	1.65	2.31	1.69	1.80
200904_at	HLA-E	1.38	1.35	2.67	2.19	2.06
221978_at	HLA-F	1.84	1.85	2.16	1.87	1.50
226878_at	HLA-DOA	1.14	1.02	0.79	0.38	0.41
205671_s_at	HLA-DOB	2.02	2.23	7.13	4.53	5.78
213537_at	HLA-DPA1	1.19	2.28	1.27	0.76	1.07
209823_x_at	HLA-DQB1	1.09	0.88	0.85	0.38	0.49
207565_s_at	MR1	0.90	2.22	1.58	1.19	1.06
210223_s_at	MR1	1.40	2.46	1.98	1.55	1.01
205905_s_at	MICA	1.66	1.52	0.98	2.23	0.86
206247_at	MICB	1.54	5.03	3.19	1.31	1.83
202086_at	MX1	8.21	24.52	13.35	23.81	53.68
204994_at	MX2	4.24	15.57	8.25	12.41	12.93
220944_at	PGLYRP4	0.51	0.80	1.65	1.17	0.33
204897_at	PTGER4	0.36	1.13	0.44	0.53	0.82
213797_at	RSAD2	105.5	446.7	45.18	51.52	680.86
242625_at	RSAD2	70.33	99.17	29.33	67.33	251.61
213716_s_at	SECTM1	1.66	4.36	2.57	2.25	1.38
203789_s_at	SEMA3C	0.73	0.36	0.21	0.30	0.21
200986_at	SERPING1	2.77	11.96	6.45	11.78	17.89
217767_at	LOC653879	0.60	0.75	0.25	0.38	0.73
207777_s_at	SP140	1.55	10.24	7.17	4.43	18.80
216920_s_at	TARP	2.70	0.72	0.34	0.62	2.82
210176_at	TLR1	1.76	1.19	1.68	1.52	2.14
206271_at	TLR3	0.69	7.04	4.80	6.30	16.80
210166_at	TLR5	0.86	0.77	0.50	0.75	1.04
220146_at	TLR7	1.85	4.36	1.99	2.75	3.33
222952_s_at	TLR7	0.58	0.93	1.89	2.26	3.29
219725_at	TREM2	0.93	0.22	0.21	0.42	0.64

223501_at	TNFSF13B	1.60	8.13	3.64	4.09	3.67
223502_s_at	TNFSF13B	1.69	10.93	4.97	3.80	4.36
207907_at	TNFSF14	0.20	0.43	0.85	0.34	0.37
241819_at	TNFSF8	0.40	0.32	0.35	1.43	1.12

Inflammatory response

204174_at	ALOX5AP	0.87	0.45	0.50	0.31	0.47
211852_s_at	ATRNL	1.30	0.41	0.23	0.49	0.10
228176_at	EDG3	0.54	0.29	0.45	0.18	0.13
225102_at	MGLL	0.82	1.82	1.00	0.54	0.45
209785_s_at	PLA2G4C	0.61	1.42	3.91	2.26	3.85
202917_s_at	S100A8	1.13	1.03	1.11	0.88	0.40
203535_at	S100A9	1.08	0.97	0.90	0.61	0.34
219519_s_at	SIGLEC1	6.17	107.0	10.07	18.73	93.89
44673_at	SIGLEC1	1.83	16.21	7.46	14.68	17.54
206025_s_at	TNFAIP6	2.13	2.98	10.29	5.09	16.49
206026_s_at	TNFAIP6	2.21	2.52	6.28	2.57	3.52
204140_at	TPST1	0.74	0.19	0.24	0.34	0.06

Locomotory behavior

201201_at	CSTB	0.89	0.99	0.99	0.51	0.43
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Membrane fusion

242780_at	VAPA	0.32	0.75	0.85	0.99	1.28
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Metabolic process

212321_at	---	1.18	0.47	0.66	0.79	1.13
219723_x_at	AGPAT3	0.77	2.56	1.72	2.10	2.05
223182_s_at	AGPAT3	0.91	2.02	1.18	1.35	0.94
225440_at	AGPAT3	1.01	2.53	2.19	1.69	1.82
228667_at	AGPAT4	0.96	1.59	1.54	0.54	0.44
219664_s_at	DECR2	0.90	0.95	0.44	1.03	1.07
202869_at	OAS1	9.49	27.32	14.01	19.68	30.77
205552_s_at	OAS1	2.76	23.97	10.18	15.94	12.41
204972_at	OAS2	2.75	17.22	15.22	13.78	26.65
206553_at	OAS2	2.95	16.76	10.25	11.90	26.56
228607_at	OAS2	4.29	8.49	3.63	4.96	3.82
218400_at	OAS3	2.61	19.99	9.63	22.61	14.90
232666_at	OAS3	4.21	10.96	4.63	9.29	3.56
203058_s_at	PAPSS2	1.41	0.32	0.37	0.57	0.48
203060_s_at	PAPSS2	1.36	0.42	0.34	0.46	0.55
209459_s_at	ABAT	1.06	0.48	0.48	0.37	0.61
209460_at	ABAT	0.87	0.21	0.45	0.48	0.67
243100_at	NT5C1B	0.81	1.00	3.40	0.66	1.40
209155_s_at	NT5C2	1.20	2.37	1.95	1.52	1.62
223298_s_at	NT5C3	4.84	28.40	10.09	10.28	14.96
226733_at	PFKFB2	0.76	0.63	0.26	0.42	0.66
202464_s_at	PFKFB3	1.34	1.68	2.17	0.81	1.05
209608_s_at	ACAT2	0.76	1.47	0.73	0.78	0.47
202003_s_at	ACAA2	0.81	0.72	0.62	0.44	0.38
201963_at	ACSL1	1.29	2.00	2.22	1.04	0.85
207275_s_at	ACSL1	1.53	2.15	1.91	0.92	0.71

222592_s_at	ACSL5	0.64	1.06	2.59	0.95	0.93
221641_s_at	ACOT9	1.57	2.98	2.75	1.80	2.77
203219_s_at	APRT	0.92	0.67	0.49	0.78	0.63
213892_s_at	APRT	0.80	0.62	0.50	0.75	0.46
239711_at	ADAL	1.34	0.49	0.21	0.64	0.93
207992_s_at	AMPD3	0.80	0.69	1.11	0.41	0.54
205996_s_at	AK2	1.01	0.59	0.95	0.20	0.84
225342_at	AK3L1	1.16	1.49	0.96	0.66	0.19
223781_x_at	ADH4	0.88	0.64	1.92	0.78	2.08
207016_s_at	ALDH1A2	0.34	1.02	0.17	0.11	0.23
201425_at	ALDH2	0.87	1.60	0.57	0.46	0.55
201612_at	ALDH9A1	0.94	0.44	0.97	0.70	0.79
202139_at	AKR7A2	1.04	0.59	0.66	0.46	0.60
214259_s_at	AKR7A2	0.88	0.81	0.44	0.55	0.56
203566_s_at	AGL	0.60	0.60	0.48	0.41	0.82
209546_s_at	APOL1	2.67	21.88	9.47	3.94	5.86
225847_at	AADACL1	1.25	0.68	0.92	0.50	0.30
227100_at	B3GALT1	1.01	0.88	0.38	0.83	0.84
209770_at	BTN3A1	0.90	2.43	1.64	2.16	2.72
226372_at	CHST11	1.09	0.72	0.71	0.49	0.38
218927_s_at	CHST12	1.57	3.37	1.83	3.47	3.92
222786_at	CHST12	1.01	2.03	1.32	2.06	2.57
209301_at	CA2	0.67	3.02	0.69	0.58	0.60
231270_at	CA13	2.79	1.16	0.23	0.81	0.96
209213_at	CBR1	3.08	5.89	3.92	2.83	2.35
209616_s_at	CES1	1.03	1.62	3.68	4.21	1.50
203634_s_at	CPT1A	0.57	2.67	1.00	0.61	0.89
210688_s_at	CPT1A	0.74	1.19	0.78	0.86	0.44
218592_s_at	CECR5	0.93	0.48	0.80	0.79	0.71
218250_s_at	CNOT7	0.88	0.44	0.83	1.18	1.07
225053_at	CNOT7	0.80	0.49	0.79	1.42	1.13
242197_x_at	CD36	0.10	0.87	0.49	1.19	1.27
218421_at	CERK	0.95	0.45	0.69	0.68	0.52
219340_s_at	CLN8	0.51	0.68	0.79	0.36	0.56
219341_at	CLN8	0.44	0.79	0.43	0.31	0.44
223912_s_at	CLN8	0.86	1.04	2.91	0.74	0.90
209395_at	CHI3L1	1.22	1.04	0.09	0.01	0.03
209396_s_at	CHI3L1	2.85	0.62	0.17	0.02	0.03
204193_at	CHKB	1.01	1.41	0.78	0.45	0.72
210069_at	CHKB	1.05	1.67	1.62	2.12	2.31
220252_x_at	CXorf21	2.69	1.65	1.33	1.98	1.89
205583_s_at	CXorf45	0.67	0.48	0.74	0.79	1.42
242136_x_at	MGC70870	0.31	1.56	1.08	1.29	0.89
202613_at	CTPS	0.79	0.34	0.70	1.01	1.28
207431_s_at	DEGS1	0.81	0.77	0.69	0.44	0.48
225503_at	DHRX	1.13	2.86	3.46	1.74	1.70
203302_at	DCK	0.99	2.46	1.44	1.32	1.47
209932_s_at	DUT	1.04	0.98	0.47	0.67	0.62
226064_s_at	DGAT2	0.65	0.49	2.72	0.39	1.47
224872_at	DIP2B	0.99	3.61	2.59	2.16	2.01
219373_at	DPM3	1.11	0.68	0.49	0.61	0.70
216212_s_at	DKC1	0.75	0.26	0.59	1.56	1.62

204142_at	ENOSF1	0.66	0.27	0.37	0.56	0.99
204143_s_at	ENOSF1	0.62	0.18	0.34	0.46	0.52
223087_at	ECHDC1	0.94	0.39	0.66	0.89	0.72
223386_at	FAM118B	2.07	0.72	0.88	0.94	1.03
229850_at	FVT1	0.96	0.72	0.50	0.71	0.45
209696_at	FBP1	0.89	0.49	0.25	0.19	0.11
209892_at	FUT4	1.65	2.02	3.19	3.19	2.64
209893_s_at	FUT4	0.78	2.36	1.88	1.98	2.15
211794_at	FYB	1.19	2.26	2.23	1.24	1.62
234974_at	GALM	1.97	3.70	1.68	1.24	1.13
235256_s_at	GALM	1.53	19.79	2.41	1.18	1.07
203560_at	GGH	1.12	0.24	1.24	0.94	0.67
208284_x_at	GGT1	1.37	0.42	0.70	0.79	1.19
214106_s_at	GMDS	3.38	2.11	1.19	0.76	2.06
203282_at	GBE1	1.30	0.56	0.62	0.28	0.37
208308_s_at	GPI	0.95	0.57	0.49	0.45	0.40
202275_at	G6PD	0.74	0.79	0.74	0.52	0.42
236077_at	GANC	0.81	1.39	1.13	0.89	0.38
238446_at	SMA4	2.57	1.41	1.67	0.77	1.57
202922_at	GCLC	0.53	1.47	0.77	0.43	0.62
202923_s_at	GCLC	0.33	1.62	0.41	0.36	0.52
200708_at	GOT2	1.10	0.33	0.44	0.64	0.86
203159_at	GLS	1.87	0.68	0.63	0.53	0.34
221510_s_at	GLS	2.38	1.57	2.34	1.09	0.67
201348_at	GPX3	0.71	0.42	0.20	0.15	0.25
214091_s_at	GPX3	1.31	0.87	0.19	0.37	0.20
204418_x_at	GSTM2	0.87	0.70	1.42	1.16	0.37
213453_x_at	GAPDH	1.12	0.66	0.68	0.62	0.49
217398_x_at	GAPDH	1.00	0.68	0.58	0.66	0.50
M33197_M_at	GAPDH	0.98	0.67	0.71	0.59	0.46
207387_s_at	GK	2.18	0.86	4.53	2.02	1.75
214681_at	GK	2.74	0.89	1.10	1.78	1.24
217167_x_at	GK	3.21	0.86	1.08	1.26	0.39
231683_at	GLYAT	1.43	3.05	4.02	0.44	1.02
228376_at	GGTA1	0.97	0.97	0.29	0.18	0.11
212737_at	GM2A	1.04	1.18	0.71	0.44	0.37
215891_s_at	GM2A	10.12	5.09	0.42	0.34	0.33
235678_at	GM2A	1.03	1.15	0.68	0.45	0.35
33646_g_at	GM2A	0.72	2.44	0.54	0.73	0.38
35820_at	GM2A	0.86	1.10	0.71	0.42	0.34
204187_at	GMPR	1.30	21.58	13.14	13.29	21.75
218017_s_at	HGSNAT	1.01	0.74	0.92	0.49	0.99
219403_s_at	HPSE	1.29	3.99	4.19	5.36	3.54
222881_at	HPSE	1.14	1.67	1.71	3.48	2.07
202934_at	HK2	0.75	2.18	2.72	2.37	1.27
208631_s_at	HADHA	0.97	1.08	0.48	0.50	0.36
228713_s_at	HSD17B14	0.48	0.85	1.16	0.77	1.11
201413_at	HSD17B4	0.98	0.48	0.42	0.44	0.53
212221_x_at	IDS	0.95	0.41	0.64	0.48	0.57
201626_at	INSIG1	0.87	0.58	0.97	0.87	0.27
201627_s_at	INSIG1	0.62	0.51	0.59	0.84	0.50
213792_s_at	INSR	0.99	0.44	0.54	0.57	1.03

209185_s_at	IRS2	0.95	0.60	0.55	0.40	0.77
242001_at	IDH1	0.60	0.79	2.24	1.66	1.42
210046_s_at	IDH2	1.10	2.04	1.11	1.61	1.47
202070_s_at	IDH3A	1.03	0.50	0.74	1.05	0.81
227601_at	KIAA1627	0.70	1.07	1.89	3.25	2.29
235552_at	KIAA1627	1.10	1.00	2.25	2.58	1.95
205306_x_at	KMO	1.56	2.54	2.01	1.24	1.31
211138_s_at	KMO	1.67	2.52	2.26	1.24	1.25
203548_s_at	LPL	0.18	1.91	0.11	0.05	0.03
203549_s_at	LPL	0.52	1.96	0.11	0.06	0.04
200785_s_at	LRP1	0.96	0.63	0.70	0.77	0.48
224480_s_at	MAG1	0.52	0.64	0.41	0.46	0.31
227889_at	LPCAT2	0.62	2.02	0.59	0.98	0.89
203041_s_at	LAMP2	0.98	1.59	2.38	1.35	1.60
203042_at	LAMP2	1.10	1.61	2.15	1.68	1.61
220615_s_at	MLSTD1	1.25	4.17	1.42	0.70	1.05
239108_at	MLSTD1	1.12	4.26	0.96	0.68	0.83
204058_at	ME1	1.71	0.41	0.35	0.51	0.29
204059_s_at	ME1	1.22	0.36	0.27	0.24	0.22
218869_at	MLYCD	0.80	0.44	0.77	0.99	0.93
206522_at	MGAM	0.37	0.36	0.04	0.15	1.86
226538_at	MAN2A1	0.78	2.28	1.59	1.15	1.01
235103_at	MAN2A1	0.56	2.84	1.46	1.29	0.89
231283_at	MGAT4A	4.40	2.39	0.87	1.52	2.32
224598_at	MGAT4B	0.69	1.00	0.65	0.55	0.38
202593_s_at	MIR16	0.92	0.15	1.07	0.97	0.31
200898_s_at	MGEA5	1.19	2.29	1.65	1.12	1.82
225520_at	MTHFD1L	1.76	0.30	1.63	2.41	3.60
211364_at	MTAP	1.05	1.10	0.93	0.95	0.45
232194_at	METTL4	4.93	1.16	1.78	0.96	1.09
207761_s_at	METTL7A	0.87	1.13	1.37	1.53	2.48
209703_x_at	METTL7A	1.17	1.00	2.55	0.78	2.23
224918_x_at	MGST1	0.73	0.60	0.51	0.30	0.16
231736_x_at	MGST1	0.74	0.49	0.42	0.30	0.27
239001_at	MGST1	0.37	0.84	0.67	0.64	0.66
218231_at	NAGK	1.12	4.63	1.93	1.53	1.76
240440_at	NPL	0.25	0.93	1.27	0.87	1.68
241923_x_at	NANS	1.64	1.30	0.80	1.07	2.11
217884_at	NAT10	0.85	0.46	1.05	1.07	1.03
223040_at	NAT5	0.78	0.49	0.54	0.70	0.80
208917_x_at	NADK	1.15	5.10	2.02	1.60	1.07
208918_s_at	NADK	1.34	5.42	3.61	2.17	2.16
208919_s_at	NADK	1.40	4.01	2.63	2.44	1.75
213607_x_at	NADK	1.60	3.85	1.86	2.24	1.09
215159_s_at	NADK	1.32	4.92	2.10	0.76	1.01
218840_s_at	NADSYN1	0.93	0.46	0.63	0.85	0.97
201695_s_at	NP	0.66	0.84	0.86	0.62	0.50
202336_s_at	PAM	0.80	3.42	0.99	0.17	0.21
212958_x_at	PAM	1.21	2.54	0.83	0.29	0.34
201050_at	PLD3	0.81	2.18	0.75	0.48	0.46
222687_s_at	PHCA	1.51	0.80	1.14	0.67	0.48
222689_at	PHCA	0.86	0.92	1.18	0.77	0.47

218718_at	PDGFC	1.04	0.27	0.46	0.49	0.51
208113_x_at	PABPC3	1.03	0.71	0.50	0.37	0.42
213264_at	PCBP2	1.10	0.87	0.50	0.30	0.44
229467_at	PCBP2	0.49	1.42	0.55	1.10	0.79
225291_at	PNPT1	6.81	19.27	7.54	6.55	5.95
203860_at	PCCA	1.10	0.70	0.51	0.38	0.55
200866_s_at	PSAP	1.08	0.86	0.83	0.44	0.49
204279_at	PSMB9	1.31	7.02	3.90	3.06	3.08
222582_at	PRKAG2	1.07	2.61	2.02	1.59	1.09
208911_s_at	PDHB	1.14	0.75	0.61	0.63	0.47
211023_at	PDHB	0.67	0.48	0.51	0.96	0.74
226452_at	PDK1	0.44	0.70	0.60	0.52	0.57
206092_x_at	RTEL1	2.87	1.03	1.38	1.55	0.49
217775_s_at	RDH11	1.36	0.49	0.59	0.99	0.76
217776_at	RDH11	0.93	0.38	0.77	0.61	0.72
208070_s_at	REV3L	0.71	0.40	1.09	1.39	2.99
238736_at	REV3L	0.50	0.76	0.76	1.03	1.43
218194_at	REXO2	0.89	0.46	0.71	1.25	0.76
219055_at	SRBD1	0.99	3.92	2.17	1.07	1.00
201826_s_at	SCCPDH	1.04	0.59	0.61	0.52	0.44
200903_s_at	AHCY	0.64	0.75	0.55	0.46	0.62
200848_at	AHCYL1	0.71	0.68	0.66	0.49	0.49
201427_s_at	SEPP1	1.87	4.18	0.29	0.40	0.56
205695_at	SDS	1.56	7.69	2.15	1.91	2.08
214095_at	SHMT2	1.64	0.20	0.62	0.95	0.47
203127_s_at	SPTLC2	1.37	4.22	3.75	7.19	5.60
216202_s_at	SPTLC2	1.78	6.20	6.18	3.95	7.22
225095_at	SPTLC2	1.63	2.44	2.29	1.77	2.46
227037_at	LOC201164	1.45	0.83	0.75	0.91	2.14
202499_s_at	SLC2A3	1.31	0.40	0.72	1.08	0.58
226894_at	SLC35A3	1.03	0.46	0.85	1.45	0.74
212290_at	SLC7A1	1.22	0.49	0.73	0.76	0.53
212295_s_at	SLC7A1	0.80	0.36	0.52	0.51	0.52
213988_s_at	SAT1	3.34	2.89	1.44	1.03	1.70
225272_at	SAT2	1.64	2.31	1.38	1.16	1.02
213624_at	SMPDL3A	0.55	0.49	0.70	1.45	1.25
227038_at	SGMS2	0.56	0.37	0.14	0.37	0.20
219257_s_at	SPHK1	1.48	1.46	2.61	1.92	1.58
209218_at	SQLE	0.33	0.59	0.95	0.73	0.54
203217_s_at	ST3GAL5	1.15	2.89	2.15	1.50	1.45
239755_at	ST3GAL5	1.72	1.95	2.42	1.64	1.53
213355_at	ST3GAL6	0.35	1.05	1.11	1.18	1.20
200832_s_at	SCD	0.95	0.99	0.49	0.35	0.27
222750_s_at	SRD5A3	0.83	0.59	0.37	0.48	0.43
204675_at	SRD5A1	1.11	2.73	2.69	1.55	1.48
210959_s_at	SRD5A1	0.87	3.04	2.24	0.93	1.74
211056_s_at	SRD5A1	0.94	2.63	4.13	1.15	2.63
221561_at	SOAT1	0.87	1.31	2.28	0.89	0.66
233555_s_at	SULF2	1.46	0.84	0.95	1.48	0.36
226850_at	SUMF1	0.97	0.66	0.41	0.32	0.26
202589_at	TYMS	2.07	1.04	8.75	7.29	1.88
240793_at	TTN	1.07	1.87	0.78	0.49	0.93

208699_x_at	TKT	1.02	0.45	0.53	0.65	0.75
221266_s_at	TM7SF4	1.13	1.01	0.47	0.19	0.15
231832_at	GALNT4	1.21	1.11	2.44	1.76	0.68
203234_at	UPP1	1.74	1.29	1.04	0.61	0.43
220528_at	VNN3	2.11	1.16	0.29	1.30	0.36
208626_s_at	VAT1	1.04	0.81	0.87	0.34	0.36
227978_s_at	ZADH2	0.34	1.57	2.28	1.36	1.05
<i>Methylation</i>						
221570_s_at	METTL5	0.77	0.41	0.88	0.79	1.22
<i>Mitochondrial fusion</i>						
207098_s_at	MFN1	1.76	3.10	1.03	1.47	1.56
217043_s_at	MFN1	2.01	2.08	1.28	1.26	1.51
<i>Morphogenesis</i>						
203184_at	FBN2	1.05	0.72	0.35	0.50	0.57
226272_at	---	0.94	1.01	0.66	0.27	0.28
203152_at	MRPL40	1.13	0.85	1.23	2.74	2.66
<i>Muscle contraction</i>						
209135_at	ASPH	0.76	0.69	0.58	0.43	0.32
201798_s_at	FER1L3	1.20	4.09	1.00	0.64	0.57
217518_at	FER1L3	1.44	2.23	1.33	1.09	1.62
231951_at	GNAO1	0.44	1.47	1.44	0.49	0.89
214002_at	MYL6	0.49	0.86	1.13	0.55	0.57
206393_at	TNNI2	0.46	2.74	0.68	0.20	0.20
225093_at	UTRN	0.95	2.21	1.26	1.16	1.33
<i>Myelination</i>						
226169_at	SBF2	1.03	2.24	1.73	1.11	1.66
<i>Nucleosome assembly</i>						
208886_at	H1F0	0.88	1.31	2.13	2.67	4.78
212205_at	H2AFV	1.11	0.28	0.28	0.47	0.60
200853_at	H2AFZ	1.38	0.48	0.71	0.83	1.07
209069_s_at	H3F3B	1.21	1.76	1.72	2.21	1.82
211997_x_at	H3F3B	1.14	1.73	1.53	2.02	1.59
229204_at	HP1BP3	2.05	0.59	1.70	1.09	1.11
209398_at	HIST1H1C	1.29	0.96	0.65	2.54	2.83
215071_s_at	HIST1H2AC	1.25	2.79	3.30	5.85	3.65
209911_x_at	HIST1H2BD	1.20	2.85	2.12	3.40	5.28
214290_s_at	HIST2H2AA3	1.18	3.75	2.44	2.55	3.59
218280_x_at	HIST2H2AA3	1.00	3.26	2.74	3.38	4.57
202708_s_at	HIST2H2BE	1.34	3.74	3.57	5.84	3.63
228063_s_at	NAP1L5	0.45	2.02	1.86	3.36	2.66
<i>Ossification</i>						
208784_s_at	KLHDC3	1.07	0.58	0.49	0.91	0.80
232231_at	RUNX2	0.85	2.45	1.78	1.69	2.01
209875_s_at	SPP1	0.56	1.36	0.92	0.36	0.46
200665_s_at	SPARC	1.93	0.71	0.16	0.12	0.09

212807_s_at	SORT1	1.08	1.94	0.81	0.53	0.39
224818_at	SORT1	0.91	2.91	0.57	0.44	0.30
205807_s_at	TUFT1	1.09	1.37	2.02	1.76	1.73
238846_at	TNFRSF11A	0.35	3.38	0.44	0.51	0.29
<i>Phagocytosis</i>						
202877_s_at	CD93	0.45	0.27	0.22	0.17	0.32
202878_s_at	CD93	0.63	0.26	0.12	0.14	0.19
221019_s_at	COLEC12	1.69	1.32	0.90	0.41	0.41
204513_s_at	ELMO1	1.11	2.12	1.56	2.21	0.95
55692_at	ELMO2	1.19	2.14	1.12	0.89	1.17
216950_s_at	FCGR1A	3.61	3.07	0.53	0.44	0.58
<i>Phospholipid dephosphorylation</i>						
205076_s_at	MTMR11	0.78	2.28	0.69	1.53	0.91
<i>Platelet activation</i>						
202430_s_at	PLSCR1	1.86	6.49	4.54	7.54	9.64
202446_s_at	PLSCR1	1.85	8.04	4.33	5.63	6.21
<i>Protein repair</i>						
219451_at	MSRB2	2.39	0.38	0.57	1.00	1.22
<i>Primary microRNA processing</i>						
91617_at	DGCR8	1.26	0.32	0.97	1.27	0.65
<i>Protein amino acid dephosphorylation</i>						
203367_at	DUSP14	0.84	0.42	0.51	0.26	0.47
227098_at	DUSP18	0.40	0.97	1.37	0.79	0.67
229211_at	DUSP28	0.69	0.46	0.25	0.93	0.68
201537_s_at	DUSP3	0.85	0.90	3.67	3.10	1.72
209457_at	DUSP5	4.54	5.74	12.30	6.69	4.55
240950_s_at	FLJ32658	2.50	1.26	0.68	0.34	0.86
204101_at	MTM1	0.71	1.27	1.38	2.96	0.65
214429_at	MTMR6	0.62	1.70	2.23	1.47	1.34
235061_at	PPM1K	4.72	23.72	5.33	9.34	12.73
244011_at	PPM1K	1.30	17.75	3.55	5.83	3.32
208874_x_at	PPP2R4	1.01	2.10	1.23	1.80	1.54
202429_s_at	PPP3CA	0.74	0.62	0.45	0.63	0.66
208615_s_at	PTP4A2	0.83	0.49	0.70	0.93	0.90
225901_at	PTPMT1	0.92	1.10	0.50	1.03	1.09
213136_at	PTPN2	2.05	1.24	1.06	0.86	0.99
242493_at	PTPRD	2.11	2.93	1.16	0.23	1.12
208121_s_at	PTPRO	2.02	1.64	1.07	0.70	0.68
222591_at	STYXL1	1.15	0.30	0.72	0.70	1.36
228853_at	LOC730432	0.85	2.04	1.50	1.43	0.93
<i>Protein amino acid geranylgeranylation</i>						
235615_at	PGGT1B	0.59	1.41	1.84	2.13	1.41
<i>Protein amino acid phosphorylation</i>						
227438_at	ALPK1	1.37	0.98	2.23	1.26	2.00

205435_s_at	AAK1	0.96	0.77	0.24	1.07	0.97
223460_at	CAMKK1	0.97	0.59	0.38	0.60	0.63
228751_at	CLK4	0.41	1.02	1.36	1.06	0.95
241403_at	CLK4	0.58	2.20	0.77	2.29	1.17
213979_s_at	CTBP1	0.51	1.39	2.25	0.82	0.92
208438_s_at	FGR	0.60	0.85	0.51	0.34	0.25
226126_at	MGC16169	0.84	0.44	1.25	1.02	1.11
206148_at	IL3RA	1.10	2.04	10.38	2.67	4.49
227677_at	JAK3	1.58	1.58	2.30	0.56	0.84
204157_s_at	KIAA0999	1.10	1.76	3.22	2.26	1.06
202193_at	LIMK2	2.62	1.91	1.39	1.11	1.39
210582_s_at	LIMK2	2.35	1.59	0.98	1.58	0.54
225613_at	MAST4	0.81	1.08	1.03	1.46	2.71
228468_at	MASTL	3.31	4.85	4.23	2.26	2.33
225927_at	MAP3K1	0.80	1.75	1.29	2.13	1.79
235421_at	MAP3K8	1.08	0.41	0.60	0.48	0.67
206571_s_at	MAP4K4	1.23	1.26	2.42	1.67	1.99
222547_at	MAP4K4	6.36	1.88	1.07	0.76	2.64
222548_s_at	MAP4K4	1.28	1.08	1.33	1.04	2.04
238025_at	MLKL	3.02	3.54	2.83	1.76	2.10
204604_at	PFTK1	0.41	0.31	0.37	0.62	0.49
224739_at	PIM3	1.37	1.42	2.54	1.45	1.72
225796_at	PXK	1.04	0.30	0.60	0.85	1.21
212565_at	STK38L	0.64	0.40	0.60	0.99	1.03
203839_s_at	TNK2	0.83	2.61	2.08	1.52	2.47
203856_at	VRK1	1.07	0.21	0.71	2.21	1.23
205126_at	VRK2	1.37	1.34	1.65	2.99	3.32

Protein amino acid sulfation

205139_s_at	UST	0.90	0.25	0.91	0.70	0.46
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Protein complex assembly

211060_x_at	GPAA1	1.26	0.55	0.41	0.39	0.56
209263_x_at	TSPAN4	0.80	0.87	0.61	0.86	0.44
202663_at	WIPF1	0.69	2.00	2.43	2.03	2.00
202665_s_at	WIPF1	1.03	2.08	2.21	1.48	1.06
231182_at	WIPF1	0.95	3.03	2.40	1.01	1.24

Protein folding

201491_at	AHSA1	1.00	2.27	1.21	1.24	1.73
212135_s_at	ATP2B4	0.91	0.46	0.31	0.53	0.52
212136_at	ATP2B4	0.99	0.83	0.53	0.54	0.38
229603_at	BBS12	4.10	3.78	1.18	2.39	2.19
217911_s_at	BAG3	0.99	2.69	0.83	1.08	0.99
202985_s_at	BAG5	0.47	0.75	1.24	1.10	0.83
201947_s_at	CCT2	0.84	0.45	0.76	1.00	0.94
200880_at	DNAJA1	2.96	3.59	2.29	2.44	1.84
200881_s_at	DNAJA1	3.12	3.37	2.30	2.73	2.36
225061_at	DNAJA4	0.96	6.71	1.74	2.72	2.20
203810_at	DNAJB4	1.31	4.08	2.10	1.93	0.92
212817_at	DNAJB5	0.49	0.64	0.95	0.64	0.85
209015_s_at	DNAJB6	1.48	1.27	0.84	0.47	0.54

202843_at	DNAJB9	1.02	2.14	1.06	1.21	0.73
222620_s_at	DNAJC1	0.90	2.31	0.97	1.03	1.15
225174_at	DNAJC10	0.72	0.49	0.69	0.61	0.39
229588_at	DNAJC10	1.30	0.53	0.74	0.35	0.46
225358_at	DNAJC19	1.06	0.41	0.86	1.09	0.81
232798_at	DNAJC5B	1.21	1.23	1.08	0.82	0.41
234107_s_at	DTD1	1.18	0.60	0.42	0.56	0.50
203279_at	EDEM1	2.23	1.47	1.45	0.82	0.94
200709_at	FKBP1A	1.13	0.98	0.74	0.69	0.49
206857_s_at	FKBP1B	0.98	3.58	1.47	2.74	1.60
203391_at	FKBP2	0.95	0.89	0.38	0.69	0.77
224840_at	FKBP5	1.11	2.65	1.43	1.52	1.34
224856_at	FKBP5	1.58	2.19	1.53	1.13	0.88
212432_at	GRPEL1	0.76	0.47	1.09	1.54	1.04
206976_s_at	HSPH1	0.95	4.25	1.12	2.10	2.85
208744_x_at	HSPH1	0.23	2.27	0.87	1.33	1.04
117_at	HSPA6	0.84	2.68	1.61	1.19	1.50
213418_at	HSPA6	0.91	2.88	1.18	1.23	1.66
210338_s_at	HSPA8	1.08	2.41	1.11	0.84	0.84
210211_s_at	HSP90AA1	1.12	2.02	1.09	0.97	1.03
211968_s_at	HSP90AA1	1.42	2.47	0.97	0.90	0.85
214359_s_at	HSP90AB1	0.82	2.17	1.02	1.03	0.76
222751_at	HERPUD2	0.89	2.62	1.83	2.06	1.71
222530_s_at	MKKS	0.85	0.67	0.54	0.80	0.48
226336_at	PPIA	0.88	0.59	0.44	0.32	0.38
228469_at	PPID	1.28	0.31	0.72	0.41	0.79
201711_x_at	RANBP2	0.63	0.49	0.68	0.70	0.90
213262_at	SACS	0.91	0.36	0.46	0.47	0.72
226175_at	TTC9C	1.01	0.82	2.52	2.25	1.57
201391_at	TRAP1	0.92	0.50	0.89	0.96	0.69
209593_s_at	TOR1B	4.96	7.97	4.93	5.27	4.57

Protein homooligomerization

201060_x_at	STOM	1.48	22.42	7.00	1.99	4.25
201061_s_at	STOM	1.47	6.56	2.49	2.07	2.51

Protein modification process

228042_at	ADPRH	1.59	4.16	3.75	5.19	2.74
218216_x_at	ARL6IP4	0.75	0.50	0.44	0.81	0.53
229720_at	BAG1	2.18	1.89	1.24	1.83	1.47
225978_at	FAM80B	1.19	2.02	6.38	0.90	1.18
235413_at	GGCX	1.57	0.61	0.68	0.83	0.49
205571_at	LIPT1	0.48	0.71	1.00	1.22	1.42
209791_at	PADI2	1.14	1.05	0.48	0.60	0.57
202185_at	PLOD3	0.93	0.86	1.00	0.47	0.64
238114_at	PCMTD1	2.01	1.07	1.27	1.07	1.77
206925_at	ST8SIA4	0.96	3.26	1.37	3.62	3.52
230261_at	ST8SIA4	0.98	3.62	3.05	3.03	2.48
230836_at	ST8SIA4	1.06	4.11	3.58	3.35	3.35
242943_at	ST8SIA4	1.07	2.80	2.57	3.30	3.05
224827_at	UBTD2	0.78	2.42	1.32	1.11	0.65
226156_at	AKT2	0.99	0.81	0.48	0.99	0.89

236664_at	AKT2	1.15	0.72	0.26	0.70	0.97
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Protein palmitoylation

222731_at	ZDHHC2	0.78	1.00	0.45	0.99	0.63
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Proteolysis

242931_at	---	0.96	0.71	0.51	0.50	0.41
205997_at	ADAM28	1.78	2.30	1.82	1.09	1.41
206134_at	ADAMDEC1	4.56	4.31	3.58	2.57	3.19
202740_at	ACY1	0.84	1.37	0.76	0.72	0.49
201454_s_at	NPEPPS	0.78	0.87	0.76	0.58	0.49
38703_at	DNPEP	1.02	2.31	1.66	1.36	0.94
218090_s_at	BRWD2	0.85	0.84	0.63	0.46	0.62
214888_at	CAPN2	0.37	1.99	0.34	1.07	1.00
210944_s_at	CAPN3	0.85	1.32	1.66	1.49	3.07
201940_at	CPD	0.78	0.52	0.47	0.30	0.41
201941_at	CPD	0.70	0.45	0.43	0.40	0.58
206100_at	CPM	5.35	2.03	0.32	0.46	0.59
235019_at	CPM	0.90	2.66	0.49	0.26	0.25
235706_at	CPM	0.71	1.14	0.54	0.36	0.31
243403_x_at	CPM	1.74	0.81	0.34	1.27	0.36
208146_s_at	CPVL	0.89	1.01	0.78	0.49	0.62
209939_x_at	CFLAR	1.17	3.64	1.93	1.33	1.89
210563_x_at	CFLAR	1.34	4.63	2.84	1.40	1.05
210564_x_at	CFLAR	0.87	1.19	3.17	1.55	1.65
211317_s_at	CFLAR	0.85	2.38	1.65	0.95	0.69
211862_x_at	CFLAR	1.26	2.12	1.53	1.09	1.36
214486_x_at	CFLAR	1.26	2.28	1.57	2.00	1.92
239629_at	CFLAR	1.28	1.60	1.48	1.08	2.02
206011_at	CASP1	0.99	2.27	2.11	1.46	1.75
209970_x_at	CASP1	1.09	2.28	1.65	1.71	1.89
211366_x_at	CASP1	1.02	2.66	2.02	1.51	2.10
211367_s_at	CASP1	1.31	3.62	2.81	1.50	2.24
211368_s_at	CASP1	1.04	2.89	1.79	2.10	2.33
205467_at	CASP10	3.56	3.07	2.13	2.90	1.38
209310_s_at	CASP4	1.97	2.40	1.66	2.10	1.88
207181_s_at	CASP7	0.92	4.02	2.55	2.54	2.10
225646_at	CTSC	1.14	3.47	1.61	1.04	1.40
225647_s_at	CTSC	1.10	3.80	1.57	1.34	1.60
231234_at	CTSC	0.38	3.65	1.46	0.82	0.47
202087_s_at	CTSL1	3.85	2.98	3.08	1.37	1.04
210074_at	CTSL2	3.89	2.28	5.77	0.82	2.97
232617_at	CTSS	1.06	1.46	0.57	0.46	0.35
223272_s_at	C1orf57	0.95	0.18	1.62	1.54	2.15
217752_s_at	CNDP2	2.05	3.23	1.65	1.23	1.09
239205_s_at	CR1	0.82	2.19	1.81	1.26	0.59
202357_s_at	CFB	2.64	9.30	11.69	19.60	5.69
219452_at	DPEP2	1.00	0.82	0.30	0.54	0.52
227018_at	DPP8	0.52	0.97	2.01	1.33	1.24
203791_at	DMXL1	0.77	1.84	1.74	1.53	2.38
241472_at	DMXL1	2.05	2.21	1.05	1.78	2.87
234021_at	EML2	1.68	0.42	0.98	1.40	1.49

222603_at	ERMP1	0.53	0.38	0.38	0.39	0.32
231769_at	FBXO6	4.28	8.73	7.18	5.12	4.66
205010_at	GNL3L	1.05	0.49	0.72	0.58	0.86
222109_at	GNL3L	0.66	0.96	0.43	1.13	0.99
210997_at	HGF	0.96	1.21	0.50	0.49	1.22
223443_s_at	FLJ32065	1.51	0.67	2.23	1.39	3.19
229025_s_at	IMMP1L	1.08	1.28	0.32	0.58	0.96
203327_at	IDE	0.91	0.26	0.57	0.86	0.73
201212_at	LGMN	0.54	0.23	0.73	0.89	2.45
217933_s_at	LAP3	2.28	10.68	4.51	4.23	4.12
208771_s_at	LTA4H	0.96	0.38	0.27	0.23	0.20
204259_at	MMP7	0.97	2.18	0.35	0.12	0.12
203936_s_at	MMP9	0.28	0.15	0.39	0.12	0.14
228055_at	NAPSB	1.35	1.95	2.03	1.70	2.73
225943_at	NLN	1.15	2.26	1.91	0.80	0.80
219557_s_at	NRIP3	1.03	1.47	0.46	0.21	0.19
209450_at	OSGEP	0.58	0.46	0.55	0.99	0.72
212088_at	PMPCA	0.80	0.57	0.67	0.59	0.49
210145_at	PLA2G4A	1.02	2.51	1.57	1.26	2.08
203501_at	PGCP	1.09	1.00	0.57	0.49	0.45
208454_s_at	PGCP	0.76	1.29	0.48	0.29	0.45
204117_at	PREP	1.30	0.74	0.50	0.67	0.88
212216_at	PREPL	0.95	0.32	1.01	0.49	0.82
205559_s_at	PCSK5	0.92	0.46	0.32	0.69	0.80
205560_at	PCSK5	0.79	0.44	0.70	0.47	0.45
213652_at	PCSK5	1.67	0.48	0.31	0.43	0.74
202659_at	PSMB10	0.87	3.54	1.57	1.53	1.21
209040_s_at	PSMB8	1.43	2.97	1.87	1.91	1.99
222849_s_at	SCRN3	0.44	2.01	1.56	0.87	1.16
202980_s_at	SIAH1	0.39	1.05	0.50	1.00	0.97
214494_s_at	SPG7	0.72	0.39	0.97	0.90	0.95
226619_at	SENP1	1.49	1.61	1.46	2.02	1.31
203871_at	SENP3	1.19	1.74	0.75	0.45	0.63
214196_s_at	TPP1	0.37	0.69	0.61	0.86	0.80
208453_s_at	XPNPEP1	0.41	1.39	0.78	1.17	1.40
226501_at	XPNPEP3	1.03	0.66	0.47	0.49	0.66
227910_at	XPNPEP3	0.80	0.77	0.54	0.71	0.46

Regulation of cell shape

202759_s_at	AKAP2	3.59	6.61	6.16	2.72	2.52
202760_s_at	AKAP2	5.28	25.05	32.33	20.78	8.58
226694_at	AKAP2	2.86	14.50	19.01	30.23	4.84

Respiratory gaseous exchange

203551_s_at	COX11	1.16	0.50	0.49	0.62	0.49
211727_s_at	COX11	1.31	0.40	0.45	0.96	0.88
204112_s_at	HNMT	1.27	0.30	1.01	0.60	1.17
211732_x_at	HNMT	0.83	0.40	1.34	3.02	1.91
228772_at	HNMT	0.83	0.42	0.70	0.63	0.87

Ribosome biogenesis and assembly

201323_at	EBNA1BP2	0.70	0.42	0.61	0.96	1.17
220688_s_at	MRT04	1.34	0.49	0.93	0.47	0.35
218156_s_at	TSR1	0.80	0.45	1.14	1.45	0.96

RNA processing

201786_s_at	ADAR	2.01	5.62	3.15	3.59	4.04
234799_at	ADARB1	0.48	1.74	1.32	1.58	0.17
203231_s_at	ATXN1	1.14	0.18	0.42	0.20	0.61
203232_s_at	ATXN1	1.16	0.19	0.25	0.39	0.46
227775_at	BRUNOL6	1.46	0.77	2.78	0.72	0.72
223404_s_at	C1orf25	1.11	1.83	1.39	2.29	1.53
243001_at	C18orf22	1.42	0.84	0.41	0.20	0.17
213998_s_at	DDX17	0.60	0.69	0.59	1.02	2.38
200702_s_at	DDX24	0.68	0.83	1.33	1.74	3.57
202462_s_at	DDX46	0.96	0.35	0.66	0.72	0.84
204405_x_at	DIMT1L	1.15	0.36	0.56	0.85	0.86
217106_x_at	DIMT1L	0.96	0.41	0.77	0.64	1.04
201479_at	DKC1	0.74	0.47	0.89	0.91	0.85
201726_at	ELAVL1	1.02	0.48	0.99	1.18	1.24
201727_s_at	ELAVL1	0.46	1.02	0.97	0.91	1.38
244660_at	ELAVL1	1.18	0.55	0.28	0.99	0.86
222398_s_at	EFTUD2	0.82	0.47	0.80	0.85	0.86
200647_x_at	EIF3C	0.95	0.35	0.49	0.68	0.57
210949_s_at	EIF3C	1.08	0.41	0.56	0.72	0.57
212627_s_at	EXOSC7	0.66	0.33	0.68	0.94	0.91
205061_s_at	EXOSC9	2.14	2.63	1.24	1.58	1.91
229083_at	---	0.93	0.55	0.40	0.61	0.56
205527_s_at	GEMIN4	0.57	0.10	0.62	1.12	0.72
216559_x_at	HNRNPA1	0.91	0.48	0.61	1.10	0.67
211932_at	HNRPA3	0.96	0.49	0.53	0.83	0.84
206809_s_at	HNRPA3	1.06	0.67	0.36	1.26	0.61
211933_s_at	HNRPA3	1.10	0.48	0.55	0.74	0.90
227110_at	HNRNPC	0.86	0.69	0.48	0.80	1.15
221860_at	HNRNPL	0.48	0.59	0.78	1.07	0.90
225385_s_at	HNRPLL	0.34	3.10	0.73	1.70	1.17
225386_s_at	HNRPLL	0.92	2.03	1.02	1.45	1.10
203819_s_at	IGF2BP3	2.26	7.07	6.05	1.95	3.29
203820_s_at	IGF2BP3	1.29	13.09	5.16	1.85	4.54
229632_s_at	INTS10	1.11	0.48	0.81	1.08	0.84
218616_at	INTS12	0.69	0.85	1.35	1.63	2.01
224308_s_at	INTS2	0.87	0.63	0.45	0.69	0.89
218783_at	INTS7	0.78	0.67	1.30	1.41	2.17
218905_at	INTS8	0.83	0.49	0.82	1.03	1.35
243927_x_at	KIAA1429	0.97	1.44	2.40	1.40	1.07
225593_at	LSM10	0.95	0.49	0.84	1.05	1.09
204559_s_at	LSM7	0.46	0.54	0.59	1.03	1.22
222555_s_at	MRPL44	0.48	1.97	2.14	1.80	1.16
230443_at	NHP2L1	0.60	1.10	0.59	2.50	2.35
214661_s_at	NOL14	1.00	0.41	0.97	0.98	0.84
219110_at	NOLA1	0.99	0.43	0.95	0.77	0.80
229220_x_at	NOM1	0.97	0.47	0.91	1.42	0.92

224883_at	PLDN	2.41	0.22	0.63	0.61	0.49
222500_at	PPIL1	1.11	0.10	1.35	2.11	1.25
213483_at	PPWD1	0.42	0.64	1.08	1.12	1.40
204228_at	PPIH	0.99	0.34	0.65	0.66	1.16
215157_x_at	PABPC1	1.17	0.81	0.55	0.37	0.51
215823_x_at	PABPC3	0.95	0.90	0.48	0.50	0.29
201064_s_at	PABPC4	0.80	0.54	0.48	0.26	0.44
200000_s_at	PRPF8	0.77	0.42	0.42	0.38	0.51
221277_s_at	PUS3	2.26	0.36	0.96	1.04	1.29
212438_at	RY1	1.11	0.92	0.95	0.74	2.01
232722_at	RNASET2	0.70	0.92	0.66	0.59	2.89
206111_at	RNASE2	1.15	2.42	2.23	1.03	0.78
213566_at	RNASE6	1.30	1.26	0.68	1.13	2.03
208319_s_at	RBM3	0.96	0.73	0.55	0.40	0.36
213718_at	RBM4	0.98	0.89	0.48	0.95	1.13
229903_x_at	RNPC3	0.53	0.94	1.42	2.28	1.27
214698_at	ROD1	0.89	2.08	2.23	0.63	2.18
210466_s_at	SERBP1	0.74	0.43	0.80	1.18	1.05
227369_at	SERBP1	0.93	0.82	0.52	1.17	0.47
235390_at	SFRS12IP1	0.47	0.79	0.74	0.73	1.07
242146_at	SNRPA1	0.23	0.68	0.90	0.84	1.54
201575_at	SNW1	0.87	1.02	1.53	2.15	1.49
200687_s_at	SF3B3	0.97	0.47	0.73	1.28	1.05
208863_s_at	SFRS1	0.46	0.70	0.64	0.66	0.99
210180_s_at	SFRS10	0.70	1.01	0.99	1.15	2.43
200685_at	SFRS11	0.50	0.47	0.39	1.08	0.71
228760_at	SFRS2B	0.64	1.10	0.32	0.71	0.80
208804_s_at	SFRS6	0.78	0.71	0.60	0.47	0.69
212896_at	SKIV2L2	1.21	0.44	0.76	0.90	0.94
227447_at	SKIV2L2	0.86	0.40	0.66	0.79	0.80
222748_s_at	TXNL4B	2.42	1.04	1.55	1.10	1.78
226416_at	THEX1	4.98	0.96	1.26	1.51	1.61
222754_at	TRNT1	0.54	0.79	2.32	1.35	0.54
218381_s_at	U2AF2	0.50	0.71	0.89	0.76	1.20
236696_at	SR140	0.38	0.40	0.90	0.88	1.39
221514_at	UTP14A	0.56	0.47	0.95	1.25	1.38
209486_at	UTP3	0.61	0.40	0.87	1.02	1.52
218715_at	UTP6	0.90	1.21	1.24	1.54	2.11
218882_s_at	WDR3	1.00	0.46	0.76	1.12	0.94
226180_at	WDR36	0.97	0.46	0.57	0.66	0.84
241937_s_at	WDR4	0.60	0.29	1.04	0.63	0.55
215905_s_at	WDR57	0.92	0.71	1.08	2.11	1.93
210285_x_at	WTAP	0.77	1.04	1.52	3.40	1.50
213775_x_at	ZNF638	1.30	0.87	1.16	1.13	2.27
223016_x_at	ZRANB2	0.89	1.21	1.73	1.20	2.19

Sensory perception of sound

203695_s_at	DFNA5	0.51	0.34	0.64	0.21	0.29
235365_at	DFNB59	1.28	1.14	0.43	0.43	0.65
200609_s_at	WDR1	0.62	0.89	1.06	0.40	0.53

Signal transduction

209535_s_at	---	2.40	0.76	1.04	1.53	1.50
209027_s_at	ABI1	1.05	1.68	2.01	1.34	1.22
202641_at	ARL3	0.86	0.66	0.47	0.75	0.70
218150_at	ARL5A	0.85	0.40	0.56	0.62	0.67
226617_at	ARL5A	0.94	0.25	0.67	0.93	0.87
242727_at	ARL5B	2.02	1.65	8.94	3.03	0.77
206170_at	ADRB2	2.16	1.82	0.96	0.88	1.41
212285_s_at	AGRN	2.46	2.40	2.40	3.27	1.64
208703_s_at	APLP2	0.96	0.68	0.64	0.60	0.49
202686_s_at	AXL	2.06	10.24	15.63	12.84	15.37
225144_at	BMPR2	0.75	2.54	1.66	1.19	1.17
226602_s_at	BCR	1.38	0.71	0.48	1.66	1.21
213812_s_at	CAMKK2	0.45	0.55	0.66	0.55	0.79
200653_s_at	CALM1	1.08	2.75	1.88	1.38	1.40
200655_s_at	CALM1	1.09	2.19	1.45	2.03	1.53
209563_x_at	CALM1	1.12	2.55	1.99	1.89	2.13
211984_at	CALM1	1.27	2.54	1.68	1.40	1.49
211985_s_at	CALM1	1.69	2.31	1.75	1.32	1.48
240221_at	CSNK1A1	0.82	1.04	1.34	0.41	1.01
203575_at	CSNK2A2	1.20	0.70	0.72	0.45	0.62
220162_s_at	CARD9	0.52	0.58	0.80	0.38	0.66
205692_s_at	CD38	0.73	19.19	7.15	6.10	4.99
223358_s_at	---	1.08	2.06	2.46	1.32	1.11
213385_at	CHN2	1.05	2.19	0.78	1.13	1.70
239660_at	C20orf74	0.69	1.24	3.57	0.66	0.67
206028_s_at	MERTK	0.84	0.44	0.27	0.81	2.27
213506_at	F2RL1	1.23	0.65	0.63	0.42	0.13
227228_s_at	CCDC88C	0.99	1.62	2.01	1.23	0.92
224516_s_at	CXXC5	0.62	0.70	0.60	0.44	0.40
233955_x_at	CXXC5	0.68	0.66	0.50	0.47	0.47
205627_at	CDA	0.80	1.15	0.03	0.08	0.17
242319_at	DGKG	1.20	0.37	0.40	0.80	2.33
219646_at	DEF8	0.73	0.63	0.31	0.51	0.45
225637_at	DEF8	1.02	0.30	0.44	0.45	0.51
228057_at	DDIT4L	1.29	1.10	0.39	0.58	0.35
223553_s_at	DOK3	0.46	0.33	0.89	0.92	0.96
222858_s_at	DAPP1	2.54	2.57	1.45	2.61	1.93
236707_at	DAPP1	2.66	0.90	1.20	0.63	1.21
221563_at	DUSP10	0.49	1.69	1.48	1.57	1.12
204794_at	DUSP2	1.36	2.18	2.93	0.62	0.60
227084_at	DTNA	1.75	0.63	0.48	0.55	0.41
210724_at	EMR3	0.78	0.15	0.11	0.22	0.18
204037_at	EDG2	1.57	0.84	0.74	0.69	0.34
227684_at	EDG5	1.34	2.12	2.64	1.57	1.39
200878_at	EPAS1	1.49	1.06	0.53	0.31	0.28
222802_at	EDN1	1.44	3.32	0.99	1.27	1.24
202609_at	EPS8	1.45	0.88	0.42	0.73	0.43
204834_at	FGL2	0.92	5.79	1.85	2.15	2.15
227265_at	FGL2	0.78	6.19	2.27	1.86	1.92
226705_at	FGFR1	0.74	0.59	0.59	0.36	0.30
205119_s_at	FPR1	1.19	0.95	0.53	0.65	0.42

221345_at	FFAR2	2.18	13.13	4.23	4.65	2.67
210220_at	FZD2	0.57	6.61	1.17	2.30	3.16
210105_s_at	FYN	1.12	0.53	0.53	0.52	0.46
231166_at	GPR155	0.67	1.69	2.26	1.01	2.01
244509_at	GPR155	0.95	6.20	2.09	1.24	1.09
223423_at	GPR160	0.66	0.34	0.83	0.84	1.13
228949_at	GPR177	0.75	1.23	1.05	0.80	0.44
223620_at	GPR34	0.75	0.34	0.20	0.39	0.49
210264_at	GPR35	0.73	1.07	0.92	0.49	0.67
223767_at	GPR84	0.76	1.26	1.34	0.66	0.44
204982_at	GIT2	0.95	0.47	0.99	2.67	2.32
207574_s_at	GADD45B	3.29	2.62	1.81	1.23	0.67
209305_s_at	GADD45B	2.54	2.16	1.28	0.85	0.70
204121_at	GADD45G	0.96	1.01	0.54	0.42	0.35
212802_s_at	GAPVD1	0.90	0.45	0.67	0.85	0.98
221737_at	GNA12	1.01	0.51	0.46	0.60	0.53
223487_x_at	GNB4	0.41	2.40	1.82	0.63	1.45
225710_at	GNB4	1.82	3.74	1.66	1.20	1.07
201921_at	GNG10	1.10	0.87	1.20	0.63	0.38
224964_s_at	GNG2	0.86	0.86	0.24	0.16	0.15
235139_at	GNGT2	0.44	0.32	1.58	2.14	2.23
200896_x_at	HDGF	0.77	0.48	0.99	1.12	0.79
220326_s_at	FLJ10357	2.43	0.62	1.14	1.08	1.14
227855_at	FLJ10357	5.26	2.32	1.33	0.72	1.77
241627_x_at	FLJ10357	0.32	0.76	0.80	0.73	1.10
239068_at	LOC285831	1.78	0.82	0.92	0.62	0.41
221501_x_at	LOC339047	0.67	0.34	0.71	0.85	1.28
215123_at	LOC339047	1.18	1.03	1.10	0.38	2.18
207167_at	IGSF2	0.66	0.35	0.14	0.15	0.19
235213_at	ITPKB	0.36	1.57	0.36	0.29	0.55
213804_at	INPP5B	0.66	0.47	0.66	1.26	1.87
203126_at	IMPA2	1.06	0.26	0.29	0.48	0.61
242903_at	IFNGR1	0.58	0.57	0.58	0.49	0.69
201601_x_at	IFITM1	3.09	42.61	19.47	65.62	256.86
214022_s_at	IFITM1	2.60	54.89	30.03	74.72	264.41
201888_s_at	IL13RA1	0.83	1.49	2.28	1.12	1.24
207375_s_at	IL15RA	2.15	14.11	5.53	2.45	1.89
210840_s_at	IQGAP1	0.97	0.98	0.71	0.45	0.65
203236_s_at	LGALS9	1.39	4.31	1.97	1.13	0.74
219607_s_at	MS4A4A	1.76	5.94	2.93	1.33	0.96
219666_at	MS4A6A	0.92	2.85	1.02	2.31	2.77
223280_x_at	MS4A6A	0.98	4.51	1.13	1.57	1.58
223922_x_at	MS4A6A	0.89	2.54	1.30	1.37	1.46
224356_x_at	MS4A6A	1.02	4.53	1.27	1.52	1.48
230550_at	MS4A6A	1.01	2.39	1.19	1.89	2.69
232724_at	MS4A6A	0.72	1.86	1.65	1.10	2.34
231335_at	MS4A6E	1.25	1.43	1.17	0.68	0.31
224358_s_at	MS4A7	0.55	1.37	0.58	0.39	1.08
210058_at	MAPK13	1.30	0.55	0.84	0.50	0.46
210059_s_at	MAPK13	0.36	0.41	0.77	0.77	0.71
205698_s_at	MAP2K6	2.42	1.85	1.39	0.67	1.07
227073_at	MAP3K2	0.75	0.50	0.73	0.92	1.35

203514_at	MAP3K3	1.13	0.60	0.56	0.57	0.43
209124_at	MYD88	1.21	2.23	1.55	1.88	1.78
225930_at	NKIRAS1	1.42	2.77	0.82	3.86	1.40
212183_at	NUDT4	0.29	0.47	1.13	0.86	2.18
232829_at	OR52K3P	0.92	2.00	7.73	8.51	7.55
219788_at	PILRA	1.00	2.11	1.45	1.68	1.74
202174_s_at	PCM1	1.10	0.54	0.84	0.48	1.08
203708_at	PDE4B	1.72	2.14	2.68	1.38	2.02
211302_s_at	PDE4B	2.56	2.18	3.50	1.86	0.53
231854_at	PIK3CA	0.78	1.39	0.66	2.87	0.82
235980_at	PIK3CA	2.27	0.76	1.63	0.95	0.89
213222_at	PLCB1	1.05	0.46	0.97	1.23	0.94
205934_at	PLCL1	1.40	1.20	2.29	0.69	1.26
203470_s_at	PLEK	2.47	1.56	1.70	0.96	0.98
203471_s_at	PLEK	2.10	1.53	1.39	1.17	1.10
212700_x_at	PLEKHM1	1.09	1.41	2.91	3.61	1.18
241742_at	PRAM1	0.97	0.65	0.43	0.62	0.51
223726_at	KCNH3	1.99	1.32	0.46	0.85	1.02
224099_at	KCNH7	2.36	1.41	1.60	1.39	0.52
217738_at	PBEF1	1.67	1.27	1.77	1.44	2.80
217739_s_at	PBEF1	1.05	1.33	2.16	2.02	2.85
243296_at	PBEF1	1.97	0.92	1.19	1.86	2.11
211373_s_at	PSEN2	0.87	1.60	0.99	0.36	0.45
206631_at	PTGER2	1.22	1.81	2.08	1.83	2.40
213093_at	PRKCA	1.21	1.31	0.61	0.95	0.23
207957_s_at	PRKCB1	1.07	0.58	0.53	0.52	0.42
227817_at	PRKCB1	0.85	0.77	0.41	0.71	0.46
225984_at	PRKAA1	0.47	0.95	1.04	0.85	1.37
225278_at	PRKAB2	0.50	0.95	1.08	1.01	1.28
202741_at	PRKACB	1.31	1.09	0.52	0.36	0.30
202742_s_at	PRKACB	0.38	0.22	1.93	0.45	0.43
235780_at	PRKACB	0.86	0.53	1.01	0.42	0.45
225000_at	PRKAR2A	0.86	0.44	0.52	0.40	0.35
225011_at	PRKAR2A	0.89	0.53	0.54	0.50	0.41
201877_s_at	PPP2R5C	0.96	1.63	1.80	1.63	2.29
213305_s_at	PPP2R5C	0.98	1.80	1.85	2.49	3.64
214083_at	PPP2R5C	1.14	2.63	6.00	4.09	2.16
209896_s_at	PTPN11	0.76	0.51	0.67	0.91	0.45
210236_at	PPFIA1	0.42	0.71	1.06	1.52	0.73
234000_s_at	PTPLAD1	0.83	0.76	0.43	0.52	0.46
222405_at	PTPLAD1	1.45	0.50	0.56	0.60	0.53
220005_at	P2RY13	1.92	1.83	0.20	0.36	0.32
218589_at	P2RY5	1.06	1.22	1.70	2.01	2.16
208373_s_at	P2RY6	0.77	1.59	4.23	4.78	5.90
209514_s_at	RAB27A	1.17	0.57	0.71	0.75	0.47
210951_x_at	RAB27A	1.01	0.53	0.40	0.66	0.36
217763_s_at	RAB31	1.12	2.81	0.77	0.85	1.07
217764_s_at	RAB31	1.07	2.08	0.81	0.86	0.69
209568_s_at	RGL1	4.83	3.29	3.41	3.21	2.99
225738_at	RAPGEF1	1.03	0.77	0.87	0.91	0.49
219112_at	RAPGEF6	0.60	0.49	0.69	1.00	1.01
225585_at	RAP2A	0.44	1.13	0.78	0.78	0.49

238622_at	RAP2B	0.34	1.41	1.38	1.44	1.43
225186_at	RAPH1	1.52	0.69	0.23	0.38	0.34
225188_at	RAPH1	0.47	0.46	0.19	0.36	0.55
225189_s_at	RAPH1	0.52	0.38	0.13	0.48	0.46
205801_s_at	RASGRP3	3.24	4.54	2.55	1.01	0.96
204951_at	RHOH	3.91	0.27	3.48	1.93	1.54
223168_at	RHOU	0.60	0.63	0.60	0.40	0.53
225562_at	RASA3	0.39	0.48	1.58	1.17	1.35
219752_at	RASAL1	0.44	0.78	0.12	0.39	0.55
228109_at	RASGRF2	2.21	0.25	1.92	1.09	7.19
230490_x_at	RSU1	0.85	0.71	0.39	0.40	0.40
243463_s_at	RIT1	0.43	1.32	2.59	1.43	1.23
242079_at	RGS12	0.34	0.87	0.51	1.08	0.96
203485_at	RTN1	0.94	0.65	0.73	0.36	0.20
210222_s_at	RTN1	0.86	0.81	0.78	0.39	0.32
218076_s_at	ARHGAP17	0.81	3.88	2.00	1.56	1.55
225171_at	ARHGAP18	1.04	0.45	0.95	1.17	0.96
204882_at	ARHGAP25	1.91	2.12	3.48	2.79	3.83
38149_at	ARHGAP25	1.30	2.05	3.12	3.05	3.24
206167_s_at	ARHGAP6	4.50	0.12	1.14	0.91	2.27
224451_x_at	ARHGAP9	0.98	0.46	0.47	0.75	0.74
232543_x_at	ARHGAP9	1.31	0.71	0.43	0.59	0.91
218501_at	ARHGEF3	1.13	1.67	1.49	2.42	3.17
236416_at	ARHGEF7	0.44	1.59	0.62	0.65	0.23
204906_at	RPS6KA2	1.22	0.66	0.46	0.38	0.39
212912_at	RPS6KA2	0.85	0.57	0.53	0.34	0.39
226335_at	RPS6KA3	0.91	0.71	0.52	0.41	0.42
243981_at	STK4	0.40	0.97	0.73	1.30	1.55
226673_at	SH2D3C	0.13	1.21	0.74	1.21	1.73
209371_s_at	SH3BP2	0.52	0.49	1.07	1.55	0.56
201810_s_at	SH3BP5	0.62	0.80	0.46	0.41	0.34
201811_x_at	SH3BP5	0.70	0.85	0.40	0.31	0.33
208095_s_at	SRP72	0.88	0.41	0.88	0.68	0.99
208800_at	SRP72	0.91	0.39	1.36	0.92	1.09
225056_at	SIPA1L2	0.89	1.23	2.06	1.59	1.59
213329_at	SRGAP2	0.76	3.57	2.71	2.51	3.21
227649_s_at	SRGAP2	0.97	5.01	6.31	4.05	4.27
212780_at	SOS1	0.84	2.46	1.72	1.61	2.24
225564_at	SPATA13	1.03	2.45	2.25	1.81	1.38
204011_at	SPRY2	0.32	0.46	0.10	0.36	0.19
223939_at	SUCNR1	3.32	1.11	0.40	3.57	0.67
210001_s_at	SOCS1	6.70	3.74	2.26	8.75	5.33
227697_at	SOCS3	3.98	0.93	1.12	1.21	0.65
227542_at	SOCS6	1.47	0.45	0.92	0.47	0.72
229723_at	TAGAP	4.40	6.72	3.05	4.57	3.17
234050_at	TAGAP	3.63	1.96	1.04	1.30	1.90
213135_at	TIAM1	1.04	0.76	0.46	0.37	0.39
201147_s_at	TIMP3	2.05	4.43	0.57	0.05	0.01
201148_s_at	TIMP3	0.73	0.73	0.58	0.13	0.03
201149_s_at	TIMP3	0.85	0.85	1.11	0.33	0.12
201150_s_at	TIMP3	1.18	0.79	0.10	0.06	0.03
212997_s_at	TLK2	0.88	1.69	2.33	1.54	1.71

205016_at	TGFA	1.30	0.62	0.68	0.59	0.41
224793_s_at	TGFBR1	0.50	1.04	0.53	0.56	0.65
236561_at	TGFBR1	0.25	1.18	0.54	0.53	0.86
216267_s_at	TMEM115	0.36	0.43	1.31	0.58	0.86
222449_at	TMEPAI	1.12	0.63	0.57	0.48	0.97
203567_s_at	TRIM38	1.42	2.56	2.43	2.86	2.53
203568_s_at	TRIM38	1.95	1.69	1.62	2.17	2.43
203610_s_at	TRIM38	1.64	3.38	2.50	2.13	2.74
212607_at	AKT3	1.14	0.89	0.75	0.46	0.55
212609_s_at	AKT3	1.34	0.34	0.63	0.86	1.04
202625_at	LYN	0.96	1.38	1.69	2.48	2.27
210754_s_at	LYN	1.06	1.73	1.78	1.51	2.13
218512_at	WDR12	1.23	0.42	0.64	0.91	0.61
239757_at	ZFAND6	0.49	0.70	0.87	1.07	1.53

Spermatogenesis

212468_at	SPAG9	0.64	0.93	0.68	0.44	0.71
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Spliceosome assembly

202690_s_at	SNRPD1	0.57	0.45	0.85	1.11	1.47
211114_x_at	SIP1	1.19	1.33	1.48	2.20	1.14

Telomere maintenance

204353_s_at	POT1	4.62	1.34	2.12	1.74	1.44
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Transcription

228188_at	---	0.85	0.51	1.27	2.87	1.72
228856_at	---	1.11	0.17	0.93	1.37	0.34
223002_s_at	XRN2	1.16	0.55	0.91	0.49	0.86
229215_at	ASCL2	7.83	6.17	4.28	3.41	5.24
219336_s_at	ASCC1	0.90	0.86	2.09	0.57	0.93
202672_s_at	ATF3	1.77	4.40	2.36	1.29	0.72
204998_s_at	ATF5	1.52	2.38	2.92	1.57	1.21
204999_s_at	ATF5	2.15	1.90	3.28	1.68	1.52
231927_at	ATF6	1.29	0.70	0.50	0.38	0.89
228829_at	ATF7	0.80	1.76	2.39	0.76	1.03
232865_at	AFF4	0.36	1.63	1.15	1.03	1.49
204205_at	APOBEC3G	1.43	8.98	5.24	4.26	4.68
200940_s_at	RERE	1.52	2.02	1.29	2.13	1.79
213138_at	ARID5A	3.22	1.13	1.43	1.07	0.86
205416_s_at	ATXN3	0.67	1.48	2.01	1.10	1.91
233182_x_at	ATXN3	0.77	0.16	1.39	2.49	0.81
221530_s_at	BHLHB3	1.61	1.07	0.10	0.03	0.17
228439_at	BATF2	6.74	5.74	5.50	5.31	4.87
238478_at	BNC2	3.35	1.47	0.41	0.71	0.12
223566_s_at	BCOR	0.85	0.47	4.20	6.20	0.96
223134_at	BBX	1.22	2.68	1.41	1.53	1.45
232008_s_at	BBX	0.76	2.94	1.41	1.67	1.47
217985_s_at	BAZ1A	2.29	2.19	2.24	1.97	2.12
217986_s_at	BAZ1A	1.67	1.58	2.01	1.65	1.28
229228_at	CREB5	1.16	0.52	0.68	0.27	0.59
207630_s_at	CREM	2.16	1.68	1.90	2.12	1.78

209967_s_at	CREM	3.98	2.42	1.73	1.46	2.91
230511_at	CREM	2.87	2.75	0.82	1.03	2.04
208407_s_at	CTNND1	1.15	0.33	1.06	1.42	1.27
209571_at	CIR	0.92	1.95	2.00	1.46	1.05
209357_at	CITED2	1.46	0.63	3.41	1.47	1.75
203973_s_at	CEBPD	0.88	1.78	0.41	1.32	1.87
235122_at	---	0.67	0.22	0.05	0.93	0.46
227210_at	---	0.58	1.75	1.33	1.74	2.08
225956_at	C5orf41	1.37	2.35	2.06	2.26	2.35
225957_at	C5orf41	1.58	2.14	1.70	1.61	2.39
205101_at	CIITA	1.04	1.29	0.43	0.54	0.62
222792_s_at	CCDC59	0.95	1.03	1.24	1.33	2.44
202367_at	CUX1	0.85	0.91	0.82	0.57	0.42
48580_at	CXXC1	0.88	0.41	1.07	0.72	0.93
241495_at	CCNL1	2.10	0.53	0.96	4.85	1.14
203536_s_at	CIAO1	1.09	0.44	1.36	0.79	0.88
217501_at	CIAO1	0.86	0.45	0.65	0.58	0.63
203258_at	DRAP1	1.27	2.02	2.39	1.40	2.59
228033_at	E2F7	0.63	0.25	7.35	4.79	2.13
227404_s_at	EGR1	3.52	0.74	0.53	0.38	0.19
226952_at	EAF1	0.57	1.41	2.10	1.22	1.06
211698_at	EID1	1.06	0.78	1.04	0.24	1.43
222765_x_at	ESF1	0.82	1.28	3.93	3.43	3.04
221680_s_at	ETV7	4.88	6.21	1.41	3.30	3.24
224225_s_at	ETV7	1.72	5.14	12.29	2.92	19.71
204211_x_at	EIF2AK2	3.40	3.93	2.96	5.29	6.40
210012_s_at	EWSR1	0.82	3.25	0.50	2.56	1.75
208987_s_at	FBXL11	1.16	0.75	0.90	0.86	3.04
204236_at	FLI1	2.72	0.74	0.97	0.81	1.58
213294_at	---	3.18	8.63	4.27	4.68	7.17
221958_s_at	GPR177	0.90	0.45	0.70	0.85	1.50
208066_s_at	GTF2B	3.31	1.94	2.20	2.46	2.45
201338_x_at	GTF3A	0.91	0.48	0.61	0.79	0.65
204366_s_at	GTF3C2	0.89	0.48	0.77	0.95	0.93
212429_s_at	GTF3C2	0.74	0.47	0.78	0.84	0.86
222604_at	GTF3C3	0.76	1.50	1.17	0.48	1.18
229435_at	GLIS3	1.77	0.17	0.64	0.96	0.26
214438_at	HLX	3.09	1.68	2.00	2.21	1.43
203394_s_at	HES1	1.02	1.55	0.44	0.26	0.68
44783_s_at	HEY1	0.23	0.37	0.84	0.65	0.57
226828_s_at	HEYL	0.26	1.34	2.58	1.55	1.13
224007_at	HSFY1	4.14	0.61	0.49	6.77	0.78
204689_at	HHEX	0.82	1.13	0.73	0.48	1.46
211267_at	HESX1	2.74	34.09	7.59	40.74	21.33
201277_s_at	HNRPAB	0.92	0.43	0.62	0.78	0.73
209068_at	HNRPDL	0.85	0.73	0.49	0.80	1.09
210719_s_at	HMG20B	1.20	0.38	0.44	0.57	0.35
203744_at	HMGB3	0.91	1.81	0.45	0.85	0.97
217427_s_at	HIRA	1.27	1.29	1.73	2.84	1.95
201209_at	HDAC1	0.94	0.42	0.67	1.01	0.74
223908_at	HDAC8	0.47	0.69	0.55	1.02	1.02
225097_at	HIPK2	0.93	0.59	0.48	0.57	0.28

225115_at	HIPK2	0.94	0.57	0.39	0.36	0.31
225116_at	HIPK2	1.05	0.62	0.53	0.39	0.39
225368_at	HIPK2	0.48	0.59	0.37	0.19	0.21
212641_at	HIVEP2	4.95	2.18	1.69	2.07	1.26
212642_s_at	HIVEP2	0.66	3.47	1.90	2.07	2.02
220086_at	IKZF5	1.02	2.29	1.91	2.02	1.21
201362_at	IVNS1ABP	1.57	0.46	0.44	0.88	1.05
201363_s_at	IVNS1ABP	1.28	0.46	0.48	0.91	0.96
206245_s_at	IVNS1ABP	1.19	0.55	0.49	0.71	1.02
213931_at	ID2	0.58	0.85	0.33	0.52	0.97
207826_s_at	ID3	0.98	2.71	0.78	1.70	2.57
202531_at	IRF1	7.86	2.81	2.30	1.84	1.48
203275_at	IRF2	2.18	3.85	2.85	2.53	2.67
202621_at	IRF3	0.89	0.47	0.86	0.77	1.01
204562_at	IRF4	2.47	3.59	1.66	1.68	1.14
239412_at	IRF5	1.70	1.74	2.10	1.34	1.47
208436_s_at	IRF7	5.35	6.15	5.02	11.16	15.85
203882_at	IRF9	1.72	2.92	2.92	2.97	2.11
206332_s_at	IFI16	4.57	7.32	3.24	3.57	3.61
208965_s_at	IFI16	2.95	5.33	2.41	4.46	3.90
208966_x_at	IFI16	3.86	6.33	2.72	4.74	3.55
225798_at	JAZF1	0.74	3.90	0.91	0.73	0.90
215698_at	JARID1A	0.33	0.69	1.40	1.86	1.74
226371_at	JARID1A	1.30	0.97	2.08	0.96	1.27
201464_x_at	JUN	1.00	0.93	0.39	0.12	0.33
201466_s_at	JUN	0.93	0.93	0.37	0.20	0.33
219371_s_at	KLF2	0.46	0.76	0.93	0.92	0.94
225140_at	KLF3	1.08	1.08	0.78	0.89	2.34
208961_s_at	KLF6	1.68	3.28	4.23	2.96	6.45
224606_at	KLF6	1.76	2.80	3.18	3.13	2.67
212446_s_at	LASS6	1.28	2.60	0.93	0.94	1.07
235463_s_at	LASS6	0.84	2.51	1.71	1.48	0.97
211615_s_at	LRPPRC	1.20	0.36	0.46	0.52	0.67
209205_s_at	LMO4	3.31	1.13	0.80	0.53	1.11
200706_s_at	LITAF	1.16	1.19	0.80	0.39	0.49
242794_at	MAML3	1.00	0.25	0.41	0.86	1.01
228846_at	MXD1	1.75	2.12	2.77	2.83	2.52
210778_s_at	MXD4	0.87	0.16	0.28	0.34	0.53
202364_at	MXI1	1.11	0.75	0.40	0.43	0.54
226797_at	MBTD1	0.45	0.38	0.60	1.24	1.11
214831_at	MED28	0.87	2.32	1.40	4.14	3.53
224416_s_at	MED28	1.36	0.87	2.10	1.47	0.97
227786_at	MED30	0.50	1.00	2.26	2.42	2.03
235473_at	MED6	1.02	1.55	2.44	1.61	2.85
207233_s_at	MITF	1.14	1.13	0.57	0.44	0.76
224714_at	MKI67IP	0.33	0.74	1.33	1.35	1.29
218259_at	MKL2	0.77	0.55	0.38	0.43	0.65
214108_at	MAX	0.88	2.45	1.00	3.56	1.77
40569_at	MZF1	0.85	0.46	0.55	0.79	0.71
224784_at	MLLT6	1.31	1.07	1.41	0.46	0.58
208328_s_at	MEF2A	0.85	2.40	1.72	1.88	1.60
214684_at	MEF2A	1.22	2.07	2.18	1.40	2.07

211675_s_at	MDFIC	0.83	1.34	0.74	0.44	0.62
222018_at	NACA	0.44	0.35	1.02	0.70	1.04
222589_at	NLK	1.08	1.63	1.75	2.23	1.79
203964_at	NMI	2.52	5.63	3.18	3.43	3.77
218902_at	NOTCH1	1.03	0.49	0.56	0.69	0.64
204702_s_at	NFE2L3	1.98	2.86	1.88	2.07	1.18
236471_at	NFE2L3	1.03	1.94	3.14	2.82	4.57
208003_s_at	NFAT5	1.14	0.69	1.04	0.45	0.90
203574_at	NFIL3	2.03	1.19	1.19	2.38	2.59
209106_at	NCOA1	1.12	0.49	0.89	0.76	1.87
225344_at	NCOA7	19.57	8.92	4.16	3.64	2.71
202599_s_at	NRIP1	1.52	2.29	1.88	1.83	2.26
202600_s_at	NRIP1	1.61	2.15	2.36	2.17	2.30
203920_at	NR1H3	0.86	0.60	1.76	1.00	0.39
204622_x_at	NR4A2	1.05	1.72	1.19	2.52	1.64
216248_s_at	NR4A2	1.13	1.94	1.73	3.35	4.41
218127_at	NFYB	1.50	0.48	0.77	1.32	1.49
227220_at	NFXL1	0.49	1.35	1.16	1.11	0.98
228170_at	OLIG1	1.53	4.69	0.98	0.76	1.11
121_at	PAX8	1.05	1.49	1.64	1.48	2.17
209552_at	PAX8	2.71	1.85	1.71	4.07	2.88
228230_at	PRIC285	2.68	5.34	1.86	7.61	4.13
232787_at	PRIC285	6.05	2.35	3.34	2.86	1.40
37152_at	PPARD	0.86	0.38	0.70	0.87	0.68
225048_at	PHF10	0.70	0.49	0.84	0.93	1.34
225820_at	PHF17	1.66	1.07	0.38	1.30	1.42
209422_at	PHF20	0.95	0.48	0.70	0.88	0.77
217954_s_at	PHF3	1.06	1.50	1.54	1.91	2.31
207002_s_at	PLAGL1	1.18	2.41	1.95	1.28	1.88
209318_x_at	PLAGL1	1.32	2.06	1.49	0.87	1.32
224701_at	PARP14	4.02	10.87	4.71	4.61	4.49
222273_at	PAPOLG	0.70	0.55	1.20	1.61	2.28
226326_at	PCGF5	0.96	3.50	2.74	1.70	1.39
227935_s_at	PCGF5	0.99	3.72	2.12	1.44	1.36
229194_at	PCGF5	0.95	3.58	2.42	1.92	1.45
209511_at	POLR2F	0.95	0.54	0.70	0.94	2.38
202306_at	POLR2G	0.92	0.70	0.57	0.44	0.61
211730_s_at	POLR2L	0.80	0.48	0.43	0.44	0.33
222490_at	POLR3E	0.79	0.44	0.89	2.29	1.26
216525_x_at	PMS2L3	0.75	0.48	0.78	0.85	1.04
228964_at	PRDM1	1.23	2.79	1.63	1.07	1.44
230777_s_at	PRDM15	1.05	0.52	0.89	0.60	0.43
229515_at	PAWR	0.69	2.31	0.24	1.92	0.66
222152_at	PDCD6	0.48	0.84	0.70	0.71	1.03
222380_s_at	PDCD6	0.35	0.75	1.01	0.97	1.65
201600_at	PHB2	1.05	0.48	0.67	0.45	0.59
222406_s_at	PNRC2	0.80	0.60	1.31	1.41	2.15
209503_s_at	PSMC5	0.79	0.41	1.20	0.81	1.00
242482_at	PRKAR1A	1.34	0.64	0.59	0.41	0.94
226762_at	PURB	0.65	0.69	1.20	0.42	0.92
226090_x_at	RABL3	2.21	0.57	1.11	0.72	0.50
200864_s_at	RAB11A	0.98	1.45	1.22	1.66	2.62

208819_at	RAB8A	0.93	2.37	2.18	3.09	2.16
212706_at	RASA4	1.75	1.36	0.38	0.40	1.13
242297_at	RREB1	0.45	1.15	0.98	0.74	1.22
218088_s_at	RRAGC	0.69	2.22	1.24	1.24	1.09
222514_at	RRAGC	0.95	2.38	1.65	1.29	0.94
228571_at	RBAK	0.45	0.69	1.29	0.91	0.81
218344_s_at	RCOR3	0.83	0.65	0.73	0.95	2.02
212332_at	RBL2	1.06	0.43	0.48	0.80	1.91
203749_s_at	RARA	0.69	0.95	1.13	2.47	0.46
201217_x_at	RPL3	1.04	0.70	0.39	0.43	0.43
211073_x_at	RPL3	0.97	0.65	0.38	0.36	0.42
211666_x_at	RPL3	0.90	0.62	0.32	0.31	0.34
212039_x_at	RPL3	1.02	0.69	0.39	0.45	0.51
204635_at	RPS6KA5	1.81	1.43	1.51	0.98	2.30
228455_at	RBM15	1.66	0.42	0.78	0.88	0.95
230832_at	RTF1	2.31	1.20	1.08	0.65	0.54
217226_s_at	SFXN3	0.65	0.76	0.98	0.98	0.49
200887_s_at	STAT1	1.75	6.99	3.89	3.99	5.39
209969_s_at	STAT1	3.62	9.70	4.88	9.25	12.04
M97935_3_at	STAT1	1.99	10.46	4.83	4.47	5.79
M97935_5_at	STAT1	2.42	6.26	3.48	4.27	8.54
M97935_MA_at	STAT1	2.93	19.24	9.10	10.73	15.21
M97935_MB_at	STAT1	2.22	5.16	4.69	3.99	5.25
205170_at	STAT2	1.72	4.98	2.95	1.65	1.86
225636_at	STAT2	2.10	8.19	4.32	4.19	5.06
208991_at	STAT3	1.56	2.16	2.25	1.55	1.83
206118_at	STAT4	1.73	2.89	2.33	1.60	1.61
222482_at	SSBP3	0.82	0.50	0.63	0.76	0.91
201138_s_at	SSB	3.27	2.80	2.89	2.94	2.71
201139_s_at	SSB	2.24	2.77	1.93	2.51	2.02
202527_s_at	SMAD4	1.06	1.04	1.90	2.35	2.43
225223_at	SMAD5	0.55	0.38	0.90	1.03	2.04
202863_at	SP100	1.48	4.10	3.69	3.44	4.21
202864_s_at	SP100	1.62	3.53	2.90	3.76	3.61
210218_s_at	SP100	2.13	2.56	2.40	2.29	3.61
237426_at	SP100	1.90	1.55	1.20	2.18	2.92
208012_x_at	SP110	3.41	14.01	4.11	7.26	7.87
208392_x_at	SP110	3.59	5.56	2.46	2.25	5.00
209761_s_at	SP110	4.40	8.17	3.68	4.00	5.02
209762_x_at	SP110	2.80	13.87	4.36	6.71	6.97
223980_s_at	SP110	7.05	13.52	4.36	4.08	6.17
232529_at	SP3	0.72	1.15	0.87	1.05	2.19
228975_at	SP6	0.84	0.34	0.79	0.56	0.20
202774_s_at	SFRS8	0.98	0.50	0.92	0.94	1.11
201416_at	SOX4	0.87	0.41	0.16	0.29	0.35
201417_at	SOX4	0.61	0.13	0.40	0.39	0.37
224864_at	SRA1	1.04	1.08	1.12	1.85	3.17
212857_x_at	SUB1	1.05	2.06	1.64	1.05	1.74
217995_at	SQRDL	1.25	2.04	2.09	2.13	1.91
222749_at	SUFU	1.38	1.81	0.45	0.46	0.66
222566_at	SUV420H1	0.47	0.79	0.68	0.45	0.52
212520_s_at	SMARCA4	0.74	0.45	0.69	1.12	1.28

213720_s_at	SMARCA4	0.90	0.42	0.70	0.77	1.21
229511_at	SMARCE1	0.44	1.65	0.96	1.14	1.51
230297_x_at	SYNGAP1	0.17	0.56	0.84	0.86	0.59
235020_at	TAF4B	0.69	0.41	2.20	2.04	2.55
221264_s_at	TARDBP	0.48	0.74	0.93	1.10	1.16
235878_at	TAF1B	2.06	1.06	1.55	2.36	3.57
213024_at	TMF1	0.67	1.27	2.18	1.07	1.21
208398_s_at	TBPL1	1.20	0.85	1.63	2.08	2.23
220607_x_at	TH1L	1.01	0.25	0.58	1.00	0.76
225006_x_at	TH1L	1.05	0.41	0.61	0.77	0.72
225261_x_at	TH1L	0.82	0.26	0.78	0.39	0.80
225865_x_at	TH1L	0.81	0.35	0.58	0.89	0.79
209751_s_at	TRAPPC2	0.98	1.16	1.09	2.34	0.97
202080_s_at	TRAK1	0.98	0.46	0.72	0.55	0.64
214924_s_at	TRAK1	0.87	0.50	1.05	1.06	1.07
202396_at	TCERG1	1.03	0.49	1.04	1.42	1.14
203753_at	TCF4	1.58	2.76	1.89	2.05	2.05
212382_at	TCF4	2.34	3.84	1.55	1.88	2.70
212386_at	TCF4	2.22	3.25	1.81	2.18	3.14
213891_s_at	TCF4	1.51	3.32	1.49	2.17	2.64
222146_s_at	TCF4	0.68	4.17	2.65	1.12	2.53
206715_at	TFEC	1.10	3.10	4.58	2.77	3.86
232383_at	TFEC	0.85	2.88	1.83	2.02	3.61
236995_x_at	TFEC	1.55	2.74	1.01	0.42	3.33
222633_at	TBL1XR1	0.84	0.33	0.44	0.55	0.76
223013_at	TBL1XR1	0.96	0.37	0.42	0.43	0.54
204872_at	TLE4	1.20	1.50	2.11	1.89	2.40
233575_s_at	TLE4	0.27	1.13	2.05	2.19	2.78
218188_s_at	TIMM13	0.76	0.32	0.61	0.85	0.69
202307_s_at	TAP1	3.24	4.82	3.55	5.72	3.53
218145_at	TRIB3	0.59	0.25	0.88	0.71	1.92
218502_s_at	TRPS1	1.43	0.46	0.37	1.01	0.90
222651_s_at	TRPS1	0.94	0.44	0.42	0.60	0.88
219231_at	TGS1	1.14	1.09	1.14	2.08	1.19
213293_s_at	TRIM22	2.34	8.84	3.07	4.26	6.49
213301_x_at	TRIM24	0.44	0.92	0.89	0.79	0.89
212118_at	TRIM27	0.66	0.42	0.65	0.63	1.03
213748_at	TRIM66	0.83	0.72	0.49	0.73	1.11
218012_at	TSPYL2	0.45	1.53	1.00	0.84	1.54
218184_at	TULP4	1.25	0.38	0.52	1.23	0.82
239742_at	TULP4	0.91	0.41	0.73	0.46	1.10
211714_x_at	TUBB	0.77	0.91	0.78	0.53	0.49
212320_at	TUBB	0.93	0.73	0.71	0.48	0.41
225179_at	UBE2K	1.15	0.46	0.69	0.81	1.03
218082_s_at	UBP1	1.04	1.32	1.86	1.67	2.02
215737_x_at	USF2	0.97	0.71	0.79	0.37	0.63
224608_s_at	VPS25	0.94	1.00	0.51	0.40	0.46
224833_at	ETS1	0.28	1.22	1.25	2.02	2.36
209189_at	FOS	0.79	0.46	0.82	0.76	0.92
209348_s_at	MAF	1.62	0.84	0.20	0.28	0.50
36711_at	MAFF	1.08	0.63	0.27	0.59	0.49
208627_s_at	YBX1	0.89	0.40	0.61	0.41	0.48

221203_s_at	YEATS2	2.20	3.69	1.27	1.66	2.09
204180_s_at	ZBTB43	2.05	1.66	1.01	1.25	1.18
204181_s_at	ZBTB43	2.17	1.75	1.02	0.98	1.07
225845_at	ZBTB44	0.55	0.48	0.61	0.73	0.84
229862_x_at	ZBTB45	0.25	0.86	0.87	1.19	0.84
219186_at	ZBTB7A	0.48	0.74	0.80	1.16	1.15
219676_at	ZSCAN16	2.08	0.71	1.01	1.12	1.53
233031_at	ZEB2	0.62	0.78	1.07	1.66	2.03
235593_at	ZEB2	0.60	1.46	1.59	1.93	2.09
205739_x_at	ZNF107	0.69	11.32	2.60	3.69	2.97
243312_at	ZNF107	0.94	1.76	1.68	1.92	3.30
206928_at	ZNF124	1.47	1.62	0.96	2.34	1.63
234394_at	ZNF124	0.80	0.72	0.70	0.39	0.59
214741_at	ZNF131	1.49	0.78	1.19	0.74	2.72
225916_at	ZNF131	0.72	0.68	1.04	2.11	1.14
235166_at	ZNF148	1.13	0.50	0.46	1.00	0.83
224014_at	ZNF160	0.48	1.51	1.11	0.44	1.94
226787_at	ZNF18	0.52	0.43	1.49	1.42	2.27
244024_at	ZNF182	0.45	1.11	0.95	0.91	0.98
205855_at	ZNF197	0.62	0.64	1.28	1.30	2.06
213916_at	ZNF20	0.88	0.86	2.09	1.12	1.02
207338_s_at	ZNF200	3.14	1.79	2.37	1.45	1.73
214706_at	ZNF200	1.48	1.83	2.48	1.70	1.30
203739_at	ZNF217	0.48	0.95	1.35	0.98	1.76
223714_at	ZNF256	0.56	0.89	0.60	2.22	1.15
205917_at	ZNF264	0.83	0.82	0.52	0.43	0.72
219540_at	ZNF267	1.35	1.20	2.04	1.25	1.36
218645_at	ZNF277	1.04	2.05	1.14	1.09	1.42
218401_s_at	ZNF281	0.39	0.55	1.12	1.01	1.20
222619_at	ZNF281	0.31	0.71	1.26	1.09	1.08
228785_at	ZNF281	0.34	0.89	0.90	1.00	1.31
225539_at	ZNF295	0.45	0.98	1.51	0.94	0.79
227980_at	ZNF322A	0.98	0.47	0.77	0.80	0.85
219266_at	ZNF350	0.74	1.53	2.61	3.53	3.44
218149_s_at	ZNF395	0.55	0.94	0.41	0.50	0.58
228718_at	ZNF44	0.89	0.56	0.45	0.35	0.91
215012_at	ZNF451	0.38	0.72	0.51	0.36	0.49
235604_x_at	ZNF493	0.99	0.97	6.68	2.39	2.03
227195_at	ZNF503	0.40	0.77	0.48	0.85	1.19
231940_at	ZNF529	0.51	0.47	0.87	1.05	0.95
242992_at	ZNF551	2.74	0.74	0.97	0.42	0.88
230205_at	ZNF561	0.94	0.51	1.92	2.22	2.58
243790_at	ZNF585A	4.04	0.27	0.74	1.50	1.19
227045_at	ZNF614	0.54	0.52	0.39	1.01	1.03
226590_at	ZNF618	0.93	8.05	3.50	3.86	3.70
238444_at	ZNF618	5.56	0.89	3.07	2.92	8.59
235179_at	ZNF641	0.99	0.72	0.88	0.47	0.65
225266_at	ZNF652	1.16	0.66	0.66	0.40	0.50
241348_at	ZNF654	0.21	1.59	1.10	1.16	1.10
224593_at	ZNF664	0.79	0.73	0.65	0.47	0.44
244398_x_at	ZNF684	25.80	11.10	1.63	1.42	1.57
227445_at	ZNF689	0.48	0.64	1.32	1.96	2.27

227080_at	ZNF697	0.64	0.68	0.88	0.71	0.41
229700_at	ZNF738	0.70	0.85	0.64	0.78	2.53
240155_x_at	ZNF493	0.42	1.05	1.07	1.32	1.30
227670_at	ZNF75A	0.94	1.09	0.97	1.59	2.02
57516_at	ZNF764	0.87	0.59	0.82	0.41	1.32
238437_at	ZNF805	0.39	0.99	1.20	0.41	1.03
234111_at	ZNF81	0.83	0.48	1.14	1.00	0.92
235170_at	ZNF92	0.78	0.90	1.66	1.71	2.28
210281_s_at	ZMYM2	0.50	0.87	1.53	0.77	0.89
225076_s_at	ZNFX1	3.01	4.31	3.95	2.41	3.44
218639_s_at	ZXDC	0.69	0.42	0.93	1.21	0.98

Translation

201000_at	AARS	1.26	0.49	0.78	0.84	0.80
200027_at	NARS	0.80	0.27	0.65	0.63	0.73
217809_at	BZW2	0.89	0.44	0.74	0.79	0.55
202387_at	BAG1	1.53	3.39	2.33	2.16	1.94
211475_s_at	BAG1	1.60	2.23	1.88	1.00	1.07
214665_s_at	CHP	1.02	0.40	0.66	0.55	0.55
223477_s_at	C12orf65	0.43	1.32	0.74	1.31	2.14
221903_s_at	CYLD	0.97	2.21	1.82	1.32	1.53
226939_at	CPEB2	0.90	2.69	2.41	2.25	1.50
235479_at	CPEB2	1.24	3.14	2.76	1.50	1.64
215761_at	DMXL2	0.23	1.12	0.88	0.45	0.96
225546_at	EEF2K	0.83	0.45	0.37	0.37	0.44
227708_at	EEF1A1	0.96	0.63	0.37	0.28	0.33
200705_s_at	EEF1B2	1.03	0.53	0.53	0.49	0.50
200689_x_at	EEF1G	1.10	0.72	0.64	0.67	0.45
211345_x_at	EEF1G	1.04	0.71	0.57	0.67	0.47
211927_x_at	EEF1G	0.98	0.76	0.60	0.48	0.51
200094_s_at	EEF2	0.98	0.68	0.61	0.46	0.50
204102_s_at	EEF2	1.05	0.74	0.54	0.22	0.44
223682_s_at	EIF1AD	0.30	1.66	0.98	1.21	1.15
239377_at	EIF1AD	0.29	1.23	1.56	1.25	1.01
224935_at	EIF2S3	0.80	0.63	0.70	0.47	0.58
215482_s_at	EIF2B4	0.69	0.48	0.90	1.00	1.00
218287_s_at	EIF2C1	1.03	0.40	0.65	0.73	0.79
203462_x_at	EIF3B	1.02	0.39	0.76	0.77	0.84
211501_s_at	EIF3B	0.78	0.47	0.68	0.60	0.94
236274_at	EIF3B	0.44	0.77	0.83	0.92	0.96
242550_at	EIF3B	0.46	0.60	0.72	0.99	1.05
215230_x_at	EIF3C	1.19	0.37	0.55	0.69	0.51
208697_s_at	EIF3E	0.90	0.66	0.50	0.49	0.57
217719_at	EIF3EIP	1.18	0.38	0.33	0.37	0.41
202232_s_at	EIF3M	0.97	0.47	0.79	0.82	1.04
201935_s_at	EIF4G3	0.75	0.93	0.49	1.01	1.03
201936_s_at	EIF4G3	0.48	0.83	0.38	0.48	0.49
214805_at	EIF4A1	0.72	0.89	0.61	0.48	1.23
211937_at	EIF4B	0.80	0.37	0.27	0.32	0.35
211938_at	EIF4B	0.86	0.46	0.37	0.40	0.40
219599_at	EIF4B	0.85	1.07	0.60	0.49	0.47
225940_at	EIF4E3	1.07	4.83	2.60	1.84	1.51

225941_at	EIF4E3	0.98	3.10	3.65	1.61	1.32
208290_s_at	EIF5	0.47	1.04	0.98	0.91	0.80
225158_at	GFM1	0.69	0.29	0.86	1.13	1.03
217846_at	QARS	1.07	0.76	0.59	0.45	0.67
200842_s_at	EPRS	0.99	0.34	0.58	1.03	0.63
200843_s_at	EPRS	1.01	0.39	0.55	0.76	0.56
201841_s_at	HSPB1	0.61	17.07	0.71	1.58	0.94
221896_s_at	HIGD1A	1.03	1.15	1.27	0.44	1.13
204744_s_at	IARS	0.77	0.22	0.33	0.45	0.32
217900_at	IARS2	0.92	0.60	0.57	0.41	0.57
217810_x_at	LARS	0.95	0.36	0.57	0.53	0.60
222427_s_at	LARS	1.16	0.36	0.73	0.48	0.60
222428_s_at	LARS	0.79	0.30	1.06	0.72	0.61
243529_at	MARS2	2.16	0.94	0.46	1.26	0.75
208787_at	MRPL3	0.82	0.37	0.66	0.61	0.62
225260_s_at	MRPL32	0.74	1.04	0.75	2.01	2.25
218890_x_at	MRPL35	0.41	0.56	0.79	0.69	0.98
217919_s_at	MRPL42	0.77	0.33	1.89	1.70	2.81
224332_s_at	MRPL43	0.96	0.47	1.05	1.59	1.13
223481_s_at	MRPL47	0.67	0.51	0.45	0.99	0.64
218281_at	MRPL48	0.98	0.26	0.42	0.56	0.99
226241_s_at	MRPL52	0.68	0.44	2.73	0.46	0.44
209609_s_at	MRPL9	1.14	0.49	1.04	1.13	1.17
226296_s_at	MRPS15	0.87	0.54	0.48	0.48	0.49
218385_at	MRPS18A	1.02	1.25	1.75	2.01	2.19
221693_s_at	MRPS18A	0.79	1.55	2.02	4.53	2.33
228019_s_at	MRPS18C	0.65	1.36	1.61	2.43	1.80
224919_at	MRPS6	0.94	0.89	0.54	0.75	0.49
225126_at	MRRF	0.94	0.68	1.02	0.48	0.64
223035_s_at	FARSB	1.08	0.49	0.54	0.68	0.77
209063_x_at	PAIP1	2.27	1.70	1.09	1.26	1.61
209064_x_at	PAIP1	0.85	1.15	0.98	0.96	2.44
213750_at	RSL1D1	0.92	0.44	0.55	0.55	0.56
221989_at	RPL10	0.58	0.50	0.94	0.99	1.11
200036_s_at	RPL10A	0.97	0.45	0.36	0.36	0.37
214271_x_at	RPL12	1.14	0.76	0.90	0.71	0.48
212191_x_at	RPL13	0.91	0.69	0.50	0.72	0.54
229590_at	RPL13	1.06	0.42	0.54	0.65	0.29
200715_x_at	RPL13A	0.87	0.43	0.63	0.55	0.57
221476_s_at	RPL15	1.18	0.55	0.40	0.43	0.45
212270_x_at	RPL17	1.14	0.59	0.55	0.48	0.63
212537_x_at	RPL17	1.06	0.57	0.52	0.49	0.62
200869_at	RPL18A	0.98	0.48	0.78	0.95	0.86
214042_s_at	RPL22	0.81	0.79	0.40	0.46	0.44
220960_x_at	RPL22	0.99	0.74	0.46	0.45	0.65
221726_at	RPL22	0.86	0.61	0.43	0.32	0.32
225541_at	RPL22L1	0.70	0.67	1.01	0.70	0.47
200888_s_at	RPL23	1.34	0.49	0.56	0.61	0.55
200003_s_at	RPL28	1.28	1.12	1.69	2.20	1.92
213969_x_at	RPL29	1.08	0.59	0.49	0.68	0.65
224763_at	RPL37	0.83	0.61	0.48	1.36	0.82
221943_x_at	RPL38	0.96	0.77	0.95	2.16	1.56

200089_s_at	RPL4	1.00	0.53	0.45	0.39	0.38
201154_x_at	RPL4	0.99	0.52	0.38	0.35	0.34
211710_x_at	RPL4	0.96	0.58	0.40	0.40	0.33
200937_s_at	RPL5	0.88	0.46	0.36	0.34	0.32
213080_x_at	RPL5	1.05	0.52	0.42	0.49	0.41
200717_x_at	RPL7	1.01	0.67	0.47	0.48	0.47
212042_x_at	RPL7	0.96	0.58	0.52	0.50	0.59
234873_x_at	RPL7A	1.46	0.58	0.66	0.33	0.50
200936_at	RPL8	0.97	0.68	0.56	0.68	0.48
235309_at	RPS15A	1.11	0.38	0.24	0.93	0.78
203107_x_at	RPS2	1.05	0.82	0.54	0.46	0.49
227722_at	RPS23	0.97	0.30	0.38	0.91	0.57
218007_s_at	RPS27L	0.80	0.93	1.51	2.14	2.45
222487_s_at	RPS27L	1.07	0.97	1.47	3.11	2.62
238935_at	RPS27L	0.76	1.04	1.18	3.89	2.58
201257_x_at	RPS3A	0.91	0.79	0.50	0.49	0.60
212391_x_at	RPS3A	0.89	0.75	0.49	0.51	0.56
200099_s_at	RPS3A	0.99	0.75	0.45	0.40	0.43
200024_at	RPS5	1.11	0.66	0.60	0.77	0.49
200081_s_at	RPS6	0.82	0.69	0.77	0.79	0.40
203777_s_at	RPS6KB2	1.34	0.47	0.64	0.95	0.58
200858_s_at	RPS8	0.93	0.70	0.57	0.68	0.48
211972_x_at	RPLP0	1.00	0.54	0.37	0.54	0.55
214167_s_at	RPLP0	0.89	0.47	0.47	0.38	0.45
201206_s_at	RRBP1	1.18	2.07	1.49	1.57	1.08
214096_s_at	SHMT2	0.94	0.41	0.52	0.62	0.53
214437_s_at	SHMT2	0.91	0.18	0.37	0.11	0.45
202541_at	SCYE1	0.98	0.44	1.20	1.64	1.17
212652_s_at	SNX4	0.83	1.00	1.94	1.16	2.23
212845_at	SAMD4A	14.53	21.36	16.80	14.28	8.54
215495_s_at	SAMD4A	3.27	18.30	30.89	31.95	6.60
201263_at	TARS	2.01	0.76	0.86	1.17	1.27
240206_at	TARS	1.24	0.49	0.72	0.97	0.44
222768_s_at	TRMT6	0.37	0.47	0.73	3.19	1.36
233970_s_at	TRMT6	0.49	0.74	1.22	0.73	0.76
200628_s_at	WARS	2.35	5.78	1.36	0.63	0.46
200629_at	WARS	2.51	3.86	1.90	0.80	0.70
201113_at	TUFM	0.85	0.42	0.56	0.68	0.60
212048_s_at	YARS	0.64	0.40	0.83	1.07	1.02
215706_x_at	ZYX	0.97	0.88	0.87	0.36	0.77

Transport

211600_at	---	0.88	0.87	0.40	0.33	0.53
222735_at	---	0.59	1.98	0.46	0.37	0.34
227620_at	---	1.19	1.05	0.49	0.47	0.35
205771_s_at	AKAP7	0.91	4.65	4.62	2.33	1.97
200710_at	ACADVL	1.10	0.63	0.54	0.49	0.61
209600_s_at	ACOX1	0.89	0.45	1.32	0.62	0.67
205423_at	AP1B1	1.05	0.65	0.42	0.64	1.40
201613_s_at	AP1G2	0.73	0.70	0.55	0.50	0.89
203300_x_at	AP1S2	1.09	0.45	0.39	0.54	0.53
203299_s_at	AP1S2	0.70	0.61	0.62	0.42	0.56

224686_x_at	ARL17P1	0.68	0.41	0.76	1.00	1.16
227227_at	ARL17P1	0.48	0.46	0.58	0.91	1.28
204151_x_at	AKR1C1	1.06	0.35	0.69	0.86	0.81
216594_x_at	AKR1C1	1.38	0.32	0.74	1.11	0.85
209160_at	AKR1C3	0.36	0.09	0.34	2.70	0.22
217757_at	A2M	0.80	1.54	0.32	0.15	0.17
227021_at	AOF1	0.89	2.93	1.65	2.12	0.88
223723_at	MFI2	0.35	0.49	0.55	0.37	0.56
222715_s_at	AP1GBP1	0.92	1.22	3.00	1.57	1.06
204416_x_at	APOC1	1.58	1.17	0.11	0.29	0.35
213553_x_at	APOC1	0.68	0.53	0.25	0.44	0.59
221653_x_at	APOL2	2.32	6.66	5.33	2.53	2.23
221087_s_at	APOL3	0.94	6.66	3.47	2.89	2.14
219716_at	APOL6	7.30	8.27	5.61	2.98	5.11
241869_at	APOL6	3.13	7.67	3.35	1.65	3.74
205568_at	AQP9	0.80	0.75	0.22	0.11	0.13
212297_at	ATP13A3	0.67	0.42	0.47	0.53	0.63
209281_s_at	ATP2B1	0.76	0.36	0.38	0.69	0.88
215716_s_at	ATP2B1	0.91	0.43	0.34	0.73	0.46
207522_s_at	ATP2A3	0.59	0.38	1.05	0.56	0.10
213036_x_at	ATP2A3	0.75	0.39	0.31	0.41	0.09
214934_at	ATP9B	0.75	0.40	0.38	0.41	0.37
214255_at	ATP10A	0.77	4.90	5.43	4.35	5.26
205198_s_at	ATP7A	0.79	0.62	0.54	0.49	0.52
201242_s_at	ATP1B1	0.90	2.85	0.73	0.61	1.01
201243_s_at	ATP1B1	0.89	2.11	0.66	0.68	0.70
216066_at	ABCA1	0.33	1.51	0.58	2.87	1.34
208161_s_at	ABCC3	3.22	0.17	0.30	0.30	0.51
230682_x_at	ABCC3	2.88	0.35	0.55	0.46	0.58
242553_at	ABCC3	1.00	0.41	0.92	0.20	1.22
209380_s_at	ABCC5	0.76	0.47	0.44	0.81	1.13
201873_s_at	ABCE1	0.70	0.44	0.61	0.72	0.69
209735_at	ABCG2	1.00	1.84	0.41	0.33	0.16
207593_at	ABCG4	2.00	1.04	1.05	0.52	0.96
203454_s_at	ATOX1	0.67	1.04	2.43	2.03	1.61
200837_at	BCAP31	0.88	1.08	0.71	0.53	0.50
207671_s_at	BEST1	0.53	0.62	0.90	1.04	2.21
237003_at	BEST3	1.47	0.84	0.81	0.69	0.43
203771_s_at	BLVRA	0.96	8.08	1.94	1.57	1.82
203773_x_at	BLVRA	1.34	5.65	2.42	2.23	2.90
211729_x_at	BLVRA	1.24	5.72	2.24	2.93	2.24
219714_s_at	CACNA2D3	1.10	0.64	0.32	0.50	0.38
228083_at	CACNA2D4	0.74	0.78	0.37	0.36	0.52
214933_at	CACNA1A	5.83	3.50	4.35	2.55	1.46
201380_at	CRTAP	0.96	0.87	0.57	0.43	0.74
226656_at	CRTAP	0.80	0.63	0.38	0.31	0.24
227138_at	CRTAP	0.77	0.53	0.14	0.34	0.35
201432_at	CAT	0.97	0.60	0.27	0.39	0.45
211922_s_at	CAT	1.00	0.53	0.41	0.15	0.61
226273_at	CLCN5	1.38	0.78	0.49	0.84	0.56
204233_s_at	CHKA	1.10	2.04	0.79	0.21	0.15
239717_at	CHRNA10	1.51	3.72	1.00	0.22	1.28

226350_at	CHML	0.75	0.65	0.56	0.50	0.47
218085_at	CHMP5	2.12	2.06	2.18	2.21	2.02
219356_s_at	CHMP5	1.34	2.85	2.13	2.56	3.04
205781_at	C16orf7	2.55	1.98	0.49	0.58	0.57
223180_s_at	C18orf55	0.69	0.50	0.56	0.69	0.64
223181_at	C18orf55	1.20	1.22	0.52	0.52	0.40
226516_at	C19orf28	0.65	2.94	0.38	1.42	0.16
234697_x_at	C3orf31	2.43	1.15	1.49	0.77	1.13
226301_at	C6orf192	0.99	8.66	2.04	1.58	0.92
206284_x_at	CLTB	1.05	0.48	0.94	0.96	0.83
217726_at	COPZ1	0.74	0.47	0.44	0.66	0.67
202646_s_at	CSDE1	0.70	0.81	0.46	0.52	0.61
229168_at	COL23A1	1.10	0.82	0.57	0.17	0.60
202119_s_at	CPNE3	0.86	0.82	0.42	0.51	0.56
219547_at	COX15	1.09	0.70	0.97	0.48	0.89
201112_s_at	CSE1L	0.88	0.38	0.76	0.85	1.10
210766_s_at	CSE1L	1.02	0.39	0.87	1.27	0.90
221482_s_at	ARPP-19	1.32	1.34	2.61	1.09	1.35
222453_at	CYBRD1	0.67	0.43	0.28	0.25	0.27
217200_x_at	CYB561	1.21	2.20	1.97	1.20	1.78
229415_at	CYCS	0.88	0.42	0.44	0.43	0.41
244546_at	CYCS	0.43	0.69	0.27	1.38	0.86
205749_at	CYP1A1	0.43	1.15	0.52	2.20	0.85
202435_s_at	CYP1B1	0.86	0.60	0.34	0.29	0.17
202436_s_at	CYP1B1	0.90	0.56	0.29	0.27	0.25
202437_s_at	CYP1B1	0.90	0.53	0.43	0.29	0.25
203475_at	CYP19A1	1.09	2.96	1.24	0.94	2.33
211295_x_at	CYP2A6	2.03	2.65	0.91	0.72	0.94
226402_at	CYP2U1	0.97	1.24	1.76	2.43	0.85
203979_at	CYP27A1	1.15	0.43	0.38	0.25	0.23
228391_at	CYP4V2	1.02	1.60	0.83	0.48	0.65
235719_at	CYP4V2	0.96	2.58	0.47	0.71	0.75
212832_s_at	CKAP5	0.72	0.36	0.80	0.73	0.96
222134_at	DDO	3.60	2.62	2.39	4.15	4.73
221509_at	DENR	0.68	0.50	0.80	0.58	0.84
219402_s_at	DERL1	0.98	2.26	1.39	1.07	0.90
209389_x_at	DBI	0.81	0.60	0.76	0.65	0.45
204646_at	DPYD	0.94	1.68	0.78	0.42	0.44
226026_at	DIRC2	0.84	0.38	0.82	1.05	0.98
224576_at	ERGIC1	0.84	0.66	0.44	0.62	0.49
204858_s_at	ECGF1	1.42	3.43	2.40	1.36	1.07
217497_at	ECGF1	1.76	3.46	2.37	3.28	3.78
218498_s_at	ERO1L	1.10	1.01	2.01	1.34	0.70
222646_s_at	ERO1L	1.02	2.55	2.16	1.04	0.81
224926_at	EXOC4	1.02	1.79	0.69	0.49	0.52
226259_at	EXOC6	1.12	2.16	1.16	1.23	1.34
212026_s_at	EXOC7	2.35	0.37	2.37	1.55	1.32
202345_s_at	FABP5	0.40	0.87	0.14	0.17	0.35
208962_s_at	FADS1	0.89	0.20	0.48	0.90	0.73
208963_x_at	FADS1	1.00	0.08	0.54	0.69	0.59
208964_s_at	FADS1	1.10	0.44	0.72	0.95	0.68
203646_at	FDX1	0.74	0.72	1.03	0.49	0.35

203647_s_at	FDX1	1.13	0.81	0.85	0.58	0.39
207813_s_at	FDXR	1.27	0.40	2.20	3.59	2.86
203689_s_at	FMR1	1.27	2.79	2.60	2.72	1.54
215245_x_at	FMR1	2.49	2.77	2.11	1.68	2.44
225007_at	---	0.58	0.63	0.65	0.46	0.44
217655_at	FXYD5	0.48	0.45	0.91	0.64	0.85
218084_x_at	FXYD5	0.93	0.79	0.69	0.50	0.60
224252_s_at	FXYD5	0.93	0.67	0.83	0.41	0.50
217897_at	FXYD6	1.00	3.10	2.36	1.30	2.25
223278_at	GJB2	0.28	2.26	1.42	0.81	0.12
219821_s_at	GFOD1	1.00	0.96	0.43	0.60	0.66
206662_at	GLRX	2.35	2.15	2.65	1.20	3.19
201106_at	GPX4	1.19	0.91	0.73	0.42	0.65
226177_at	GLTP	0.98	0.44	0.42	0.58	0.38
225023_at	GOPC	0.56	2.23	2.30	1.00	0.93
215749_s_at	GORASP1	1.68	1.47	2.13	1.52	1.33
220576_at	PGAP1	1.96	3.38	1.19	1.85	1.55
239725_at	PGAP1	3.73	3.41	1.83	2.06	1.63
200643_at	HDLBP	1.76	0.71	0.53	0.42	0.69
235624_at	HDLBP	3.99	1.42	2.51	1.21	0.83
204647_at	HOMER3	1.04	0.82	0.40	0.43	0.59
230179_at	LOC285812	1.11	0.63	0.57	0.89	0.45
200992_at	IPO7	0.83	0.38	0.72	0.62	0.57
200993_at	IPO7	0.72	0.42	0.68	0.62	0.66
200994_at	IPO7	0.67	0.30	0.89	0.92	0.88
200995_at	IPO7	0.89	0.41	0.76	1.06	0.84
203710_at	ITPR1	1.07	0.89	0.67	0.43	1.19
240052_at	ITPR1	0.59	1.02	0.74	0.72	2.24
230966_at	IL4I1	2.59	4.53	5.61	4.91	2.77
203474_at	IQGAP2	1.33	3.13	1.09	1.08	1.01
225267_at	KPNA4	0.55	1.58	2.05	1.25	1.16
200699_at	KDEL2	0.71	0.40	0.60	0.68	0.61
219157_at	KLHL2	0.90	0.49	1.00	0.92	1.14
238828_at	KIAA1919	1.18	0.52	2.23	2.29	0.68
211005_at	LAT	0.45	0.74	0.96	0.74	0.48
240936_at	MFSD1	1.33	0.43	0.71	0.26	0.69
202180_s_at	MVP	1.03	2.80	1.21	1.35	1.05
208581_x_at	MT1X	2.12	3.67	3.08	6.15	4.86
212473_s_at	MICAL2	0.94	0.49	0.36	0.35	0.33
222014_x_at	MTO1	0.57	0.99	2.01	1.20	2.61
213000_at	MORC3	1.13	1.57	2.21	1.36	1.84
230110_at	MCOLN2	1.53	7.51	5.44	5.19	15.38
201468_s_at	NQO1	2.80	0.41	1.12	0.90	0.54
202001_s_at	NDUFA6	0.49	0.87	0.91	1.05	0.89
202839_s_at	NDUFB7	0.84	0.91	0.32	0.71	0.90
201757_at	NDUFS5	0.80	0.48	0.67	0.83	0.90
228355_s_at	NDUFA12L	0.70	0.48	0.78	1.26	0.48
209300_s_at	NECAP1	0.70	1.58	2.01	1.22	1.40
206491_s_at	NAPA	1.16	2.89	1.88	2.35	1.18
208751_at	NAPA	1.17	4.83	2.98	2.14	1.93
204961_s_at	NCF1	1.16	6.57	3.04	3.42	3.95
200701_at	NPC2	0.88	1.10	0.71	0.50	0.46

214870_x_at	NPIP	0.88	0.39	0.70	0.68	1.18
200063_s_at	NPM1	0.67	0.49	0.71	0.83	0.50
221923_s_at	NPM1	0.78	0.60	0.48	1.05	0.91
212709_at	NUP160	0.69	2.34	1.05	1.05	1.26
225470_at	NUP35	0.89	0.54	1.29	2.07	1.63
218295_s_at	NUP50	0.41	1.16	3.37	1.51	1.56
202153_s_at	NUP62	1.29	1.51	2.06	1.44	1.20
236505_at	NUP62	1.46	0.99	2.12	0.90	0.80
204435_at	NUPL1	1.06	0.94	2.08	1.42	1.52
238199_x_at	LOC440552	0.92	0.85	0.45	0.50	0.23
202073_at	OPTN	2.12	15.09	3.23	1.70	1.41
202074_s_at	OPTN	6.85	17.31	11.82	6.58	7.33
208158_s_at	OSBPL1A	1.12	5.59	2.52	1.53	1.68
209485_s_at	OSBPL1A	1.27	13.02	3.35	2.65	2.91
223464_at	OSBPL5	1.11	8.29	4.10	3.07	2.77
218676_s_at	PCTP	0.66	0.50	0.77	0.92	0.88
214735_at	PIP3-E	0.83	0.33	0.33	0.71	1.23
225147_at	PSCD3	0.32	0.63	0.54	0.50	1.81
203688_at	PKD2	1.12	0.73	0.88	0.43	0.79
240288_at	KCNRG	1.26	2.21	0.71	0.91	1.20
226518_at	KCTD10	0.83	0.60	0.49	0.52	0.53
223176_at	KCTD20	0.78	0.60	0.42	0.33	0.62
228299_at	KCTD20	0.81	0.47	0.52	0.69	0.68
238077_at	KCTD6	0.31	0.75	0.61	1.02	0.80
221584_s_at	KCNMA1	0.46	1.86	2.23	0.51	0.61
222857_s_at	KCNMB4	0.88	0.69	0.82	1.18	2.65
204788_s_at	PPOX	1.24	0.83	0.38	1.06	0.85
238117_at	PPOX	1.37	0.81	0.55	2.56	0.98
210401_at	P2RX1	1.01	0.70	0.43	0.57	0.44
207091_at	P2RX7	1.61	3.44	1.07	0.61	0.70
225177_at	RAB11FIP1	0.91	0.84	0.47	0.83	0.83
236019_at	RAB12	1.18	1.75	1.63	1.60	2.24
213405_at	RAB22A	0.89	0.51	0.55	0.45	0.38
218360_at	RAB22A	0.56	1.30	2.12	1.28	1.27
225251_at	RAB24	1.07	3.10	2.45	1.29	1.51
219412_at	RAB38	0.21	2.56	2.68	2.92	1.41
225001_at	RAB3D	0.65	0.64	0.64	0.48	0.45
203581_at	RAB4A	0.92	0.63	0.55	0.48	0.57
203582_s_at	RAB4A	0.96	0.57	0.59	0.34	0.65
201276_at	RAB5B	1.32	0.90	0.97	0.50	0.80
230266_at	RAB7B	0.69	0.36	0.32	0.36	0.38
221808_at	RAB9A	0.67	2.11	1.50	1.17	1.00
225064_at	RABEP1	0.70	0.93	2.02	1.09	1.54
211953_s_at	RANBP5	1.15	0.41	0.46	0.67	0.52
211954_s_at	RANBP5	0.92	0.66	0.51	0.50	0.46
211955_at	RANBP5	1.27	0.76	0.59	0.54	0.44
219684_at	RTP4	29.66	86.51	15.06	14.92	13.77
229823_at	RIMS2	10.39	5.97	0.22	0.94	0.71
238519_at	RSC1A1	0.59	0.47	0.58	0.71	0.71
219549_s_at	RTN3	0.94	0.54	0.47	0.58	0.54
238066_at	RBP7	0.87	0.90	0.17	0.20	0.29
226060_at	RFT1	1.21	0.46	1.02	0.95	1.17

235595_at	ARHGEF2	0.39	0.99	1.21	0.74	0.97
235549_at	RNF144B	2.88	2.04	0.89	0.87	1.66
201823_s_at	RNF14	1.12	1.06	0.79	0.49	1.29
234405_s_at	RNIXA	0.53	0.23	0.71	1.53	2.56
205241_at	SCO2	1.97	3.68	3.69	9.22	8.92
228408_s_at	SDAD1	0.38	0.66	0.97	1.17	1.37
215548_s_at	SCFD1	0.47	1.15	0.90	0.84	1.04
216392_s_at	SEC23IP	0.93	1.33	1.11	2.15	2.74
244700_at	SEC61B	1.23	2.41	0.75	1.13	0.59
214838_at	SFT2D2	2.60	3.70	1.62	1.18	0.78
232055_at	SFXN1	0.44	0.30	0.65	0.20	2.80
225143_at	SFXN4	0.81	0.25	0.87	0.68	0.65
200918_s_at	SRPR	0.69	0.49	0.75	0.67	1.09
225435_at	SSR1	0.96	0.51	0.29	0.19	0.22
222412_s_at	SSR3	0.53	0.95	0.56	0.48	1.04
220059_at	STAP1	1.38	6.14	11.89	1.78	1.82
228940_at	LOC727762	0.62	1.00	0.79	0.34	1.32
214084_x_at	NCF1	1.04	8.89	3.08	2.82	4.02
202800_at	SLC1A3	1.38	1.17	0.63	0.45	0.40
210422_x_at	SLC11A1	0.81	0.44	0.46	0.89	0.61
210423_s_at	SLC11A1	0.87	0.58	0.31	0.44	0.57
220740_s_at	SLC12A6	0.71	0.70	0.71	0.73	0.49
223596_at	SLC12A6	0.59	0.96	0.43	0.47	0.41
226741_at	SLC12A6	0.71	0.61	0.77	0.51	0.44
204404_at	SLC12A2	0.74	0.73	0.89	0.68	0.46
225043_at	SLC15A4	1.23	2.74	1.96	2.17	1.92
225057_at	SLC15A4	1.13	2.39	2.07	1.96	1.72
219915_s_at	SLC16A10	2.93	0.43	0.09	0.30	0.73
222939_s_at	SLC16A10	0.95	0.56	0.20	0.59	0.91
202856_s_at	SLC16A3	0.68	1.45	1.01	1.00	0.48
206600_s_at	SLC16A5	0.70	0.43	0.63	0.77	0.81
207038_at	SLC16A6	0.27	0.34	0.92	0.87	0.83
230748_at	SLC16A6	0.28	0.38	0.69	0.64	0.63
241866_at	SLC16A7	1.60	0.74	0.19	0.18	1.05
223441_at	SLC17A5	0.76	2.41	1.60	1.03	1.09
230494_at	SLC20A1	0.49	1.36	1.88	1.51	1.83
232232_s_at	SLC22A16	0.29	10.55	1.96	2.11	0.74
243969_at	SLC24A4	0.71	0.39	0.51	0.31	0.14
203339_at	SLC25A12	1.34	0.71	0.43	0.83	1.44
200657_at	SLC25A5	0.98	0.51	0.51	0.38	0.45
212085_at	SLC25A6	0.82	0.52	0.55	0.38	0.50
212826_s_at	SLC25A6	0.94	0.56	0.59	0.44	0.43
223222_at	SLC25A19	0.71	0.92	1.97	2.52	2.76
221432_s_at	SLC25A28	2.42	4.00	1.57	1.36	1.12
223192_at	SLC25A28	2.52	3.85	2.35	1.80	1.85
223296_at	SLC25A33	1.14	0.37	0.97	0.84	0.96
221920_s_at	SLC25A37	2.06	0.35	0.34	0.81	3.31
223649_s_at	SLC25A39	1.08	0.68	0.81	0.57	0.49
227012_at	SLC25A40	0.41	0.73	0.97	0.52	0.79
226679_at	SLC26A11	0.61	1.10	0.58	0.47	0.56
219344_at	SLC29A3	1.56	0.70	0.64	0.53	0.38
232432_s_at	SLC30A5	0.87	0.48	0.89	0.93	0.70

239596_at	SLC30A7	4.74	0.31	0.59	0.97	0.93
203164_at	SLC33A1	0.34	0.94	0.53	0.90	0.88
225881_at	SLC35B4	0.98	0.31	0.41	0.41	0.41
218485_s_at	SLC35C1	1.44	0.87	0.92	0.45	0.70
218041_x_at	SLC38A2	2.29	1.18	0.99	1.10	1.02
220924_s_at	SLC38A2	2.46	1.27	1.20	1.06	1.06
214830_at	SLC38A6	1.22	0.37	0.67	0.42	0.82
209267_s_at	SLC39A8	0.90	0.57	0.18	0.30	0.25
219869_s_at	SLC39A8	0.31	0.59	0.68	0.28	0.22
209884_s_at	SLC4A7	1.70	0.27	0.71	1.01	0.98
223798_at	SLC41A2	4.19	3.81	2.18	1.06	1.08
243894_at	SLC41A2	0.88	4.81	1.44	2.91	0.73
212944_at	SLC5A3	0.73	1.07	0.31	0.46	0.54
213164_at	SLC5A3	1.01	0.96	0.56	0.51	0.49
239394_at	SLC6A2	3.58	0.88	0.82	2.16	3.58
230597_at	SLC7A3	3.89	1.89	0.99	1.09	0.96
203580_s_at	SLC7A6	0.72	0.41	0.57	0.60	1.04
209921_at	SLC7A11	0.73	0.72	0.66	0.36	0.62
203473_at	SLCO2B1	1.27	1.67	0.48	0.41	0.91
211557_x_at	SLCO2B1	0.78	0.34	1.28	0.31	1.20
203509_at	SORL1	0.74	0.33	0.22	0.42	0.58
230707_at	SORL1	0.63	0.41	0.51	1.04	1.45
218404_at	SNX10	0.87	6.56	3.67	2.40	2.45
200991_s_at	SNX17	1.04	0.46	0.67	0.41	0.56
202113_s_at	SNX2	1.21	2.31	1.62	1.58	2.62
202114_at	SNX2	0.97	1.94	1.64	1.65	2.84
217792_at	SNX5	0.70	0.59	0.59	0.43	0.72
222410_s_at	SNX6	0.77	2.27	1.36	1.21	1.06
223027_at	SNX9	0.82	3.30	1.38	0.63	0.83
210357_s_at	SMOX	0.64	0.49	0.89	0.65	0.93
230077_at	SDHALP1	0.50	0.62	0.78	1.07	1.09
226693_at	SDHALP2	0.66	0.45	1.57	0.98	1.36
238423_at	SYTL3	2.33	3.87	1.65	0.87	0.88
242109_at	SYTL3	5.03	3.21	1.62	2.24	1.83
218666_s_at	STX17	1.19	1.89	2.26	1.95	2.17
222708_s_at	STX17	1.87	4.92	2.99	1.94	2.52
226662_at	STX17	1.64	7.65	2.54	1.58	2.11
228091_at	STX17	1.03	2.35	2.82	3.11	1.93
202260_s_at	STXBP1	0.74	0.37	1.00	0.39	0.36
226794_at	STXBP5	1.65	0.40	1.11	1.31	1.21
208829_at	TAPBP	1.09	2.08	1.81	0.84	0.58
226198_at	TOM1L2	1.78	0.49	1.05	0.97	1.30
208864_s_at	TXN	1.20	1.57	2.09	1.12	1.20
209077_at	TXN2	0.90	0.46	1.03	0.90	0.85
243664_at	TXNL1	0.43	0.90	1.17	0.75	0.84
225294_s_at	TRAPPC1	0.45	1.60	0.88	1.10	0.68
204985_s_at	TRAPPC6A	0.72	0.61	0.45	1.00	0.97
204043_at	TCN2	1.24	1.44	3.41	2.42	1.47
207332_s_at	TFRC	1.30	1.17	0.36	0.18	0.16
208691_at	TFRC	1.18	1.21	0.36	0.20	0.20
201821_s_at	TIMM17A	0.42	1.09	1.19	1.05	1.08
224913_s_at	TIMM50	1.45	0.68	0.55	0.30	0.45

200662_s_at	TOMM20	0.87	0.47	0.60	0.40	0.62
201399_s_at	TRAM1	1.05	2.15	1.55	1.52	1.42
225352_at	TLOC1	0.85	0.45	0.67	0.67	0.67
226050_at	TMCO3	0.83	0.99	0.63	0.46	0.28
227190_at	TMEM37	0.30	2.58	0.22	0.18	0.42
218772_x_at	TMEM38B	0.75	1.31	0.69	0.72	0.47
204769_s_at	TAP2	1.11	2.67	1.91	2.62	1.65
204770_at	TAP2	1.51	3.05	2.94	2.63	2.24
225973_at	TAP2	1.84	10.66	4.88	5.18	4.12
225765_at	TNPO1	0.72	1.25	2.03	1.30	1.52
217914_at	TPCN1	1.05	0.70	0.40	0.70	0.51
209065_at	UQCRB	0.99	0.60	0.37	0.47	0.77
209066_x_at	UQCRB	0.93	0.77	0.58	0.49	0.65
201903_at	UQCRC1	0.93	0.42	0.63	0.62	0.75
241755_at	UQCRC2	0.68	0.18	0.44	0.69	3.01
219348_at	USE1	1.05	0.69	0.40	0.38	0.34
221706_s_at	USE1	0.76	0.63	0.37	0.56	0.65
208998_at	UCP2	0.90	0.67	0.69	0.42	0.46
219053_s_at	VPS37C	0.61	0.83	0.94	0.50	0.71
235625_at	VPS41	0.99	2.08	0.16	0.53	0.49
217140_s_at	VDAC1	0.85	0.72	0.68	0.43	0.53
202940_at	WNK1	0.53	0.75	0.73	0.49	0.96
219077_s_at	WWOX	0.83	1.64	0.66	0.38	0.26
217781_s_at	ZFP106	0.95	0.61	0.46	0.37	0.58
222407_s_at	ZFP106	0.66	0.46	0.38	0.57	0.66

Tricarboxylic acid cycle

207071_s_at	ACO1	1.16	0.95	0.45	0.39	0.38
201729_s_at	KIAA0100	0.74	0.45	0.58	0.49	0.60
202783_at	NNT	1.14	1.01	0.82	0.59	0.42
238056_at	SDHC	1.13	0.72	0.73	0.73	0.41

Tubulin folding

202495_at	TBCC	0.44	1.24	1.48	1.45	1.30
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Ubiquitin cycle

201305_x_at	ANP32B	0.79	0.35	0.71	0.72	0.82
201306_s_at	ANP32B	1.00	0.48	0.77	0.83	0.71
225554_s_at	ANAPC7	1.26	0.45	1.08	0.88	0.81
212818_s_at	ASB1	0.53	0.63	0.48	0.46	0.58
226871_s_at	ATG4D	1.43	0.64	1.08	2.08	1.11
202204_s_at	AMFR	1.04	0.74	0.72	0.48	0.45
213473_at	BRAP	0.66	0.89	1.08	1.55	2.01
238523_at	C16orf44	0.23	0.41	0.36	0.31	0.33
228190_at	CTR9	4.07	0.97	1.22	1.94	2.04
203409_at	DDB2	0.85	1.04	2.46	3.59	3.94
201340_s_at	ENC1	0.62	0.25	0.40	0.82	0.48
209630_s_at	FBXW2	0.59	0.35	0.44	0.52	0.69
202271_at	FBXO28	0.74	0.48	0.85	0.67	0.91
221812_at	FBXO42	0.99	0.36	0.60	0.77	0.78
201178_at	FBXO7	1.09	2.29	1.55	1.16	1.07
243649_at	FBXO7	5.62	1.02	1.28	1.43	2.15

223240_at	FBXO8	0.67	1.97	2.31	2.29	2.56
225989_at	HERC4	0.49	1.31	1.11	1.37	0.49
219352_at	HERC6	6.68	38.78	8.70	9.56	13.27
241955_at	HECTD1	0.76	0.68	0.68	0.48	0.58
227568_at	HECTD2	2.45	1.28	0.68	0.96	0.61
205483_s_at	ISG15	14.04	48.11	14.90	48.70	78.18
223255_at	KIAA1333	0.81	1.60	0.88	2.12	1.27
219574_at	MARCH1	1.63	1.76	2.00	1.19	3.36
226394_at	MARCH5	1.45	0.98	0.42	1.23	0.91
223130_s_at	MYLIP	1.03	1.49	1.69	2.13	2.64
228098_s_at	MYLIP	1.17	1.71	2.63	3.34	2.66
227761_at	MYO5A	0.66	0.55	0.42	0.46	0.63
236012_at	PSMF1	1.63	0.50	0.86	0.75	0.89
201316_at	PSMA2	1.35	2.29	0.91	1.17	0.92
201317_s_at	PSMA2	1.13	2.42	1.08	1.04	1.09
201532_at	PSMA3	1.58	2.12	1.93	1.15	1.65
203396_at	PSMA4	1.04	2.44	1.58	1.24	2.07
201404_x_at	PSMB2	0.93	0.60	0.88	1.47	0.44
207713_s_at	RBCK1	1.42	2.93	1.28	1.14	1.21
221827_at	RBCK1	2.88	5.95	3.01	1.71	1.36
237919_at	RFFL	0.56	0.82	2.21	1.03	0.92
235199_at	RNF125	0.63	0.59	0.45	0.50	0.82
218738_s_at	RNF138	1.60	2.19	1.92	1.60	1.67
225414_at	RNF149	1.02	2.59	1.55	1.89	1.17
36564_at	RNF19B	7.06	1.58	1.81	2.56	2.51
244804_at	SQSTM1	0.46	1.60	0.44	0.79	0.94
215452_x_at	SUMO4	0.44	0.72	1.11	0.95	1.81
200719_at	SKP1	0.87	0.78	2.23	0.95	1.27
227607_at	STAMBPL1	5.86	0.96	1.70	2.15	1.29
210705_s_at	TRIM5	8.35	4.60	5.53	9.66	6.41
202643_s_at	TNFAIP3	1.62	2.37	2.53	1.10	0.73
202151_s_at	UBAC1	1.53	0.20	0.83	0.68	0.66
204616_at	UCHL3	0.82	0.36	0.58	1.08	0.91
209103_s_at	UFD1L	1.04	0.50	0.83	0.79	1.55
209137_s_at	USP10	0.73	0.43	0.63	0.89	1.05
209475_at	USP15	0.76	1.38	1.70	1.90	2.19
210681_s_at	USP15	1.11	2.09	2.13	1.36	2.10
231990_at	USP15	0.89	2.83	2.72	1.98	1.53
219211_at	USP18	29.64	283.3	15.16	20.56	89.55
212381_at	USP24	1.35	1.07	0.79	0.79	0.37
220419_s_at	USP25	1.33	2.01	2.09	1.37	1.37
223167_s_at	USP25	1.13	2.53	2.55	3.21	2.55
232033_at	USP37	0.81	0.95	1.37	1.16	3.01
223289_s_at	USP38	0.55	0.35	1.10	1.64	0.94
226172_at	USP42	0.22	0.90	1.04	0.68	0.45
226176_s_at	USP42	2.04	3.52	1.19	2.23	2.73
226669_at	USP42	1.55	2.46	1.87	2.22	1.75
203870_at	USP46	0.80	0.83	0.81	0.82	0.39
237465_at	USP53	0.44	1.46	0.33	1.31	0.15
202317_s_at	UBE4B	0.86	0.53	0.62	0.52	0.45
211764_s_at	UBE2D1	1.54	1.84	2.14	0.85	0.74
65521_at	UBE2D4	0.94	0.82	0.90	0.85	0.43

225783_at	UBE2F	0.86	2.76	1.23	1.34	1.73
225787_at	UBE2F	1.26	2.11	0.89	1.02	1.12
231948_s_at	UBE2F	1.52	3.37	1.59	1.22	1.15
209042_s_at	UBE2G2	0.93	0.40	0.60	0.62	0.92
208760_at	UBE2I	0.86	0.42	0.46	0.51	0.57
201649_at	UBE2L6	1.39	17.26	7.39	7.62	6.85
217750_s_at	UBE2Z	1.20	2.42	2.48	1.57	1.18
222395_s_at	UBE2Z	1.56	2.10	2.05	1.05	0.94
222502_s_at	UFM1	0.87	0.66	0.81	1.65	0.44
218340_s_at	UBA6	0.74	2.25	0.34	0.53	0.24
1294_at	UBA7	1.36	3.98	1.92	1.52	1.96
219810_at	VCPIP1	1.83	2.14	1.32	0.82	2.48
201296_s_at	WSB1	1.37	1.15	1.16	1.82	2.04
210561_s_at	WSB1	2.42	1.23	1.08	1.03	1.28
239916_at	WDR16	4.39	1.05	2.15	1.03	1.47
225898_at	WDR54	0.88	0.81	0.44	0.75	1.47
226261_at	ZNRF2	0.90	2.35	1.28	1.62	2.20
217950_at	NOSIP	1.05	1.22	1.89	2.22	1.62
205178_s_at	RBBP6	2.72	1.33	0.95	0.95	1.42
212781_at	RBBP6	3.74	1.43	1.26	0.91	1.04
212783_at	RBBP6	4.30	1.36	0.87	0.96	1.29

Visual perception

212745_s_at	BBS4	0.58	0.37	1.40	1.17	2.17
33197_at	MYO7A	1.13	1.29	0.75	0.48	0.63
226021_at	RDH10	0.83	0.60	0.47	0.98	0.72

Unknown

202648_at	---	1.00	0.72	0.94	1.32	2.51
206082_at	---	0.94	1.12	2.77	2.77	3.57
207768_at	---	0.43	1.75	0.50	0.31	1.85
210524_x_at	---	1.10	3.43	2.09	1.88	0.81
210598_at	---	0.35	0.96	0.71	0.75	1.03
213221_s_at	---	0.42	0.32	0.41	0.33	0.38
215029_at	---	0.47	0.79	1.13	1.08	3.84
216582_at	---	1.55	2.03	1.10	2.99	1.06
217293_at	---	0.35	0.89	1.22	1.03	0.72
217715_x_at	---	1.35	0.54	0.46	1.25	0.95
220494_s_at	---	1.03	0.74	0.66	0.48	1.02
222303_at	---	0.91	0.91	0.63	0.41	1.04
223760_s_at	---	1.00	1.19	3.07	1.13	1.07
224148_at	---	0.91	3.69	1.07	2.18	3.65
224340_at	---	0.92	1.15	0.44	1.13	1.21
224647_at	---	1.05	0.52	0.48	0.68	0.61
224893_at	---	0.99	1.10	0.36	0.39	0.34
225108_at	---	0.66	0.63	0.49	0.57	0.58
225767_at	---	0.82	0.74	0.47	0.65	1.03
226348_at	---	0.71	0.66	0.57	0.63	0.44
227943_at	---	3.38	2.63	2.54	0.90	2.05
229087_s_at	---	1.73	0.53	0.93	0.88	0.47
229541_at	---	2.34	1.06	1.08	0.69	1.49
229928_at	---	2.12	0.24	0.23	1.12	0.62

230961_at	---	2.29	0.97	1.04	0.81	1.13
231205_at	---	0.43	1.11	0.94	0.89	0.79
231296_at	---	1.03	0.47	0.34	0.34	0.37
231343_at	---	1.24	0.55	0.92	2.16	1.91
231695_at	---	1.17	3.08	3.40	1.48	8.44
232072_at	---	0.87	0.91	2.26	0.56	0.55
232504_at	---	0.61	2.01	0.29	0.73	0.13
232665_x_at	---	0.14	1.37	0.74	0.40	0.79
232789_at	---	0.96	0.63	0.47	0.74	0.70
234277_at	---	1.72	0.36	1.34	0.26	1.90
234848_at	---	2.13	0.76	0.82	0.30	0.30
235543_at	---	2.08	1.46	1.23	1.22	1.31
236203_at	---	1.15	0.31	0.56	0.40	0.69
236671_at	---	0.81	0.29	1.00	0.95	0.82
236923_x_at	---	0.46	1.08	0.59	0.80	1.07
237009_at	---	29.65	3.88	1.63	6.77	10.79
237165_at	---	1.53	2.43	2.64	1.50	0.50
237218_at	---	2.46	0.88	1.29	1.00	1.73
237370_at	---	3.21	0.97	1.32	0.97	1.84
238299_at	---	1.21	1.20	1.00	0.99	2.48
238342_at	---	1.27	1.01	0.91	0.22	2.93
238470_at	---	0.55	0.63	0.35	0.82	0.62
239227_at	---	2.10	1.53	0.61	3.10	0.78
239597_at	---	0.47	0.75	0.80	0.82	1.09
239692_at	---	0.16	0.37	0.73	0.66	1.13
239721_at	---	0.86	4.16	1.41	2.34	1.74
239945_at	---	2.95	0.95	1.06	0.40	0.44
239979_at	---	16.72	10.77	7.99	8.51	17.25
240046_at	---	0.52	0.46	0.83	1.09	1.55
240076_at	---	0.35	3.97	0.14	1.14	0.51
240141_at	---	1.64	1.43	7.00	2.20	2.73
240156_at	---	0.36	0.48	1.58	1.26	0.35
240279_at	---	0.60	1.42	1.19	0.76	2.85
240555_at	---	3.30	0.82	0.74	0.36	0.54
240652_at	---	0.43	1.03	1.63	1.39	2.91
240690_at	---	1.81	0.91	1.30	2.06	0.94
240798_at	---	1.04	0.48	1.11	1.14	1.27
241036_at	---	0.44	1.01	1.93	0.88	1.14
241237_at	---	14.85	3.38	0.83	1.38	1.73
241319_at	---	3.86	0.59	1.36	0.68	0.71
241595_at	---	9.57	2.06	1.78	1.80	2.17
241799_x_at	---	1.65	1.04	2.10	0.82	0.97
241845_at	---	0.31	0.86	0.45	0.60	0.91
241906_at	---	0.44	0.65	1.55	0.82	1.26
241956_at	---	1.13	3.84	4.72	1.14	2.61
242144_at	---	1.33	1.29	2.44	0.41	2.57
242232_at	---	3.53	2.21	3.25	1.21	1.99
242397_at	---	0.61	0.35	0.96	0.75	0.96
242407_at	---	4.12	2.67	2.13	2.45	3.04
242431_at	---	0.68	1.13	1.26	2.22	1.65
242440_at	---	0.48	1.00	1.04	0.87	0.61
242461_at	---	2.11	1.00	0.45	0.89	0.86

242664_at	---	0.82	1.18	2.78	0.19	1.10
242714_at	---	0.87	1.43	0.48	0.38	0.25
242763_at	---	2.09	1.07	0.60	1.10	1.44
243088_at	---	0.80	1.05	0.73	1.11	2.01
243158_at	---	3.61	1.95	1.42	1.03	1.72
243217_at	---	1.00	1.08	0.88	0.48	1.08
243470_at	---	0.75	0.50	0.33	1.26	1.06
243640_x_at	---	1.65	0.98	2.25	1.29	0.97
243748_at	---	1.20	1.30	1.58	0.66	5.31
243788_at	---	6.38	16.11	2.34	6.68	1.69
243819_at	---	0.51	1.04	0.50	0.58	0.51
243915_at	---	0.91	2.23	0.41	0.45	0.60
243966_at	---	1.10	1.21	0.90	0.48	1.26
244022_at	---	0.80	0.68	2.06	1.11	1.32
244093_at	---	2.62	0.97	0.47	1.30	0.77
244358_at	---	0.48	0.72	1.40	0.99	1.04
244379_at	---	0.63	18.41	2.63	4.20	4.49
244414_at	---	0.49	1.15	1.35	1.07	1.53
244732_at	---	1.34	1.77	0.72	0.88	0.48
244791_at	---	2.36	0.82	3.85	1.76	1.81
244792_at	---	0.59	0.52	0.49	1.69	0.87
91682_at	---	0.97	2.08	0.76	1.46	0.67
236520_at	---	0.88	0.53	0.43	0.65	0.78
239237_at	---	1.14	0.59	1.08	0.36	0.71
M10098_5_at	LOC100008588	0.92	0.98	0.64	0.43	0.78
AFFX-r2-Hs18SrRNA-3_s_at	LOC100008588	0.97	0.81	0.74	0.53	0.48
AFFX-r2-Hs18SrRNA-5_at	LOC100008588	0.93	0.93	0.48	0.40	0.63
218043_s_at	AZI2	2.01	1.17	0.98	0.90	1.77
223846_at	AZI2	2.47	1.17	1.72	1.56	1.83
227904_at	AZI2	0.93	1.24	2.16	2.35	3.66
45288_at	ABHD6	0.63	0.38	0.27	0.61	0.51
204393_s_at	ACPP	0.94	0.91	0.29	0.43	0.53
208103_s_at	ANP32E	0.85	1.00	2.05	1.65	1.52
200974_at	ACTA2	1.09	2.79	1.45	2.85	3.92
209122_at	ADFP	0.57	0.48	0.65	0.55	0.59
225711_at	ARL6IP6	1.40	3.25	1.35	1.25	0.92
223097_at	ADPRHL2	3.97	7.91	2.72	3.62	3.14
212605_s_at	---	1.03	0.59	0.34	0.38	0.77
212608_s_at	---	1.23	0.67	0.66	0.50	0.90
201924_at	AFF1	1.15	2.11	1.54	1.47	1.84
227878_s_at	ALKBH7	0.41	0.99	0.54	0.66	0.54
223297_at	AMMECR1L	0.48	1.09	1.38	1.09	0.76
226431_at	ALS2CR13	0.73	0.23	0.24	0.67	0.77
213099_at	ANGEL1	1.07	0.46	0.79	1.26	0.84
224900_at	ANKFY1	1.50	3.22	2.35	1.43	2.10
212286_at	ANKRD12	0.89	1.48	1.85	1.35	2.13
238642_at	ANKRD13D	0.31	0.81	0.68	1.04	1.22
238597_at	ANKRD13C	0.36	2.21	1.11	1.23	1.05
238439_at	ANKRD22	7.17	110.4	6.02	4.27	11.12
239196_at	ANKRD22	3.61	5.01	3.32	3.10	1.49

226025_at	ANKRD28	1.62	1.26	0.42	0.49	0.64
229307_at	ANKRD28	0.63	0.75	0.51	1.18	0.37
225735_at	ANKRD50	0.73	0.62	0.62	0.73	0.48
219496_at	ANKRD57	0.48	0.35	0.54	0.23	0.35
227034_at	ANKRD57	1.43	0.36	0.64	0.43	0.19
204671_s_at	ANKRD6	1.44	1.13	1.27	0.67	0.34
218769_s_at	ANKRA2	0.46	1.04	1.70	1.15	1.33
210873_x_at	APOBEC3A	3.15	11.57	15.45	15.83	29.59
228477_at	ARGLU1	0.60	1.20	0.85	1.73	2.20
236966_at	ARMC8	0.46	0.93	0.98	0.74	1.00
219637_at	ARMC9	1.20	1.56	1.35	0.17	0.34
218694_at	ARMCX1	0.89	1.63	2.00	1.57	2.37
213015_at	---	0.93	2.25	1.53	1.36	1.30
228817_at	ALG9	0.91	3.67	0.58	0.44	0.91
227014_at	ASPHD2	2.29	3.03	1.21	1.76	1.72
227732_at	ATXN7L1	1.02	1.10	1.57	2.33	6.12
218799_at	ATPBD1B	1.59	0.98	1.07	2.01	1.33
224850_at	ATAD1	0.92	0.99	1.49	2.11	1.54
213387_at	ATAD2B	0.67	0.67	1.22	1.18	2.46
229718_at	---	1.14	2.26	1.02	0.86	2.34
231810_at	BRI3BP	0.69	0.56	0.26	0.46	0.38
202103_at	BRD4	1.07	1.00	0.89	0.48	0.86
228570_at	BTBD11	0.78	2.41	0.45	0.63	0.57
209846_s_at	BTN3A2	1.47	3.13	2.42	2.10	1.46
212613_at	BTN3A2	1.19	2.22	1.57	2.11	2.30
204821_at	BTN3A3	1.24	4.62	3.65	4.17	2.92
38241_at	BTN3A3	1.14	3.01	3.94	3.45	4.25
204820_s_at	BTN3A3	0.86	2.88	2.21	2.81	2.62
219283_at	C1GALT1C1	1.06	3.03	1.69	2.20	1.75
221042_s_at	CLMN	1.01	0.45	0.45	0.62	0.80
225759_x_at	CLMN	0.75	0.64	0.43	0.74	0.49
244682_at	CAMSAP1	0.10	2.86	2.40	1.94	1.03
200755_s_at	CALU	1.70	0.50	0.33	0.12	0.36
200757_s_at	CALU	0.87	0.53	0.54	0.54	0.41
226751_at	CNRIP1	3.17	0.77	0.12	0.09	0.10
202857_at	CNPY2	1.05	0.48	0.65	0.91	0.79
226425_at	CLIP4	0.66	0.82	1.14	0.47	0.65
224393_s_at	CECR6	0.84	2.60	1.98	1.74	0.34
226545_at	CD109	1.14	1.69	0.66	0.41	0.30
229900_at	CD109	1.58	2.36	1.36	0.76	0.75
223655_at	CD163L1	2.52	1.41	0.25	0.27	0.49
203799_at	CD302	1.00	0.82	0.24	0.22	0.39
204661_at	CD52	1.12	1.10	0.19	0.12	0.10
34210_at	CD52	1.09	0.95	0.22	0.12	0.07
230727_at	CISD3	0.85	1.10	0.82	0.94	0.49
228438_at	---	1.22	0.51	0.19	0.10	0.23
224603_at	---	0.85	0.36	1.21	0.65	0.61
239555_at	---	1.06	2.12	2.30	1.65	3.38
234020_x_at	---	1.06	3.57	0.58	0.73	0.87
229544_at	---	0.82	0.84	0.26	0.44	0.27
232150_at	---	17.51	5.54	1.46	2.69	3.59
226883_at	---	0.47	0.83	1.00	1.00	0.80

226873_at	---	0.14	0.36	0.41	0.46	0.32
239138_at	---	2.80	1.17	0.35	0.61	0.42
229635_at	---	1.00	0.30	0.69	0.81	0.93
229318_at	---	1.14	0.78	0.46	0.84	0.83
235406_x_at	---	0.67	0.44	1.02	0.90	1.17
227069_at	---	0.96	0.61	0.72	0.45	0.79
235456_at	---	1.23	6.21	2.87	6.30	9.02
227765_at	---	0.97	0.54	0.36	0.28	0.52
230672_at	---	0.18	1.55	2.44	4.98	1.58
226085_at	---	2.02	0.99	0.51	0.50	0.47
228465_at	---	1.26	0.45	0.63	1.00	1.17
236494_x_at	---	1.75	0.49	0.67	1.12	1.99
238953_at	---	1.09	0.25	0.83	2.04	1.42
225725_at	---	0.73	0.37	0.67	0.74	0.73
228315_at	---	0.76	0.46	0.73	0.85	0.84
228959_at	---	0.99	0.69	0.32	0.32	0.48
227929_at	---	1.26	0.93	0.65	0.40	0.38
240795_at	---	3.31	1.30	1.79	0.68	0.46
226316_at	---	0.67	0.47	1.02	0.82	1.58
225227_at	---	0.43	0.78	1.18	1.28	1.61
227235_at	---	2.37	9.38	8.55	13.19	29.72
229530_at	---	0.78	4.35	5.75	9.64	15.85
237351_at	---	0.80	0.35	0.79	1.13	0.45
227524_at	---	2.13	0.80	0.69	1.14	1.02
212867_at	---	0.81	3.25	2.10	1.65	2.40
227665_at	---	0.45	0.41	0.56	0.45	0.43
222294_s_at	---	1.18	0.39	0.37	0.33	0.50
235766_x_at	---	0.74	0.49	0.43	0.47	0.43
221844_x_at	---	0.48	0.48	0.32	0.70	0.34
233036_at	---	0.46	0.47	0.57	0.27	0.29
232555_at	---	0.68	0.70	0.30	0.55	0.36
233912_x_at	---	2.44	0.43	1.25	0.44	2.10
232307_at	---	0.45	1.16	0.99	0.85	1.51
232576_at	---	1.56	0.46	1.23	0.11	0.39
234135_x_at	---	1.23	0.65	2.14	0.40	1.08
232134_at	---	1.77	2.93	2.05	2.60	4.29
232670_at	---	7.90	2.80	2.56	2.52	3.20
233039_at	---	1.57	0.47	0.17	0.13	0.54
233931_at	---	2.30	2.09	1.39	0.99	1.02
217482_at	---	1.21	0.88	0.92	0.68	2.23
232858_at	---	0.17	0.64	1.28	3.51	1.41
232952_at	---	0.74	0.93	0.74	0.30	0.70
232277_at	---	3.14	0.45	0.79	0.04	0.05
233921_s_at	---	0.67	0.89	0.89	0.65	2.15
233270_x_at	---	1.51	0.80	1.07	1.27	2.04
234059_at	---	0.22	0.37	0.83	0.85	6.11
232375_at	---	17.02	7.99	3.77	5.11	10.45
232459_at	---	3.14	0.97	0.52	0.28	0.72
226116_at	---	0.82	0.41	0.40	0.53	0.44
226345_at	---	2.52	3.44	1.48	1.55	1.40
225553_at	---	0.92	0.33	0.45	0.51	0.50
232130_at	---	0.45	0.89	1.60	0.64	0.65

232658_at	---	1.14	1.09	0.74	0.87	0.43
233219_at	---	0.15	0.33	0.70	0.91	1.06
232628_at	---	0.50	0.92	0.33	0.61	1.20
238536_at	---	2.54	2.30	1.80	1.34	0.71
226107_at	---	1.22	10.12	3.75	7.67	4.05
232356_at	---	1.27	1.25	1.34	1.85	2.18
232346_at	---	1.60	2.81	1.43	1.46	1.73
229184_at	---	0.41	1.12	1.30	1.63	0.87
232958_at	---	2.30	0.95	0.39	0.50	0.48
213817_at	---	0.91	0.66	0.67	0.26	0.29
232058_at	---	0.38	1.35	1.32	1.34	1.41
228866_at	---	0.50	0.76	1.08	0.59	1.59
215587_x_at	---	2.93	2.35	1.33	1.16	1.19
215595_x_at	---	0.35	0.84	0.85	1.08	1.44
232653_at	---	0.31	0.32	0.43	0.57	0.96
232210_at	---	0.85	2.49	0.71	0.76	1.39
215392_at	---	0.12	0.59	0.43	1.18	0.97
228200_at	---	1.17	0.92	0.46	0.98	1.01
216675_at	---	1.93	0.80	0.47	0.56	1.11
234143_at	---	1.12	1.51	1.84	2.16	0.46
239606_at	---	2.22	1.97	1.39	1.63	2.06
238604_at	---	0.75	0.99	0.50	0.61	0.39
217665_at	---	0.74	0.41	0.76	1.07	0.98
235756_at	---	1.87	3.28	2.75	3.91	4.45
241775_at	---	0.40	1.09	0.71	0.87	1.03
229640_x_at	---	0.79	0.44	0.62	0.59	0.60
242506_at	---	0.22	0.44	0.57	0.99	1.22
236002_at	---	0.59	2.06	0.99	0.57	1.14
230330_at	---	0.72	1.18	3.52	1.37	2.21
224811_at	---	0.52	0.90	0.59	0.50	0.49
235000_at	---	2.17	0.76	1.22	1.10	0.53
240807_at	---	1.07	0.92	0.37	1.51	0.82
236125_at	---	1.36	2.16	1.65	1.39	1.43
236075_s_at	---	1.11	0.75	0.61	0.48	0.44
227319_at	---	0.76	0.81	0.38	0.23	0.32
228175_at	---	0.72	1.54	1.24	0.87	0.37
213448_at	---	1.03	0.61	0.66	0.73	0.43
214949_at	---	1.20	0.19	0.49	0.60	0.96
225221_at	---	0.48	0.68	0.83	0.60	0.62
228918_at	---	0.77	0.36	0.27	0.48	0.32
243465_at	---	5.99	9.61	2.85	2.94	3.52
240928_at	---	0.35	0.88	1.11	0.50	1.30
224645_at	---	0.86	0.56	0.35	0.42	0.35
224653_at	---	0.94	0.45	0.43	0.51	0.39
243179_at	---	0.50	0.28	0.33	0.49	0.94
235385_at	---	1.79	1.95	1.65	2.06	2.06
242674_at	---	0.99	0.33	1.91	0.85	0.71
237289_at	---	1.01	1.81	1.26	1.30	2.40
229319_at	---	0.23	0.69	0.50	0.47	0.47
226252_at	---	1.13	2.25	0.81	0.86	0.99
229296_at	---	0.29	0.29	0.15	0.20	0.16
226497_s_at	---	2.22	0.95	1.40	0.15	0.20

236104_at	---	1.40	2.47	1.41	1.22	1.04
235592_at	---	2.36	0.92	0.91	0.81	1.23
243659_at	---	4.26	2.76	3.02	0.76	0.99
226441_at	---	0.33	0.68	0.84	1.08	1.41
230874_at	---	0.63	0.57	0.79	0.92	0.41
228032_s_at	---	2.33	1.56	2.03	1.84	1.33
238787_at	---	1.01	2.24	1.97	1.57	1.99
228662_at	---	0.96	0.44	0.53	0.56	0.61
81811_at	---	0.44	0.69	0.88	0.76	0.83
228548_at	---	0.89	0.49	0.63	0.64	0.94
236016_at	---	1.21	1.12	1.93	0.31	0.92
238879_at	---	0.35	1.17	1.47	1.15	0.83
240781_x_at	---	13.17	0.38	0.79	1.17	0.77
230178_s_at	---	0.15	0.44	0.76	0.47	1.61
227395_at	---	1.20	2.06	1.48	1.38	2.89
236476_at	---	0.40	0.16	0.69	0.42	0.47
64488_at	---	0.51	0.25	0.51	0.94	0.63
224996_at	---	1.15	0.81	0.75	1.19	0.48
230663_at	---	0.85	0.62	0.56	0.30	0.85
229695_at	---	0.61	0.35	0.83	0.87	1.68
224185_at	---	0.15	1.22	1.90	1.10	0.82
239956_at	---	0.25	0.42	0.31	0.28	2.42
241388_at	---	2.05	0.63	0.19	0.90	0.60
235109_at	---	2.38	0.49	0.20	0.46	0.39
227117_at	---	1.01	0.08	0.65	0.57	0.52
217922_at	---	1.14	0.51	0.32	0.44	0.63
243303_at	---	0.58	0.36	0.58	0.91	0.96
226855_at	---	1.18	0.60	0.78	0.22	0.52
227277_at	---	0.61	0.90	0.82	0.47	0.44
228971_at	---	0.38	0.31	0.23	0.40	0.33
236099_at	---	5.04	1.12	8.17	3.17	4.97
225256_at	---	0.85	0.40	0.33	0.57	0.51
242691_at	---	1.56	0.36	0.78	0.45	0.26
225923_at	---	0.41	0.59	0.54	1.07	0.62
241887_at	---	0.87	0.50	0.98	0.90	1.20
229715_at	---	0.44	0.36	0.25	0.55	0.55
227484_at	---	0.74	1.83	0.50	0.38	0.42
242725_at	---	0.44	0.52	0.62	0.68	1.25
236402_at	---	0.89	1.34	3.60	1.65	1.05
230300_at	---	1.75	2.57	1.27	0.91	0.66
243003_at	---	0.37	0.43	0.72	0.59	0.76
229699_at	---	0.82	0.25	0.29	0.35	0.55
230917_at	---	0.76	0.80	0.14	0.80	0.86
238455_at	---	0.94	0.54	0.45	0.90	0.84
230403_at	---	0.68	0.70	0.48	0.65	0.61
236836_at	---	0.45	1.06	1.31	1.06	1.24
228620_at	---	2.74	3.33	1.99	3.28	6.29
237105_at	---	2.16	13.03	5.14	10.38	6.75
234230_at	---	2.83	3.13	0.35	0.97	0.07
234151_at	---	0.43	1.48	0.82	0.57	1.17
222877_at	---	1.04	1.60	1.46	0.17	0.81
226397_s_at	---	0.82	0.97	0.39	0.33	0.40

232412_at	---	0.48	0.52	0.89	0.32	0.94
232903_at	---	1.39	0.48	0.76	0.16	0.53
216751_at	---	0.87	0.99	0.50	1.19	0.98
234604_at	---	1.69	0.39	0.26	0.76	1.85
234326_at	---	2.98	2.66	2.89	2.62	3.06
232726_at	---	0.81	0.50	0.58	0.67	1.23
233834_at	---	1.70	1.25	1.15	1.43	2.46
232773_at	---	0.63	0.32	0.72	1.00	1.79
226438_at	---	0.77	2.19	0.86	1.62	0.89
216094_at	---	2.62	1.20	1.00	0.74	0.72
231968_at	---	0.86	0.56	0.30	0.37	0.19
225318_at	---	0.47	0.57	0.98	0.87	0.93
228842_at	---	0.98	0.44	0.36	0.41	1.01
228120_at	---	1.01	0.39	0.57	0.40	0.42
226712_at	---	0.72	0.74	0.45	0.35	0.50
232778_at	---	0.93	0.64	1.30	0.60	2.29
232218_at	---	1.61	0.94	0.62	0.75	0.38
211976_at	---	0.81	0.69	0.54	0.58	0.47
233105_at	---	2.83	0.68	0.88	1.30	2.80
232615_at	---	0.81	2.00	1.26	1.17	1.75
233664_at	---	0.80	0.49	1.05	1.12	1.04
231925_at	---	0.34	0.43	0.57	0.12	0.22
232331_at	---	0.66	0.62	0.36	0.48	0.24
227333_at	---	2.36	1.04	1.44	1.34	1.10
219555_s_at	CENPN	1.04	1.66	2.68	1.86	1.64
205642_at	CEP110	1.68	2.24	1.25	0.96	1.02
229181_s_at	CEP27	0.92	1.10	0.34	0.93	1.02
229208_at	CEP27	1.39	0.62	0.65	0.37	0.76
219242_at	CEP63	1.47	1.20	1.35	1.14	2.16
212677_s_at	CEP68	1.51	1.75	0.70	1.34	2.11
212539_at	CHD1L	1.22	0.49	0.49	0.58	0.56
222459_at	C1orf108	0.56	1.24	2.05	1.29	0.74
225480_at	C1orf122	1.01	0.40	1.03	0.53	0.72
219696_at	C1orf218	1.40	2.31	1.70	1.51	2.03
219506_at	C1orf54	1.08	0.67	0.66	0.64	0.47
229933_at	C1orf74	1.67	1.61	1.10	1.15	0.46
228990_at	C1orf79	0.83	0.47	0.94	1.09	1.05
220199_s_at	C1orf80	1.37	3.90	1.45	0.62	0.66
226801_s_at	C1orf80	1.35	4.53	1.82	1.13	0.83
224665_at	C10orf104	0.94	0.40	0.73	0.82	0.67
244186_at	C10orf11	1.36	0.80	2.44	1.03	0.92
226892_at	C10orf12	0.76	0.70	0.45	0.63	0.80
212419_at	C10orf56	0.81	0.89	0.43	0.47	0.37
224435_at	C10orf58	1.30	0.53	0.31	0.63	0.78
212560_at	C11orf32	0.85	0.21	0.21	0.37	0.47
223009_at	C11orf59	1.03	0.73	0.68	0.71	0.47
221599_at	C11orf67	1.05	1.23	1.19	2.00	1.30
219806_s_at	C11orf75	1.20	0.68	0.97	0.68	0.46
225888_at	C12orf30	1.01	1.54	2.09	1.63	1.41
227245_at	C12orf30	1.34	1.29	2.84	1.43	1.79
218614_at	C12orf35	0.40	1.34	0.98	1.00	2.50
227152_at	C12orf35	0.33	1.41	0.96	1.47	2.01

228937_at	C13orf31	0.49	0.92	1.56	1.18	1.40
219303_at	C13orf7	0.60	1.19	2.00	1.47	1.41
213246_at	C14orf109	0.49	0.69	0.94	0.65	0.63
229514_at	C14orf118	0.38	1.03	1.13	0.89	0.93
223060_at	C14orf119	0.45	1.39	2.20	1.64	1.18
237640_at	C14orf138	0.94	0.71	0.70	0.27	0.32
213508_at	C14orf147	1.35	0.60	0.43	0.49	0.55
233106_at	C14orf82	3.53	1.19	0.85	1.00	2.26
227544_at	C14orf83	0.84	3.64	5.78	6.21	12.09
242649_x_at	C15orf21	1.71	1.29	5.10	2.58	3.80
223484_at	C15orf48	1.18	1.31	4.78	3.87	3.28
225861_at	C16orf14	0.82	0.79	0.54	0.54	0.49
219709_x_at	C16orf24	1.44	0.38	0.42	0.56	0.56
230296_at	C16orf52	0.49	0.80	1.10	1.11	0.94
244835_at	C16orf52	1.45	0.71	1.31	2.16	0.78
218447_at	C16orf61	1.40	2.29	1.79	2.56	2.46
225065_x_at	C17orf45	1.54	0.76	0.76	0.70	0.35
226901_at	C17orf58	1.03	0.87	0.92	0.72	0.49
207996_s_at	C18orf1	1.50	0.35	0.40	0.54	0.82
223983_s_at	C19orf12	3.05	1.21	0.84	1.25	0.79
217926_at	C19orf53	0.83	0.49	0.77	0.83	0.74
235568_at	C19orf59	0.84	0.31	0.14	0.19	0.10
221711_s_at	C19orf62	1.04	0.43	0.86	1.02	1.35
219176_at	C2orf47	0.98	1.29	1.41	2.37	1.57
225799_at	C2orf59	1.24	1.18	0.85	0.42	0.34
218448_at	C20orf11	0.82	0.86	1.27	0.96	0.39
226805_at	C20orf142	0.72	0.54	0.40	0.55	0.27
220941_s_at	C21orf91	1.84	2.50	2.65	3.31	3.45
226109_at	C21orf91	1.35	4.20	3.12	2.65	3.32
220918_at	C21orf96	0.45	0.43	1.55	0.46	1.32
200042_at	C22orf28	2.24	8.47	3.65	3.85	3.83
234283_at	C22orf28	12.39	13.73	2.25	4.05	0.83
239980_at	C22orf28	3.94	2.15	2.00	7.11	2.53
225794_s_at	C22orf32	0.95	0.65	0.70	0.72	0.50
241817_at	C3orf62	0.48	0.85	1.00	1.35	1.97
223204_at	C4orf18	0.86	0.52	0.85	0.53	0.50
227856_at	C4orf32	1.48	2.88	1.95	2.15	1.33
224990_at	C4orf34	0.48	2.42	1.27	1.37	0.93
218179_s_at	C4orf41	1.17	0.45	0.76	0.99	1.12
212936_at	C5orf21	1.13	0.82	0.35	0.50	0.49
224876_at	C5orf24	0.74	0.70	0.70	0.40	0.67
224707_at	C5orf32	1.10	1.52	3.35	3.44	1.66
227877_at	C5orf39	15.41	14.23	2.67	1.58	1.28
238476_at	C5orf41	1.61	2.31	1.95	2.22	1.81
235223_at	C6orf153	1.19	0.74	0.84	0.49	0.72
242446_at	C6orf163	0.13	0.69	0.98	0.35	1.38
238504_at	C6orf57	2.11	0.65	0.52	0.65	0.44
224816_at	C7orf20	1.33	0.25	1.87	1.12	3.95
229146_at	C7orf31	0.50	1.02	1.37	1.01	0.73
220949_s_at	C7orf49	0.43	0.46	0.64	0.69	0.68
218187_s_at	C8orf33	0.86	0.47	0.80	0.67	0.50
235509_at	C8orf38	0.97	0.39	0.66	1.07	0.68

229059_at	C9orf109	0.73	1.09	3.64	1.98	2.25
232868_at	C9orf11	1.13	0.20	0.73	2.14	0.48
225602_at	C9orf19	1.24	1.03	1.10	0.77	0.47
225604_s_at	C9orf19	0.98	1.64	0.91	0.76	0.47
227534_at	C9orf21	0.97	2.19	1.24	1.17	1.00
223368_s_at	C9orf32	1.03	0.44	1.14	1.45	1.56
241781_at	C9orf41	0.61	0.10	1.26	0.94	0.69
232000_at	C9orf52	1.48	2.09	1.55	1.04	0.29
236826_at	C9orf52	1.51	1.13	0.69	0.33	0.23
221865_at	C9orf91	1.29	2.95	3.68	3.34	3.13
239034_at	CXorf24	2.28	0.45	0.46	0.97	1.35
224177_s_at	CXorf26	0.33	1.17	1.27	0.89	0.67
227133_at	CXorf39	1.09	1.31	2.48	0.83	0.87
208925_at	CLDND1	1.48	1.15	2.11	1.20	1.09
239146_at	CLDND1	0.39	1.14	1.72	0.50	1.00
226886_at	---	0.41	1.26	1.02	0.75	0.82
214848_at	---	0.87	0.68	0.35	0.37	0.50
226615_at	---	0.70	0.55	0.72	1.05	0.48
215398_at	---	2.62	1.20	0.45	0.97	0.93
242471_at	---	10.57	3.97	4.21	3.36	4.68
238875_at	---	0.55	0.16	0.31	0.98	1.01
234958_at	---	1.35	1.33	2.07	0.45	0.79
234131_at	---	0.17	1.26	1.48	1.83	0.40
234033_at	---	0.42	0.85	1.31	0.89	1.24
226935_s_at	CLPTMIL	0.85	0.49	0.97	0.90	0.78
240573_at	LOC374443	2.00	2.03	0.81	0.60	0.96
224583_at	COTL1	0.94	0.69	0.57	0.56	0.40
203274_at	F8A1	0.71	0.49	1.20	1.21	1.18
226193_x_at	CBWD1	1.36	3.87	1.72	1.89	1.40
229804_x_at	CBWD1	1.99	11.63	4.95	4.67	5.03
220175_s_at	CBWD1	1.59	4.56	2.36	4.03	4.46
224352_s_at	CFL2	0.94	0.58	0.26	0.51	0.80
48117_at	CCDC101	0.76	0.78	1.23	1.99	2.14
232945_at	CCDC139	0.68	0.83	1.16	0.45	2.17
227818_at	CCDC21	0.49	0.59	0.92	0.95	0.89
225397_at	CCDC32	1.46	1.11	2.02	1.38	1.52
222706_at	CCDC49	0.98	0.67	1.14	0.49	0.75
225010_at	CCDC6	1.09	2.97	0.87	0.87	0.76
219893_at	CCDC71	0.61	0.62	0.82	0.37	0.39
220094_s_at	CCDC90A	0.95	1.09	0.62	0.48	0.51
226521_s_at	CCDC98	1.46	1.29	1.65	2.01	1.25
226896_at	CHCHD1	0.71	0.49	1.02	1.34	0.88
207085_x_at	CSF2RA	1.52	0.93	1.73	0.93	2.23
223198_x_at	COMMD5	0.49	1.66	1.19	1.13	0.96
224387_at	COMMD5	0.29	0.99	0.90	1.33	0.80
218072_at	COMMD9	0.98	0.49	0.87	1.14	1.15
225129_at	CPNE2	1.17	0.59	0.74	0.38	0.62
235533_at	COX19	0.44	0.62	0.94	0.71	0.71
212498_at	---	0.72	0.59	0.49	0.76	0.96
215930_s_at	CTAGE5	1.09	1.21	0.73	3.21	2.48
223270_at	CTDSPL2	0.72	1.37	1.38	2.71	1.62
209732_at	CLEC2B	1.51	3.20	1.86	1.84	1.95

244413_at	CLECL1	0.80	5.37	3.12	1.30	1.16
227667_at	CUEDC1	0.66	1.03	0.90	0.86	0.42
237040_at	CWF19L2	0.95	1.37	1.08	1.25	2.17
219470_x_at	CCNJ	1.36	1.75	1.84	2.55	1.28
229091_s_at	CCNJ	1.83	2.02	1.79	2.48	1.05
224652_at	CCNY	0.88	0.67	0.73	0.81	0.49
227280_s_at	CCNYL1	0.74	3.39	1.21	0.98	0.75
228810_at	CCNYL1	1.18	3.52	1.39	1.40	0.88
200621_at	CSRP1	0.90	0.40	0.67	0.80	0.62
218643_s_at	CRIP1	1.48	0.56	1.34	2.03	1.33
227942_s_at	CRIP1	0.96	0.79	2.02	1.66	1.47
200999_s_at	CKAP4	0.90	1.81	1.47	0.72	0.48
222679_s_at	DCUN1D1	0.70	1.00	1.05	1.44	2.21
239648_at	DCUN1D3	3.27	0.73	1.37	1.31	1.29
212851_at	DCUN1D4	0.60	0.42	0.92	1.02	1.31
205763_s_at	DDX18	0.58	0.32	1.23	1.29	1.05
208896_at	DDX18	0.51	0.39	1.00	0.70	1.24
208897_s_at	DDX18	0.70	0.32	0.75	1.16	1.17
221780_s_at	DDX27	1.24	0.76	1.30	2.76	1.34
203785_s_at	DDX28	0.19	0.33	0.83	0.33	1.01
212514_x_at	DDX3X	1.30	1.44	2.02	1.74	1.42
204355_at	DHX30	0.58	0.38	0.88	0.95	1.66
212107_s_at	DHX9	0.46	0.79	0.96	0.61	0.77
238356_at	DOCK11	0.47	1.80	1.64	0.80	1.51
244840_x_at	DOCK4	1.95	1.28	1.83	1.27	2.09
230206_at	DOCK5	0.81	0.49	0.99	0.99	0.94
230263_s_at	DOCK5	0.89	0.39	0.86	0.81	0.73
225502_at	DOCK8	0.90	4.08	2.14	1.61	1.40
232842_at	DOCK8	0.72	1.36	0.88	2.42	4.31
239027_at	DOCK8	1.02	2.01	1.66	2.33	2.04
225415_at	DTX3L	3.24	6.35	4.14	3.24	3.04
205684_s_at	DENND4C	4.80	0.62	0.78	0.47	0.82
226867_at	DENND4C	0.94	1.01	0.57	0.42	0.45
218854_at	DSE	1.05	0.92	1.58	1.53	2.19
226659_at	DEF6	1.12	0.85	0.64	1.01	2.14
206090_s_at	DISC1	1.05	1.08	1.19	2.32	1.44
227581_at	DKFZP434B03	0.89	0.93	0.80	0.49	0.73
	35					
223452_s_at	DKFZP564J086	0.96	2.75	1.82	0.97	1.14
	3					
231858_x_at	DKFZp761E19	2.23	1.35	2.64	1.34	1.16
	8					
228736_at	HEL308	0.68	1.43	1.74	2.36	1.10
212792_at	DPY19L1	1.48	0.37	0.48	0.48	0.52
225633_at	DPY19L3	0.77	0.32	0.82	1.02	1.03
222488_s_at	DCTN4	0.75	1.25	2.11	1.15	1.16
201999_s_at	DYNLT1	1.41	4.87	2.67	3.27	2.80
219833_s_at	EFHC1	1.74	0.55	0.21	0.04	0.41
217992_s_at	EFHD2	0.93	0.83	0.66	0.79	0.29
221755_at	EHBP1L1	1.30	0.86	1.10	0.10	0.74
209536_s_at	EHD4	1.79	2.52	1.84	1.64	1.71
244354_at	---	1.16	1.00	0.40	0.77	0.87

212570_at	ENDOD1	1.74	8.32	2.78	1.28	1.01
212573_at	ENDOD1	1.74	10.83	1.53	1.41	1.62
227450_at	ERP27	1.09	0.86	0.40	0.42	0.82
227609_at	EPSTI1	2.60	16.27	10.29	12.68	15.87
235276_at	EPSTI1	2.29	22.99	11.20	21.67	22.09
226876_at	FAM101B	0.89	0.47	0.37	0.31	0.18
226905_at	FAM101B	0.89	0.31	0.17	0.15	0.07
223058_at	FAM107B	0.70	0.56	0.56	0.50	0.54
223059_s_at	FAM107B	0.65	0.59	0.51	0.47	0.53
218248_at	FAM111A	1.26	4.46	1.62	1.55	1.21
225361_x_at	FAM122B	0.90	0.44	0.69	1.08	1.19
239047_at	FAM122C	1.18	1.89	2.14	1.43	3.78
52975_at	FAM125B	0.87	7.81	3.05	2.42	3.13
213166_x_at	FAM128A	1.47	1.06	0.75	0.64	0.49
230983_at	FAM129C	0.86	0.93	1.49	0.53	2.50
235469_at	FAM133B	0.54	0.83	0.48	1.18	0.99
218446_s_at	FAM18B	0.55	1.49	2.15	0.87	1.16
221565_s_at	FAM26B	0.82	0.73	0.45	0.59	0.59
228362_s_at	FAM26F	1.67	16.67	10.77	31.83	9.34
229390_at	FAM26F	0.91	14.71	10.12	12.21	15.91
229391_s_at	FAM26F	1.49	10.51	11.98	14.53	11.66
229543_at	FAM26F	1.69	3.99	2.22	7.70	8.20
209405_s_at	FAM3A	1.13	1.12	1.18	0.42	0.78
201889_at	FAM3C	1.17	0.66	0.71	0.49	0.88
202771_at	FAM38A	1.01	0.41	0.48	0.51	0.54
236841_at	FAM39DP	0.47	1.04	0.69	0.86	1.03
235009_at	FAM44A	0.82	0.57	1.36	1.70	2.02
221766_s_at	FAM46A	13.10	5.02	2.05	2.41	3.40
224973_at	FAM46A	12.05	5.59	2.55	4.05	5.57
226811_at	FAM46C	1.72	2.53	1.78	1.29	3.27
208092_s_at	FAM49A	1.02	2.25	1.45	1.63	1.82
230276_at	FAM49A	0.93	0.78	1.58	2.20	1.84
203262_s_at	FAM50A	0.95	0.47	0.71	0.81	0.72
223038_s_at	FAM60A	0.89	0.27	1.03	1.43	1.79
213689_x_at	FAM69A	0.71	4.07	2.46	2.25	2.79
216044_x_at	FAM69A	1.80	2.10	2.13	1.66	1.99
219895_at	FAM70A	4.31	3.54	5.01	2.52	2.95
232048_at	FAM76B	1.17	0.72	1.00	2.23	0.98
229764_at	FAM79B	0.86	0.89	0.12	0.55	0.65
203420_at	FAM8A1	1.52	2.92	1.86	1.56	1.96
235349_at	FAM82A	0.59	1.96	0.21	0.37	0.39
228040_at	LOC728903	1.23	1.04	0.64	0.44	0.76
229429_x_at	FAM91A2	0.84	2.38	1.24	1.01	1.11
239487_at	FAM98A	0.31	0.44	0.95	0.88	1.33
224402_s_at	FCRL4	1.01	1.82	0.30	1.02	0.69
203620_s_at	FCHSD2	1.26	0.39	0.47	0.80	0.73
213341_at	FEM1C	2.92	1.45	1.74	1.19	0.78
230645_at	FRMD3	1.06	10.51	5.10	2.03	1.11
225168_at	FRMD4A	3.96	2.04	0.79	0.46	0.51
213056_at	FRMD4B	1.01	0.55	0.42	0.47	0.44
223262_s_at	FGFR1OP2	0.37	1.36	2.01	1.37	1.16
222693_at	FNDC3B	0.91	3.33	0.66	0.47	1.04

204135_at	FILIP1L	0.38	0.56	0.25	0.46	0.37
208120_x_at	FKSG49	0.79	0.92	0.90	0.48	0.61
225325_at	FLJ20160	1.21	0.98	0.92	0.67	0.45
231455_at	FLJ42418	0.56	1.79	3.22	5.65	2.45
224641_at	FYTTD1	0.97	2.09	1.73	1.38	1.45
224642_at	FYTTD1	1.29	2.42	1.67	2.09	1.05
236417_at	---	2.52	1.66	1.61	2.29	1.04
238243_at	---	0.55	0.95	0.34	0.50	0.45
241631_at	---	0.91	1.15	0.39	1.50	0.99
244548_at	---	0.71	1.03	1.10	1.06	2.09
242705_x_at	---	1.28	0.50	0.86	0.35	0.40
230741_at	---	0.99	2.76	1.34	0.50	0.67
243702_at	---	1.08	0.95	0.82	0.34	0.70
235735_at	---	0.43	0.34	0.51	0.84	0.97
244598_at	---	1.21	1.93	3.25	2.52	1.82
237262_at	---	1.12	2.10	1.16	0.95	1.09
241458_at	---	0.35	0.55	0.74	1.61	1.55
227036_at	---	1.83	0.90	0.69	0.50	0.38
225740_x_at	---	0.47	0.98	0.63	0.87	1.82
235162_at	---	1.03	0.99	1.48	1.56	2.24
240233_at	---	0.99	1.41	1.59	2.04	1.69
239682_at	---	0.83	1.45	0.74	6.88	3.57
226532_at	---	0.79	0.15	0.60	0.66	0.55
224989_at	---	0.64	4.98	1.14	0.48	0.64
230968_at	---	0.61	0.43	0.43	0.24	0.29
226974_at	---	1.55	0.59	0.30	0.74	0.43
235964_x_at	---	0.80	2.94	0.71	0.83	0.83
226105_at	---	1.32	2.23	1.22	1.53	1.22
225716_at	---	0.95	0.38	0.27	0.24	0.31
235841_at	---	0.70	0.60	0.15	0.73	1.37
235346_at	FUNDC1	1.47	1.61	1.60	2.91	2.45
236026_at	GPATCH2	0.38	0.80	1.45	2.23	1.28
224634_at	GPATCH4	1.12	0.33	0.73	0.90	0.86
204137_at	GPR137B	0.79	1.03	0.89	0.39	0.40
218154_at	GSDMDC1	1.38	7.84	2.03	1.51	2.38
225834_at	FAM72A	2.32	4.23	3.04	1.53	2.04
224648_at	GPBP1	1.43	1.81	1.65	2.18	2.04
204221_x_at	GLIPR1	0.97	0.72	0.63	0.58	0.47
214085_x_at	GLIPR1	0.88	0.44	0.48	0.49	0.53
226136_at	GLIPR1	1.07	0.51	0.35	0.31	0.34
226142_at	GLIPR1	0.90	0.59	0.52	0.36	0.39
238296_at	GLIPR1L1	1.44	1.20	0.72	0.48	0.55
225706_at	GLCCI1	1.14	0.69	0.49	0.21	0.51
227525_at	GLCCI1	0.92	0.41	0.13	0.55	0.42
232889_at	GUSBP1	0.46	0.42	1.16	0.22	1.31
232207_at	GUSBL2	4.11	0.92	0.48	0.87	0.71
212244_at	GRINL1A	0.91	1.03	1.60	1.76	2.01
234954_at	GAPDHL19	1.06	0.30	0.22	1.04	0.36
207966_s_at	GLG1	0.87	0.48	0.90	0.88	1.00
214730_s_at	GLG1	0.87	0.49	0.68	0.68	0.71
217771_at	GOLM1	0.91	6.05	0.33	0.40	0.88
228238_at	GAS5	0.93	0.48	0.69	1.38	0.65

232024_at	GIMAP2	1.04	9.44	2.36	2.56	2.31
219243_at	GIMAP4	0.79	3.52	3.65	3.59	3.56
218805_at	GIMAP5	2.16	2.56	4.71	3.12	2.88
64064_at	GIMAP5	2.04	1.77	3.20	2.43	2.81
219777_at	GIMAP6	0.88	4.94	4.93	3.12	4.47
229367_s_at	GIMAP6	0.68	3.96	4.80	3.99	4.69
228071_at	GIMAP7	1.80	1.95	3.38	3.56	3.93
235306_at	GIMAP8	1.19	2.33	3.24	2.50	2.35
220577_at	GVIN1	1.00	2.02	2.34	1.29	2.76
200651_at	GNB2L1	0.96	0.61	0.55	0.56	0.44
226381_at	PS1TP4	0.50	0.90	0.74	0.76	0.57
224602_at	LOC401152	1.35	2.04	1.15	0.89	0.79
224605_at	LOC401152	1.22	3.49	0.86	1.13	1.17
203259_s_at	HDDC2	1.32	0.48	0.45	0.30	0.34
218594_at	HEATR1	1.10	0.44	0.68	0.78	0.66
218595_s_at	HEATR1	1.04	0.46	0.85	1.34	1.14
212822_at	HEG1	2.20	3.18	3.71	2.03	6.84
213069_at	HEG1	2.33	2.47	2.96	4.27	3.54
205466_s_at	HS3ST1	0.48	0.29	0.33	0.54	1.34
203284_s_at	HS2ST1	1.03	0.38	0.35	0.52	0.48
203285_s_at	HS2ST1	0.82	0.27	0.48	0.47	0.62
235458_at	HAVCR2	1.82	2.52	2.78	1.14	0.65
216176_at	HCRP1	1.13	0.69	0.48	0.70	0.56
232680_at	HDGFL1	0.96	0.77	1.18	0.30	1.04
203253_s_at	HISPPD1	1.43	0.46	0.79	0.61	0.71
226537_at	HINT3	7.53	4.35	5.73	2.28	2.58
223366_at	---	0.60	0.69	0.35	0.12	0.35
235203_at	---	0.70	0.44	0.14	0.37	0.32
229746_x_at	---	2.16	0.27	1.43	1.51	0.47
238055_at	---	1.41	1.27	1.39	2.12	2.84
241534_at	---	1.76	1.04	2.98	2.09	2.82
242320_at	---	0.41	0.85	1.09	1.02	1.98
241432_at	---	1.22	1.20	0.45	0.77	0.23
244764_at	---	0.96	0.98	0.44	0.65	0.44
243824_at	---	0.98	4.57	1.28	1.68	2.03
226550_at	---	0.49	0.72	0.21	0.24	0.17
219284_at	HSPBAP1	0.73	0.53	0.78	0.86	2.05
213375_s_at	CG018	1.63	3.34	2.42	1.16	2.04
243843_at	CG018	1.50	2.71	2.14	1.75	0.92
233358_at	FLJ14311	0.43	0.67	0.75	0.73	1.15
228839_s_at	LOC642361	1.09	1.11	0.47	0.70	1.61
230999_at	FLJ39051	2.39	0.44	1.45	1.84	1.60
230405_at	LOC441108	4.58	11.96	22.59	20.48	14.01
238727_at	LOC440934	0.12	1.03	1.10	0.32	0.91
235911_at	LOC440995	0.39	0.37	0.66	1.04	0.42
228160_at	LOC400642	1.14	0.19	0.50	0.49	1.25
226413_at	LOC400027	0.49	0.89	0.94	0.63	0.75
235798_at	RP11-679B17.1	0.51	0.21	0.52	0.55	0.68
236832_at	LOC221442	0.40	0.83	0.48	0.82	0.92
230435_at	LOC375190	1.30	0.85	0.78	0.78	0.43
225857_s_at	LOC388796	0.77	0.41	0.74	0.59	0.68
65588_at	LOC388796	0.74	0.48	0.72	0.73	0.67

242329_at	LOC401317	5.47	0.80	0.74	1.64	1.38
243009_at	LOC441242	0.70	1.86	0.51	0.70	0.45
241899_at	LOC553103	3.31	0.91	0.66	1.05	1.84
226419_s_at	FLJ44342	1.05	0.64	0.18	0.42	0.33
218624_s_at	MGC2752	0.86	0.42	0.64	0.72	0.64
230528_s_at	MGC2752	0.72	0.41	0.70	0.56	1.06
214791_at	LOC93349	2.48	7.43	3.58	1.69	2.62
223934_at	LOC93349	3.39	1.05	3.75	1.89	0.85
224981_at	LOC124446	1.07	2.97	2.53	1.40	1.82
231954_at	DKFZP434I071	0.41	0.70	0.74	0.64	0.77
4						
205510_s_at	FLJ10038	0.46	0.43	0.62	1.22	1.35
228433_at	FLJ11236	0.84	0.65	0.57	0.51	0.46
218429_s_at	FLJ11286	3.21	4.20	3.19	2.53	2.77
53720_at	FLJ11286	2.77	4.93	3.40	3.04	2.56
236526_x_at	FLJ13611	0.83	0.99	2.03	2.06	2.11
218986_s_at	FLJ20035	2.20	17.03	4.55	4.88	5.39
217899_at	FLJ20254	0.81	0.68	0.72	0.96	0.49
220467_at	FLJ21272	0.87	2.16	2.39	1.31	1.62
226706_at	FLJ23867	0.81	0.27	0.78	0.85	0.65
225444_at	FLJ25778	0.97	0.44	1.15	1.53	0.64
228152_s_at	FLJ31033	2.42	2.16	5.02	5.43	6.68
228149_at	FLJ31818	1.17	2.17	1.49	1.49	1.29
230505_at	LOC145474	0.71	0.55	1.28	1.21	3.05
226358_at	LOC145842	0.81	0.38	0.60	0.75	0.95
225918_at	LOC146346	0.99	0.63	0.46	0.41	0.59
238654_at	LOC147645	1.17	2.51	2.84	2.30	3.66
228456_s_at	LOC149832	0.70	0.92	0.48	0.49	0.47
229295_at	LOC150166	0.79	0.91	0.66	0.61	0.32
212098_at	LOC151162	1.32	0.44	0.54	0.57	0.61
232645_at	LOC153684	2.50	1.28	1.02	1.17	0.98
232179_at	LOC158863	0.80	0.86	0.73	0.38	0.36
227514_at	LOC162073	2.44	1.07	0.95	1.36	0.80
227792_at	LOC162073	3.11	1.34	1.41	1.08	0.69
227954_at	LOC162073	2.93	1.47	1.33	1.23	1.13
238015_at	LOC201725	0.20	0.97	0.98	0.38	0.50
232034_at	LOC203274	3.12	3.16	3.04	4.94	4.41
226382_at	LOC283070	0.97	1.09	0.36	0.57	0.77
235151_at	LOC283357	0.67	1.11	0.83	0.36	0.78
240979_at	LOC284100	1.22	0.44	0.95	1.89	1.74
225762_x_at	LOC284801	1.37	0.76	0.33	0.77	0.98
236166_at	LOC285147	0.72	1.30	1.01	0.46	1.53
236363_at	LOC285378	0.94	0.73	1.29	1.97	0.28
229130_at	LOC285535	1.19	1.29	1.09	2.13	1.17
225603_s_at	LOC286144	0.80	0.85	0.54	0.49	0.66
226395_at	LOC286170	0.68	0.66	0.43	0.34	0.50
238893_at	LOC338758	0.76	1.17	0.48	0.85	1.06
227941_at	LOC339803	0.48	1.04	0.84	0.34	0.62
239247_at	LOC401577	1.01	0.96	1.66	1.14	0.43
240061_at	tcag7.1314	0.72	1.37	1.69	0.46	1.29
224740_at	DKFZP686E21	0.50	0.70	1.12	1.10	1.05

235292_at	FLJ32255	2.46	6.73	5.66	2.54	7.39
44669_at	LOC644096	0.63	0.42	0.85	1.02	1.13
224597_at	LOC647979	0.64	0.96	0.72	0.76	0.40
238432_at	FLJ35776	1.95	0.73	0.23	0.31	0.48
227383_at	LOC727820	0.68	3.62	1.70	1.17	1.51
227384_s_at	LOC727820	1.03	2.36	1.49	1.30	2.02
230653_at	LOC730391	0.45	0.66	0.49	0.88	0.97
238039_at	LOC728769	0.54	3.56	7.50	2.48	2.02
235010_at	LOC729013	0.86	0.43	0.62	0.66	0.68
225225_at	LOC729082	0.92	0.37	0.53	0.43	0.48
225332_at	LOC729082	1.11	0.38	0.43	0.50	0.54
227593_at	FLJ37453	0.97	0.98	0.59	2.06	1.41
229444_at	LOC729776	0.51	1.05	0.38	0.95	0.63
229200_at	LOC729810	1.59	2.67	2.00	1.82	2.50
226596_x_at	LOC729852	1.07	0.86	0.91	1.23	2.16
239279_at	LOC730102	1.14	0.32	0.93	0.19	1.00
230448_at	MGC15523	0.79	0.99	1.00	0.68	0.49
228551_at	MGC24039	2.67	0.40	0.74	0.57	0.43
232568_at	MGC24103	0.44	1.13	0.14	0.09	0.12
225003_at	MGC3205	0.88	0.90	0.41	0.71	0.97
217542_at	MGC5370	0.26	1.07	1.78	3.82	3.29
225160_x_at	MGC5370	0.75	1.19	2.88	2.98	3.54
229711_s_at	MGC5370	0.65	1.34	3.41	4.72	10.17
221477_s_at	MGC5618	1.11	1.60	1.83	0.21	0.62
202993_at	ILVBL	0.41	0.32	0.33	0.36	0.44
210624_s_at	ILVBL	1.35	0.40	0.50	0.75	0.61
218611_at	IER5	0.92	1.43	2.08	2.52	2.75
213447_at	IPW	0.77	1.38	1.18	1.00	0.29
210970_s_at	IBTK	0.84	0.72	0.70	0.48	0.85
224743_at	IMPAD1	1.23	0.54	0.52	0.43	0.68
220590_at	ITFG2	0.70	0.65	0.35	0.54	1.02
216565_x_at	LOC391020	1.38	13.38	17.70	23.75	6.98
224570_s_at	IRF2BP2	0.49	0.88	1.14	1.37	1.45
219361_s_at	ISG20L1	1.87	0.95	5.32	5.87	7.32
202411_at	IFI27	4.33	78.82	16.02	25.54	172.87
204439_at	IFI44L	3.88	74.47	33.31	104.55	560.91
203153_at	IFIT1	166.2	88.49	32.70	128.77	1678.43
217502_at	IFIT2	61.80	29.48	19.82	34.30	33.40
226757_at	IFIT2	33.51	20.47	11.13	26.69	60.69
204747_at	IFIT3	45.39	26.38	15.15	17.52	23.96
229450_at	IFIT3	61.63	46.63	14.93	51.24	110.65
203595_s_at	IFIT5	25.09	13.97	7.65	12.68	29.55
203596_s_at	IFIT5	20.42	19.06	22.49	30.52	77.35
227997_at	IL17RD	0.49	3.45	4.22	0.50	1.12
239813_at	IQCH	0.27	0.83	0.96	1.24	1.72
221580_s_at	JOSD3	0.85	0.45	1.08	1.01	1.09
225142_at	JHDM1D	0.75	1.48	5.11	1.88	1.45
227713_at	KATNAL1	0.72	1.15	3.39	1.11	0.58
221986_s_at	KLHL24	1.28	1.62	1.00	0.47	3.22
243982_at	KLHL28	0.99	1.26	1.70	0.12	0.77
228167_at	KLHL6	2.06	1.86	1.18	0.94	1.19
226874_at	KLHL8	0.74	0.45	0.97	1.06	1.03

242648_at	KLHL8	0.91	0.40	1.12	1.11	0.85
234685_x_at	KRTAP4-9	0.35	0.89	0.99	0.88	2.10
203143_s_at	KIAA0040	1.84	8.69	3.95	3.08	1.75
212380_at	KIAA0082	1.68	4.38	3.21	3.16	4.05
212395_s_at	KIAA0090	0.78	0.44	0.99	1.29	0.61
228325_at	KIAA0146	1.23	1.96	0.86	0.48	0.97
200617_at	KIAA0152	0.63	0.88	0.68	0.46	0.71
212835_at	KIAA0157	1.04	1.45	2.42	0.93	1.29
212733_at	KIAA0226	2.92	5.20	3.14	3.68	5.00
212735_at	KIAA0226	2.04	4.79	2.49	1.92	2.98
212441_at	KIAA0232	0.97	0.58	0.57	0.49	0.70
213839_at	KIAA0500	0.80	0.42	0.49	0.40	0.70
212946_at	KIAA0564	1.58	0.27	0.26	0.18	0.44
203364_s_at	KIAA0652	0.52	1.50	0.94	1.14	2.02
212311_at	KIAA0746	1.17	0.80	0.42	0.29	0.59
212314_at	KIAA0746	1.18	0.43	0.26	0.25	0.13
212779_at	KIAA1109	0.87	8.32	2.33	1.06	1.93
223162_s_at	KIAA1147	0.90	0.40	0.41	0.54	0.66
225117_at	KIAA1267	0.48	1.05	1.18	1.54	1.11
226254_s_at	KIAA1430	0.55	0.33	0.93	1.04	0.75
226222_at	KIAA1432	0.90	1.83	2.27	1.58	1.65
225922_at	KIAA1450	0.68	2.76	1.09	0.96	1.20
225924_at	KIAA1450	0.99	2.21	1.29	0.97	1.24
225704_at	KIAA1545	0.91	0.39	0.73	0.51	1.02
226155_at	KIAA1600	1.01	2.28	1.44	1.17	1.04
231956_at	KIAA1618	9.70	15.63	4.79	4.01	7.12
232155_at	KIAA1618	0.66	101.3	16.88	62.48	93.70
231850_x_at	KIAA1712	1.91	0.52	0.65	0.92	2.24
225582_at	KIAA1754	0.49	0.94	1.15	1.17	0.73
240037_at	KIAA1754L	2.32	0.58	0.61	0.65	0.52
218503_at	KIAA1797	0.68	0.08	0.06	0.13	0.18
229257_at	KIAA1856	3.49	1.13	0.33	1.91	0.57
227370_at	KIAA1946	6.52	1.64	1.03	0.86	1.03
212137_at	LARP1	1.01	1.45	1.70	1.64	2.05
231824_at	LARP2	0.66	0.93	0.77	1.14	0.40
203411_s_at	LMNA	0.46	0.96	0.68	0.59	0.65
212086_x_at	LMNA	0.49	0.66	0.94	1.09	1.08
203276_at	LMNB1	3.37	2.47	2.41	1.69	1.48
208450_at	LGALS2	0.99	2.30	2.40	2.36	3.60
208949_s_at	LGALS3	0.83	1.02	0.65	0.46	0.55
208934_s_at	LGALS8	2.00	2.29	1.83	1.16	1.69
210732_s_at	LGALS8	2.40	2.19	1.62	1.72	1.12
202594_at	LEPROTL1	1.20	1.14	1.53	1.74	2.13
202595_s_at	LEPROTL1	1.34	1.35	1.78	1.64	2.02
232486_at	LRFN1	0.59	1.47	1.22	1.58	2.47
230793_at	LRRC16	1.80	1.20	0.47	0.76	0.65
222068_s_at	LRRC50	11.51	19.31	1.33	1.11	1.09
224624_at	LRRC8A	0.96	0.91	0.95	0.73	0.46
221832_s_at	LUZP1	0.88	0.44	0.62	0.82	0.70
218437_s_at	LZTFL1	1.33	0.39	0.43	0.81	0.86
223228_at	LDOC1L	0.48	0.74	0.97	0.96	0.88
228648_at	LRG1	2.54	1.65	1.21	0.82	0.72

215838_at	LILRA5	1.11	2.28	1.64	2.86	0.78
207509_s_at	LAIR2	0.28	1.27	2.44	1.15	1.11
64899_at	LPPR2	1.39	0.42	0.76	0.58	2.10
212532_s_at	LSM12	0.89	0.49	0.96	0.81	0.97
212131_at	LSM14A	0.93	0.48	0.89	1.01	0.99
223687_s_at	LY6K	0.49	0.98	0.16	0.39	1.50
228841_at	LYRM7	0.95	0.48	0.44	0.40	0.47
240344_x_at	LYRM7	1.51	0.17	0.48	0.73	0.78
230174_at	LYPLAL1	0.15	0.68	0.37	0.63	0.93
201552_at	LAMP1	0.97	0.98	0.85	0.40	0.38
224324_at	MRO	1.52	2.36	0.77	0.57	0.94
212708_at	MSL-1	0.88	0.42	0.61	0.74	0.76
200644_at	MARCKSL1	0.65	0.34	1.16	1.45	0.79
230011_at	MEI1	1.29	0.43	0.91	0.36	0.43
221290_s_at	MUM1	0.37	1.55	0.45	0.80	1.03
234305_s_at	MLZE	2.42	0.92	2.66	0.58	0.76
227379_at	MBOAT1	1.09	1.30	0.60	0.68	0.50
238451_at	MPP7	0.42	0.72	0.41	0.62	0.61
223264_at	MESDC1	0.89	1.38	2.27	1.90	1.27
212859_x_at	MT1E	1.76	2.14	1.81	1.76	2.50
213629_x_at	MT1F	0.61	2.19	2.63	1.92	1.26
204745_x_at	MT1G	2.43	4.31	4.89	2.94	1.31
216336_x_at	MT1M	2.48	1.09	1.66	1.58	0.98
224559_at	MALAT1	2.55	1.09	0.89	0.51	1.18
236347_at	MMAA	2.66	1.73	1.58	1.38	1.11
226220_at	METTL9	0.46	0.85	0.78	1.08	0.69
230395_at	METTL9	0.47	1.02	1.59	1.15	2.99
228778_at	MCPH1	0.94	1.00	2.45	1.37	0.92
229437_at	MIRN155	1.60	4.55	0.93	0.36	0.28
224917_at	MIRN21	2.27	1.55	2.44	1.81	1.27
229934_at	---	0.22	0.08	0.07	0.25	0.73
223156_at	MRPS23	0.62	0.44	0.94	1.03	1.06
212145_at	MRPS27	0.68	0.07	0.46	0.89	0.43
201297_s_at	MOBK1B	0.97	2.08	3.23	1.72	1.30
201299_s_at	MOBK1B	0.46	1.42	0.99	1.71	0.65
227066_at	MOBK1C	2.47	2.34	1.67	1.46	1.46
203956_at	MORC2	0.53	0.49	0.70	1.08	0.84
218853_s_at	MOSPD1	1.16	0.94	0.82	0.73	0.49
226773_at	---	1.81	8.52	3.14	2.41	2.53
235505_s_at	---	0.55	0.66	0.45	0.40	0.44
213657_s_at	---	1.04	0.79	0.40	0.42	0.77
213658_at	---	1.23	0.32	0.47	0.43	0.35
225123_at	---	0.72	0.31	0.32	0.42	0.46
234578_at	---	0.70	0.22	0.45	0.44	3.29
234258_at	---	2.26	0.68	0.37	0.41	2.42
232372_at	---	0.79	0.27	6.06	0.28	1.85
232484_at	---	1.48	0.25	0.33	1.16	0.24
214867_at	---	10.17	1.02	0.72	0.80	0.68
225199_at	---	0.82	0.70	0.39	0.92	0.54
232002_at	---	0.66	0.49	0.49	1.16	2.23
232580_x_at	---	1.55	2.05	0.67	0.72	0.52
233455_at	---	4.09	1.45	0.67	0.14	0.48

214807_at	---	0.78	0.39	0.32	0.47	0.70
226865_at	---	0.67	0.21	0.37	0.46	0.50
227995_at	---	0.64	0.19	0.41	0.36	0.39
224637_at	---	0.82	0.84	0.73	0.65	0.49
228013_at	---	2.09	1.02	1.12	0.92	1.03
239033_at	---	1.32	2.51	2.55	2.51	2.06
231406_at	---	1.09	0.83	0.71	0.60	0.43
243495_s_at	---	0.72	0.30	0.44	0.39	0.90
230491_at	---	0.17	1.60	1.93	3.16	3.18
244010_at	---	0.28	1.04	1.02	0.88	1.16
225567_at	---	0.81	0.46	0.79	0.78	0.68
221861_at	---	1.16	0.45	0.35	0.38	0.34
43511_s_at	---	0.92	0.49	0.29	0.30	0.29
49111_at	---	0.90	0.48	0.27	0.28	0.26
226040_at	---	1.76	1.96	1.99	1.35	2.06
237186_at	---	2.70	0.26	0.44	0.95	0.29
238780_s_at	---	11.67	0.70	1.85	0.14	0.25
229498_at	---	0.83	0.97	0.39	0.34	0.41
243010_at	MSI2	0.27	0.61	1.11	0.55	0.79
203640_at	MBNL2	0.73	0.53	0.45	0.85	0.68
232138_at	MBNL2	0.67	0.75	0.45	0.85	1.50
225673_at	MYADM	0.70	1.30	0.57	0.54	0.34
238124_at	MYOM3	0.42	1.04	0.59	1.03	0.88
221474_at	MRLC2	0.87	1.39	1.68	0.75	3.46
225299_at	MYO5B	0.65	0.36	0.80	1.25	0.30
228933_at	NHS	0.90	0.17	0.23	0.70	0.97
204601_at	N4BP1	2.30	3.99	2.53	2.64	1.79
221867_at	N4BP1	2.00	2.05	2.66	2.27	1.90
32069_at	N4BP1	2.73	2.81	2.82	2.75	2.39
222512_at	NUB1	1.54	5.58	2.96	1.47	1.78
234332_at	NUB1	1.68	3.00	2.42	1.13	0.96
227926_s_at	NBPF11	1.17	1.76	1.14	2.07	1.04
218888_s_at	NETO2	0.97	0.36	1.05	1.34	0.82
227040_at	NHLRC3	1.69	12.52	2.03	1.14	1.21
229735_s_at	NPAL3	2.78	0.80	0.47	1.26	1.14
226474_at	NLRC5	0.93	9.74	6.22	3.24	2.66
214722_at	NOTCH2NL	0.48	0.66	0.73	0.90	1.34
213062_at	NTAN1	0.74	2.11	0.93	0.66	0.76
200649_at	NUCB1	1.07	1.41	0.97	0.79	0.43
202882_x_at	NOL7	0.78	0.81	0.99	2.03	1.52
232251_at	NUDT16P	6.34	0.19	1.00	1.45	1.71
222872_x_at	OBFC2A	0.91	1.63	2.19	0.77	0.49
218196_at	OSTM1	0.82	0.70	2.21	1.00	1.00
235197_s_at	OSTM1	0.85	0.40	0.86	0.59	1.01
235198_at	OSTM1	0.82	0.82	0.64	0.43	0.39
212017_at	LOC130074	0.79	0.28	0.41	0.27	0.31
204715_at	PANX1	1.66	2.24	1.94	1.47	1.56
238706_at	PAPD4	1.38	2.13	1.48	1.41	3.12
233177_s_at	PNKD	0.64	0.79	0.96	0.84	0.41
212825_at	PAXIP1	1.25	0.46	0.71	0.94	0.81
203243_s_at	PDLIM5	0.50	0.81	1.68	1.33	2.22
39650_s_at	PCNXL2	0.82	1.30	1.25	2.02	2.05

218319_at	PELI1	2.22	1.79	1.36	1.33	1.70
221816_s_at	PHF11	2.12	4.51	2.87	2.65	4.40
242060_x_at	PHF11	3.89	1.95	2.44	3.75	2.55
212660_at	PHF15	1.11	4.53	4.16	2.98	2.51
227211_at	PHF19	0.45	0.67	1.13	1.59	1.04
231967_at	PHF20L1	0.68	3.66	0.78	0.71	1.27
204047_s_at	PHACTR2	1.22	2.36	2.23	2.40	3.23
204048_s_at	PHACTR2	0.86	4.17	2.88	2.54	2.16
204049_s_at	PHACTR2	1.41	3.36	2.88	2.17	2.43
227947_at	PHACTR2	0.94	2.77	3.36	3.18	1.65
226823_at	PHACTR4	1.36	2.43	2.47	1.83	2.17
205353_s_at	PEBP1	0.86	1.66	0.63	0.71	0.36
222631_at	PI4K2B	2.18	6.89	2.61	2.97	2.45
226459_at	PIK3AP1	1.14	2.11	1.89	1.73	1.40
219093_at	PID1	1.12	0.16	0.05	0.08	0.10
237783_at	PLAC8L1	3.40	1.26	0.86	1.00	0.81
219014_at	PLAC8	0.95	4.26	5.90	14.43	12.49
219024_at	PLEKHA1	1.51	0.53	0.60	0.47	0.54
226247_at	PLEKHA1	1.15	0.68	0.75	0.48	0.56
225136_at	PLEKHA2	0.99	2.27	1.45	1.18	1.42
238013_at	PLEKHA2	0.86	2.17	1.58	0.46	1.87
222699_s_at	PLEKHF2	1.13	2.42	1.67	1.50	1.20
229350_x_at	PARP10	1.76	3.05	3.15	1.78	1.87
220315_at	PARP11	1.50	3.07	5.04	1.96	2.95
229138_at	PARP11	1.35	4.59	2.92	1.83	1.81
218543_s_at	PARP12	4.09	12.12	6.11	8.56	8.48
221022_s_at	PMFBP1	1.20	3.17	0.56	0.13	0.99
212100_s_at	POLDIP3	1.14	1.41	1.52	1.88	2.14
218271_s_at	PARL	0.91	0.52	0.64	0.48	0.89
218233_s_at	PRICKLE4	1.02	0.47	0.62	0.82	0.93
223577_x_at	PRO1073	0.79	1.11	0.96	1.11	2.16
231735_s_at	PRO1073	0.68	1.36	1.12	1.54	2.82
219295_s_at	PCOLCE2	3.73	0.16	0.14	0.42	0.21
226423_at	PAQR8	0.37	3.09	1.39	1.24	1.42
227626_at	PAQR8	1.39	3.02	1.40	0.80	1.14
238513_at	PRRG4	0.37	3.16	1.68	1.76	1.53
224937_at	PTGFRN	1.35	0.43	0.35	0.64	0.95
224950_at	PTGFRN	0.74	0.32	0.36	0.81	1.23
244515_at	PSMD7	0.38	0.78	2.65	0.79	1.28
200814_at	PSME1	0.93	1.65	1.63	2.40	1.44
201762_s_at	PSME2	0.86	3.53	2.43	3.28	2.07
225466_at	PATL1	1.59	2.27	1.75	2.25	1.55
225468_at	PATL1	2.16	4.45	2.70	1.41	1.38
222662_at	PPP1R3B	3.82	0.46	2.35	1.03	1.08
212640_at	PTPLB	1.03	0.49	0.48	0.36	0.38
227741_at	PTPLB	0.89	0.53	0.48	0.44	0.51
244050_at	PTPLAD2	0.69	2.98	1.18	1.36	0.95
221524_s_at	RRAGD	0.52	0.95	2.13	0.96	0.72
208873_s_at	REEP5	0.95	0.50	0.50	0.65	0.62
226430_at	RELL1	0.70	0.75	0.45	0.53	0.42
226696_at	RBBP9	1.18	0.46	0.95	1.03	0.75
219202_at	RHBDF2	1.54	1.87	2.49	1.95	1.22

222995_s_at	RHBDD2	1.15	1.09	0.91	0.49	0.85
201785_at	RNASE1	2.11	0.56	0.45	1.11	1.07
228996_at	RC3H1	0.66	2.01	1.54	1.50	1.00
219021_at	RNF121	1.19	0.92	1.05	2.54	1.27
226106_at	RNF141	1.04	0.53	0.54	0.41	0.41
220985_s_at	RNF170	4.57	0.96	1.11	1.06	0.41
225929_s_at	RNF213	1.78	11.29	4.31	5.47	4.79
225931_s_at	RNF213	0.89	11.25	5.13	3.74	5.60
230000_at	RNF213	3.35	12.42	6.21	5.90	9.65
223740_at	RIPPLY2	0.68	0.40	0.78	0.35	0.56
218593_at	RBM28	0.76	0.50	0.82	0.71	0.99
218842_at	RPAP3	0.99	1.48	2.25	1.79	1.76
222788_s_at	RSBN1	0.35	1.52	2.17	1.70	2.29
222791_at	RSBN1	0.33	0.77	0.90	0.83	0.88
228963_at	RSBN1L	0.22	1.72	1.21	2.22	1.39
230328_at	LOC730092	0.41	0.95	0.77	0.92	1.48
203186_s_at	S100A4	1.07	0.92	0.29	0.64	0.51
220330_s_at	SAMSN1	0.88	1.74	2.05	1.37	1.26
219885_at	SLFN12	2.24	4.17	1.91	2.86	2.67
223070_at	SELK	1.36	2.29	1.63	1.63	1.63
233167_at	RP3-402G11.5	1.40	2.79	3.22	1.75	8.39
233831_at	---	0.36	0.38	2.25	1.52	2.22
218649_x_at	SDCCAG1	0.66	0.71	0.89	1.26	2.02
239213_at	SERPINB1	2.75	0.96	1.11	1.53	1.54
221269_s_at	SH3BGRL3	0.76	0.71	0.46	0.30	0.29
225589_at	SH3RF1	0.87	0.42	0.57	0.80	1.14
204019_s_at	SH3YL1	1.18	0.30	0.53	0.42	0.48
228461_at	SH3MD4	1.52	0.16	0.64	0.45	0.32
219083_at	SHQ1	0.61	0.32	0.95	1.05	1.04
63009_at	SHQ1	0.84	0.33	0.74	1.15	0.85
224391_s_at	SIAE	1.69	0.88	0.21	0.96	0.32
215856_at	SIGLEC15	0.50	0.62	0.64	0.90	0.38
56256_at	SIDT2	0.95	2.71	1.33	1.77	1.28
218140_x_at	SRPRB	1.00	0.37	0.58	0.75	0.62
217092_x_at	LOC646912	1.54	0.53	0.60	0.28	0.40
234512_x_at	LOC728179	1.09	0.71	0.55	0.64	0.48
238043_at	LOC729446	0.53	0.79	1.00	0.47	0.80
236837_x_at	LOC650794	1.17	0.23	0.67	0.48	0.36
213388_at	LOC727942	1.87	0.82	0.66	0.42	0.35
241930_x_at	LOC442113	0.70	0.46	0.94	0.85	1.40
217379_at	LOC442171	1.13	0.83	0.66	0.66	0.46
215963_x_at	LOC642741	0.89	0.77	0.27	0.22	0.32
229693_at	LOC388335	0.95	2.07	0.78	0.51	0.95
217122_s_at	RP11-345P4.4	1.00	0.38	0.57	0.58	0.71
219385_at	SLAMF8	6.01	0.90	0.80	0.46	0.44
219386_s_at	SLAMF8	1.24	0.91	0.43	0.44	0.37
228628_at	SRGAP2P1	1.07	2.46	2.95	2.49	2.57
229067_at	SRGAP2P1	1.21	3.17	3.04	2.53	4.03
232095_at	SRGAP2P1	1.27	3.23	2.62	2.70	3.91
240830_at	SCARNA17	1.51	1.79	2.09	2.28	2.13
225155_at	SNHG5	1.04	0.89	0.66	0.66	0.41
225220_at	SNHG8	0.75	0.33	0.88	0.40	0.32

227517_s_at	GAS5	0.99	0.37	0.92	0.69	1.19
226278_at	SVIP	2.30	1.66	0.83	0.92	0.45
226230_at	SMEK2	0.99	0.30	0.78	0.92	0.66
204594_s_at	SMCR7L	0.56	0.38	0.65	0.50	0.72
218393_s_at	SMU1	0.67	1.93	3.32	2.02	1.86
233946_at	SMU1	1.43	0.59	0.17	1.02	1.93
236487_at	SCLT1	1.27	1.48	2.49	2.17	3.01
218988_at	SLC35E3	0.66	0.87	2.63	1.25	1.44
234973_at	SLC38A5	1.82	1.99	1.12	0.98	2.07
214719_at	SLC46A3	1.10	0.39	0.39	0.66	0.92
232057_at	SLC7A6OS	0.94	1.09	3.05	1.23	1.23
201570_at	SAMM50	0.94	0.44	0.50	0.71	0.76
236600_at	SPG20	1.85	2.99	2.47	1.33	1.26
223340_at	SPG3A	0.93	0.70	1.81	0.67	0.12
233429_at	SPEF2	1.45	0.31	0.38	0.36	2.37
212177_at	SFRS18	0.63	0.44	0.81	0.53	0.54
235440_at	SPTY2D1	0.47	0.98	1.38	0.77	1.04
218032_at	SNN	1.10	2.01	1.46	1.21	1.17
218033_s_at	SNN	0.97	2.46	1.60	0.52	0.63
219691_at	SAMD9	6.27	12.50	8.08	8.30	7.66
228531_at	SAMD9	11.12	17.16	10.14	12.35	12.47
226603_at	SAMD9L	9.73	34.78	12.96	20.22	22.16
230036_at	SAMD9L	5.72	34.94	13.39	14.94	16.90
235643_at	SAMD9L	5.75	25.29	12.55	12.94	20.09
215416_s_at	STOML2	1.29	0.32	0.74	1.02	0.95
225721_at	SYNPO2	0.50	1.29	0.76	1.38	0.75
212154_at	SDC2	0.64	0.37	0.34	0.20	0.40
212157_at	SDC2	1.04	0.59	0.30	0.51	0.44
212158_at	SDC2	0.80	0.36	0.16	0.21	0.34
202816_s_at	SS18	0.84	1.27	2.37	1.23	2.95
228867_at	TATDN3	0.76	1.53	1.98	2.58	1.96
228606_at	TCTEX1D2	1.07	0.62	0.31	0.47	0.34
218099_at	TEX2	0.47	0.76	0.56	0.88	0.75
208073_x_at	TTC3	0.94	0.42	0.39	0.48	0.49
208661_s_at	TTC3	1.09	0.61	0.33	0.75	0.64
208662_s_at	TTC3	1.00	0.54	0.51	0.45	0.52
208663_s_at	TTC3	0.92	0.23	0.33	0.30	0.38
210645_s_at	TTC3	1.13	0.48	0.32	0.34	0.62
226838_at	TTC32	0.38	1.20	0.88	0.84	1.41
226152_at	TTC7B	3.10	8.26	2.53	2.83	1.21
212910_at	THAP11	0.16	0.59	0.84	0.82	0.86
219292_at	THAP1	0.43	1.28	0.94	1.15	0.89
226747_at	TXNDC16	0.94	1.51	1.30	0.58	0.45
225741_at	THUMPD3	0.41	0.89	0.98	1.08	1.14
202085_at	TJP2	1.38	2.84	2.98	1.26	1.48
232017_at	TJP2	1.41	9.12	2.23	0.31	1.84
224413_s_at	TM2D2	1.33	2.14	1.32	1.15	1.05
212409_s_at	TOR1AIP1	1.25	0.95	1.25	2.04	1.87
240265_at	TRAF3IP3	0.33	0.77	0.29	0.18	2.62
226117_at	TIFA	5.08	1.06	2.37	1.38	0.90
202837_at	TRAFFD1	3.23	11.02	14.73	6.85	4.76
243196_s_at	TRAFFD1	2.17	3.47	2.77	1.08	1.50

35254_at	TRAFD1	2.27	4.63	3.24	2.60	1.95
214349_at	---	1.47	1.55	0.73	0.36	1.06
216022_at	---	0.76	0.86	0.49	0.76	0.63
217549_at	---	1.09	0.45	0.30	0.55	0.79
217671_at	---	0.49	0.76	1.36	0.84	1.26
217704_x_at	---	0.33	0.51	0.56	0.74	1.45
221963_x_at	---	0.91	0.48	0.85	0.97	1.06
222282_at	---	1.04	1.70	1.49	1.92	3.22
224755_at	---	0.73	0.42	0.34	0.55	0.84
225274_at	---	0.80	0.56	0.19	0.26	0.23
225356_at	---	1.30	1.79	1.11	0.62	0.41
226468_at	---	0.47	1.28	0.96	0.88	0.36
226525_at	---	0.82	1.17	1.39	2.14	1.57
226560_at	---	4.69	0.44	1.80	0.42	0.92
226742_at	---	0.65	0.60	0.57	0.47	0.45
226795_at	---	1.18	0.77	0.76	0.42	0.60
227191_at	---	4.65	2.94	0.84	0.73	0.46
227432_s_at	---	1.02	0.42	0.56	1.09	1.25
227458_at	---	45.62	10.68	17.16	5.84	5.41
227462_at	---	0.63	4.48	1.54	2.46	1.62
227476_at	---	0.80	0.40	0.40	0.54	0.38
227545_at	---	1.56	2.15	1.76	1.12	1.55
227547_at	---	0.75	0.48	0.46	0.46	0.54
227565_at	---	1.10	0.57	0.52	0.49	0.69
227769_at	---	0.75	0.37	0.52	0.54	0.68
227776_at	---	0.93	0.61	1.03	0.55	0.43
227851_s_at	---	2.76	1.67	1.16	0.52	0.73
227991_x_at	---	1.93	2.79	1.19	0.96	0.88
228180_at	---	2.20	1.43	1.50	1.48	2.16
228196_s_at	---	1.06	2.04	1.50	1.05	1.32
228273_at	---	0.65	0.88	0.63	0.39	0.30
228304_at	---	2.75	18.13	2.69	1.66	1.85
228346_at	---	0.39	2.68	4.29	1.98	1.23
228479_at	---	1.23	0.94	0.59	0.68	0.49
228626_at	---	2.15	0.26	0.62	1.23	4.60
228675_at	---	2.31	5.36	3.39	1.39	1.74
228854_at	---	1.00	0.28	1.40	0.14	0.36
228869_at	---	1.64	2.04	2.27	1.87	2.11
229202_at	---	0.17	2.75	4.78	14.12	21.08
229303_at	---	0.68	0.52	0.26	0.80	0.83
229327_s_at	---	0.97	1.35	0.26	0.36	0.76
229333_at	---	1.03	0.72	0.21	0.25	0.75
229359_at	---	1.60	0.63	0.73	0.48	0.48
229531_at	---	0.40	0.62	0.69	0.72	0.65
229558_at	---	1.13	0.39	0.67	0.88	0.59
229593_at	---	0.35	0.89	0.75	0.69	1.07
229629_at	---	7.37	3.07	0.76	0.76	0.24
229704_at	---	1.37	0.66	2.08	1.13	1.41
229757_at	---	0.41	0.46	0.55	1.04	0.89
229841_at	---	0.73	0.39	0.71	0.59	0.82
229879_at	---	0.37	0.58	0.76	1.82	0.94
229926_at	---	0.68	0.82	1.24	1.10	2.23

229951_x_at	---	0.83	0.39	0.50	0.82	0.48
230003_at	---	1.04	0.31	0.28	0.54	0.22
230233_at	---	1.32	5.23	2.69	3.05	3.72
230278_at	---	0.96	0.98	0.75	0.48	0.43
230314_at	---	3.99	3.37	2.69	3.02	3.87
230333_at	---	3.56	1.41	1.39	0.96	1.68
230383_x_at	---	2.73	6.55	2.30	2.22	2.34
230386_at	---	2.79	0.95	0.57	1.15	0.73
230387_at	---	1.09	0.60	1.19	1.21	2.18
230503_at	---	2.61	3.22	4.75	4.88	4.47
230620_at	---	0.49	0.50	0.85	0.67	2.17
230640_at	---	0.45	0.42	0.60	0.61	0.45
230659_at	---	2.32	2.16	1.74	0.80	1.51
230735_at	---	0.87	1.40	1.75	1.61	3.57
230795_at	---	1.32	2.25	3.17	3.90	6.01
230820_at	---	1.54	1.12	3.21	1.35	1.64
230970_at	---	0.28	0.60	0.61	0.83	1.30
231111_at	---	5.04	1.06	0.79	0.99	1.38
231550_at	---	0.96	0.76	1.25	1.22	2.02
231576_at	---	1.50	2.29	0.98	0.89	0.94
231644_at	---	0.38	0.69	0.88	0.99	1.13
234983_at	---	0.66	0.59	0.42	0.50	0.40
235079_at	---	3.14	0.35	0.31	0.26	0.39
235107_at	---	0.74	0.74	0.39	0.53	0.82
235157_at	---	6.82	15.65	17.35	6.87	8.60
235211_at	---	1.50	0.47	1.91	0.53	0.22
235274_at	---	0.48	0.53	0.84	0.86	0.81
235380_at	---	0.41	5.01	0.94	1.48	1.34
235429_at	---	0.48	0.75	1.00	0.70	0.52
235452_at	---	0.40	0.60	0.66	0.21	1.32
235639_at	---	1.06	1.53	0.66	1.01	0.25
235670_at	---	1.77	3.52	2.31	1.80	1.91
235680_at	---	1.98	1.19	2.30	0.84	0.79
235685_at	---	3.70	0.68	0.45	0.44	0.46
235739_at	---	0.98	1.06	2.61	3.67	2.59
235772_at	---	2.17	1.09	0.92	0.90	0.98
235803_at	---	7.44	0.60	0.34	0.19	0.90
235912_at	---	0.45	1.27	0.76	0.66	1.20
235983_at	---	1.26	1.69	0.98	1.15	2.02
235999_at	---	0.34	1.04	1.23	1.29	1.06
236035_at	---	0.51	1.55	1.71	0.38	1.08
236065_at	---	0.58	0.37	2.68	4.19	0.70
236072_at	---	1.00	1.64	0.93	0.87	2.11
236106_at	---	0.93	3.35	1.47	2.81	1.01
236122_at	---	0.74	2.49	0.89	1.00	1.46
236149_at	---	0.79	0.32	1.00	1.02	1.59
236167_at	---	2.76	1.21	1.14	0.92	1.26
236191_at	---	28.72	6.81	3.42	13.66	3.75
236192_at	---	0.76	0.92	0.73	0.58	0.46
236220_at	---	1.42	0.42	0.32	0.32	0.62
236237_at	---	0.35	0.69	1.22	1.31	0.63
236251_at	---	0.60	0.45	0.74	0.77	1.89

236285_at	---	1.77	5.77	7.11	7.43	20.61
236293_at	---	4.20	3.51	0.52	5.23	1.08
236322_at	---	0.36	0.88	1.18	0.78	1.13
236345_at	---	0.86	0.41	1.01	1.07	0.66
236432_at	---	0.70	2.88	1.10	0.99	1.15
236437_at	---	0.32	0.81	1.01	1.05	0.68
236462_at	---	3.79	3.65	1.14	0.83	1.64
236527_at	---	0.46	0.76	1.42	1.21	1.21
236607_at	---	0.45	0.70	1.22	1.04	1.24
236610_at	---	1.15	0.24	0.30	0.65	1.19
236617_at	---	1.90	0.95	0.12	0.21	2.25
236662_at	---	0.32	0.91	1.08	0.70	0.48
236685_at	---	1.97	3.38	2.65	2.36	1.75
236703_at	---	2.99	2.38	1.85	1.64	2.15
236766_at	---	0.33	0.88	1.55	1.59	6.07
236962_at	---	0.14	1.10	1.76	1.41	0.83
237006_at	---	2.93	1.96	1.70	1.30	1.27
237025_at	---	0.34	0.84	0.57	0.62	0.84
237110_at	---	2.69	2.96	0.95	1.84	2.06
237114_at	---	1.61	1.27	1.55	2.60	0.77
237128_at	---	0.95	0.50	0.75	0.98	0.30
237201_at	---	1.35	1.90	1.40	1.31	2.39
237310_at	---	3.08	3.42	1.02	1.88	0.78
237330_at	---	2.13	1.10	2.80	2.87	1.27
237383_at	---	1.72	1.23	1.47	1.95	2.46
237419_at	---	2.05	1.05	0.50	0.58	0.56
237456_at	---	0.40	0.99	1.08	0.93	1.65
237544_at	---	0.45	0.63	0.45	0.79	1.34
237568_at	---	2.03	0.68	0.96	1.07	1.17
237605_at	---	1.15	0.63	0.49	0.55	0.45
237626_at	---	0.63	0.75	0.96	0.88	2.02
237753_at	---	0.81	0.62	1.58	2.25	2.61
237803_x_at	---	0.76	1.22	0.55	0.24	1.78
237849_at	---	2.25	1.08	0.18	1.28	1.20
237868_x_at	---	0.53	0.81	0.92	0.40	1.41
238183_at	---	0.60	3.51	0.66	0.22	0.17
238185_at	---	2.39	1.31	1.21	2.28	1.15
238311_at	---	0.34	1.44	1.02	0.90	1.49
238431_at	---	0.87	0.31	0.42	0.52	1.14
238507_at	---	1.68	0.57	0.88	2.03	0.96
238601_at	---	0.71	0.92	0.70	0.55	0.48
238646_at	---	0.94	1.43	0.38	1.22	1.59
238651_at	---	0.44	0.58	1.41	1.57	1.44
238668_at	---	0.66	0.78	0.61	0.49	0.38
238712_at	---	1.88	0.99	0.46	1.23	1.98
238714_at	---	1.15	1.78	1.23	1.53	2.15
238725_at	---	12.56	2.29	2.57	2.04	1.63
238733_at	---	0.56	1.19	2.19	1.79	2.30
238761_at	---	0.48	1.33	1.48	1.84	1.32
238769_at	---	0.31	1.17	1.70	2.28	2.96
238884_at	---	0.47	0.85	1.14	3.63	1.29
238899_at	---	3.31	0.65	0.36	1.65	4.43

239032_at	---	2.86	2.04	1.57	1.53	1.40
239054_at	---	5.63	0.97	0.39	0.41	0.52
239058_at	---	2.04	0.80	0.87	0.63	0.43
239060_at	---	0.25	0.38	0.62	0.94	1.25
239122_at	---	1.46	1.04	0.54	0.38	0.43
239131_at	---	1.06	0.94	0.70	0.49	0.70
239134_at	---	0.61	0.64	2.47	2.80	1.31
239162_at	---	0.35	0.93	0.45	0.73	0.91
239164_at	---	1.29	1.76	2.51	1.36	1.40
239166_at	---	0.43	0.56	1.55	0.67	1.56
239167_at	---	2.68	1.95	1.41	1.17	1.48
239234_at	---	0.87	0.91	1.59	2.33	1.53
239251_at	---	0.81	0.88	0.84	0.44	1.21
239258_at	---	0.92	0.91	0.87	0.35	1.60
239274_at	---	0.64	0.89	1.40	1.04	2.11
239277_at	---	1.32	2.26	2.51	2.52	1.84
239287_at	---	2.03	0.91	0.77	1.43	0.40
239294_at	---	0.88	1.13	0.70	0.40	0.45
239296_at	---	0.80	1.05	1.26	1.84	3.03
239331_at	---	2.21	1.75	0.78	1.41	0.77
239363_at	---	0.41	0.55	0.89	0.40	0.87
239409_at	---	0.29	0.92	0.89	0.76	1.30
239411_at	---	5.08	3.02	3.84	1.38	1.49
239429_at	---	0.77	2.33	0.23	0.71	5.39
239449_at	---	0.24	1.43	0.31	0.78	1.06
239450_at	---	1.03	0.67	0.18	0.78	0.23
239519_at	---	0.27	0.55	0.69	0.35	0.76
239539_at	---	3.08	2.78	0.54	1.07	1.60
239571_at	---	0.47	1.81	1.26	1.22	1.68
239587_at	---	1.33	2.47	2.14	2.22	5.34
239646_at	---	0.18	0.47	1.11	0.66	0.47
239661_at	---	2.91	2.05	1.75	1.98	3.28
239677_at	---	1.81	0.54	0.43	0.61	0.78
239716_at	---	0.34	1.24	1.04	1.97	0.80
239780_at	---	2.00	2.00	1.69	0.92	3.24
239788_at	---	2.35	1.03	1.11	1.19	1.87
239809_at	---	0.35	0.25	0.47	0.50	0.94
239861_at	---	0.48	0.85	0.98	0.98	0.77
239989_at	---	0.87	0.77	3.80	1.53	1.23
240038_at	---	2.25	1.00	0.90	0.92	1.35
240058_at	---	0.99	1.02	2.69	4.55	6.26
240108_at	---	0.81	1.67	3.14	1.12	1.34
240128_at	---	6.90	2.37	1.64	1.77	2.68
240137_at	---	0.58	0.90	0.80	0.44	0.70
240154_at	---	1.31	1.36	1.14	1.06	2.12
240165_at	---	0.53	0.47	0.38	0.88	1.14
240173_at	---	0.71	0.17	0.24	0.25	0.24
240174_at	---	0.70	0.89	0.76	2.65	1.56
240232_at	---	9.75	12.72	22.00	25.62	39.79
240302_at	---	0.69	0.60	0.67	0.66	2.09
240410_at	---	2.27	0.84	1.14	0.91	0.53
240458_at	---	0.97	0.51	1.22	1.19	2.81

240501_at	---	1.10	1.18	1.38	0.93	0.42
240582_x_at	---	0.97	0.73	0.57	0.75	0.49
240594_at	---	1.13	1.01	1.44	0.19	0.75
240656_at	---	0.64	2.05	0.52	0.78	0.42
240673_at	---	0.45	0.42	0.06	0.21	0.19
240681_at	---	2.61	0.72	1.50	1.01	0.62
240696_at	---	1.54	2.13	1.96	1.31	1.12
240772_at	---	1.29	0.13	0.45	0.50	0.49
240800_x_at	---	0.97	0.67	0.72	0.47	0.98
240803_at	---	2.64	1.75	0.87	1.25	0.49
240948_at	---	0.96	1.00	0.41	0.41	0.39
241033_at	---	0.55	1.12	0.68	1.88	2.43
241068_at	---	1.31	13.94	0.76	1.53	0.42
241244_at	---	17.84	0.98	0.55	0.73	0.65
241336_at	---	1.48	0.97	1.95	0.36	1.25
241417_at	---	0.65	2.84	1.11	1.28	0.83
241438_at	---	1.07	0.79	0.50	0.87	0.96
241489_at	---	0.49	0.89	1.06	1.26	1.27
241501_at	---	2.54	1.38	3.04	1.31	2.25
241505_at	---	2.73	4.81	1.48	1.26	0.76
241686_x_at	---	2.28	1.18	2.32	1.51	2.17
241692_at	---	3.86	2.10	0.96	1.25	1.27
241740_at	---	5.10	3.81	1.11	1.19	1.09
241777_x_at	---	0.70	0.92	0.68	0.70	2.04
241879_at	---	1.21	0.63	0.52	0.45	0.75
241891_at	---	1.00	2.28	1.69	1.33	2.15
241916_at	---	4.82	17.68	3.72	4.38	5.46
241940_at	---	1.12	1.99	1.63	1.20	2.38
241991_at	---	1.58	3.51	1.80	2.09	2.11
242008_at	---	0.69	0.52	0.49	0.85	1.75
242046_at	---	0.46	0.73	0.99	0.35	1.10
242051_at	---	0.37	0.22	1.03	0.25	0.17
242057_at	---	0.60	2.97	0.91	3.51	0.72
242068_at	---	0.49	0.79	1.13	1.24	2.17
242106_at	---	0.39	0.66	1.04	0.31	1.07
242110_at	---	0.79	1.21	2.20	0.85	1.33
242124_at	---	0.20	0.97	0.71	0.79	2.70
242233_at	---	0.43	1.42	1.20	0.90	2.60
242277_at	---	1.05	4.02	2.78	2.20	1.84
242281_at	---	2.07	0.97	1.18	0.71	0.58
242388_x_at	---	5.00	6.37	4.30	7.74	4.29
242390_at	---	1.32	1.36	1.22	2.22	2.27
242403_at	---	0.91	2.25	0.82	1.17	1.51
242405_at	---	0.45	1.15	1.52	1.43	2.26
242480_at	---	1.00	0.75	0.97	0.87	2.74
242655_at	---	1.23	3.77	1.52	0.94	1.75
242695_at	---	1.69	1.57	1.34	1.78	2.83
242710_at	---	1.36	0.69	0.75	0.62	0.42
242713_at	---	1.87	3.83	1.67	2.28	2.42
242732_at	---	0.34	0.52	1.08	0.28	0.55
242741_x_at	---	0.51	0.48	0.97	0.87	1.64
242759_at	---	3.01	1.01	0.42	0.91	1.15

242868_at	---	0.54	1.90	0.36	0.37	1.49
242879_x_at	---	1.44	1.07	0.82	0.48	0.28
242995_at	---	4.80	1.05	1.21	0.94	0.72
243004_at	---	1.24	0.72	0.65	0.63	0.49
243012_at	---	0.93	0.77	0.42	0.58	0.45
243017_at	---	2.21	0.83	1.30	0.43	0.75
243020_at	---	0.72	0.77	0.50	0.66	1.09
243030_at	---	0.68	1.33	0.88	1.06	2.00
243055_at	---	2.54	0.39	1.03	0.27	0.36
243170_at	---	0.26	0.63	0.76	0.99	1.41
243218_at	---	1.20	2.23	1.61	1.38	2.07
243221_at	---	2.58	0.84	1.07	0.35	0.19
243271_at	---	76.86	33.65	12.02	15.71	30.81
243286_at	---	2.39	2.34	2.28	2.12	3.75
243299_at	---	0.43	0.96	2.33	1.39	2.02
243343_at	---	2.06	1.10	1.30	0.74	0.87
243345_at	---	0.89	0.90	0.42	1.06	0.70
243350_at	---	1.16	1.18	1.51	0.70	2.06
243404_at	---	1.31	1.31	1.01	0.26	0.91
243410_at	---	6.27	1.29	0.91	1.31	1.21
243444_at	---	1.06	2.85	0.56	0.51	0.40
243461_at	---	0.59	0.25	0.40	0.56	0.84
243504_at	---	1.11	0.22	0.79	1.38	0.43
243509_at	---	0.51	0.39	0.29	0.29	0.55
243513_at	---	1.09	1.21	0.78	1.17	0.24
243546_at	---	0.79	0.18	0.37	0.41	0.85
243561_at	---	0.24	0.84	0.87	1.01	1.26
243578_at	---	0.96	0.85	2.60	0.84	4.41
243598_at	---	0.56	2.41	7.69	2.24	3.23
243604_at	---	1.61	0.90	0.29	0.79	0.26
243606_at	---	2.38	1.17	0.71	0.77	0.31
243745_at	---	0.46	0.55	0.54	0.39	0.92
243754_at	---	0.72	2.46	4.80	3.69	3.83
243794_at	---	0.48	0.44	0.93	1.45	1.34
243801_x_at	---	0.19	1.28	1.31	0.93	1.03
243876_at	---	1.11	4.39	2.34	1.34	1.63
243931_at	---	0.46	0.64	0.88	0.85	1.01
243934_at	---	2.13	2.04	1.42	1.37	1.28
243997_x_at	---	11.60	1.15	0.52	1.29	0.67
244087_at	---	0.49	0.53	0.86	0.38	0.50
244145_at	---	2.05	1.02	1.02	1.34	2.04
244230_at	---	0.48	0.52	0.63	0.50	1.28
244332_at	---	0.43	0.90	0.48	0.55	0.75
244341_at	---	0.38	0.92	0.89	0.74	1.22
244352_at	---	0.72	0.76	0.99	0.47	0.66
244356_at	---	0.34	0.97	1.26	1.31	1.30
244418_at	---	2.03	0.68	0.24	1.24	1.05
244447_at	---	0.95	1.26	0.43	0.58	0.90
244457_at	---	1.36	0.74	1.43	1.37	2.39
244473_at	---	0.83	2.05	1.18	0.61	1.42
244539_at	---	0.49	3.41	1.38	2.55	0.82
244559_at	---	1.12	3.57	1.19	5.04	5.83

244579_at	---	0.77	0.45	0.37	0.54	1.10
244633_at	---	0.66	0.71	0.45	0.59	1.13
244642_at	---	2.59	2.24	2.81	1.12	1.74
244652_at	---	1.05	0.29	0.45	0.56	0.50
244658_at	---	3.43	0.70	0.41	2.28	1.40
244753_at	---	0.44	0.88	1.12	1.31	1.22
244831_at	---	2.21	0.94	1.35	0.47	0.67
65472_at	---	0.69	0.20	0.45	0.69	0.69
231274_s_at	---	1.17	0.49	0.88	0.62	1.03
226262_at	---	0.63	0.58	0.70	2.02	1.60
227368_at	---	0.55	1.35	1.71	2.26	2.58
238389_s_at	---	2.59	0.97	2.36	0.98	1.11
228582_x_at	---	2.06	1.08	1.26	0.89	1.34
239021_at	---	1.40	0.52	0.42	1.18	1.05
231061_at	---	1.27	0.70	0.63	2.77	2.06
213872_at	---	1.59	2.31	1.32	1.14	1.48
228174_at	---	2.42	1.21	0.30	0.45	0.91
231038_s_at	---	1.66	1.55	2.13	2.38	2.98
229548_at	---	2.21	3.06	1.73	7.39	4.75
231611_at	---	0.90	2.05	1.42	0.75	0.62
228049_x_at	---	1.01	0.17	0.44	1.20	0.79
235898_at	---	1.61	0.38	1.15	0.22	0.16
235629_at	---	3.89	4.30	0.53	0.82	1.01
230987_at	---	0.93	2.12	1.78	2.35	1.70
228498_at	---	0.86	1.63	1.28	1.58	2.17
230154_at	---	3.01	1.05	0.19	0.90	0.83
231199_at	---	0.31	1.03	1.10	0.84	1.04
228925_at	---	0.29	1.14	0.14	0.78	1.09
236248_x_at	MGC21874	0.36	0.87	1.62	1.40	1.16
212040_at	TGOLN2	1.16	0.62	0.54	0.48	0.34
212043_at	TGOLN2	1.02	0.69	0.63	0.60	0.46
201519_at	TOMM70A	0.44	0.58	0.92	0.96	1.19
219892_at	TM6SF1	0.84	0.30	0.50	0.60	0.43
228610_at	TM9SF3	1.70	0.88	1.47	2.43	0.45
221096_s_at	TMCO6	0.99	0.95	1.26	2.26	1.20
226604_at	TMTC3	0.49	1.41	1.42	1.04	1.21
224496_s_at	TMEM107	4.89	0.14	0.45	0.32	0.72
213851_at	TMEM110	0.90	6.29	2.21	2.68	2.15
227078_at	TMEM110	0.64	2.65	1.09	1.38	2.07
223482_at	TMEM120A	0.86	0.44	0.64	0.57	0.67
211967_at	TMEM123	1.07	2.58	1.77	1.08	1.50
223113_at	TMEM138	0.44	0.69	1.96	0.78	0.77
218999_at	TMEM140	3.43	3.45	4.90	3.01	2.99
223133_at	TMEM14B	0.97	0.31	0.98	0.72	0.94
223106_at	TMEM14C	0.77	0.41	0.50	0.78	0.78
223105_s_at	TMEM14C	1.00	0.50	0.67	0.90	0.71
213338_at	TMEM158	0.39	0.67	0.84	0.39	0.66
238783_at	TMEM161B	1.06	1.11	1.09	0.98	2.01
224702_at	TMEM167	0.76	0.48	0.73	0.82	0.67
218962_s_at	TMEM168	0.61	0.32	0.69	0.40	0.55
225489_at	TMEM18	0.76	1.08	1.10	0.77	0.45
226860_at	TMEM19	0.97	2.34	1.10	0.87	1.04

225374_at	TMEM199	0.58	1.15	2.08	2.16	1.47
217743_s_at	TMEM30A	0.82	1.17	1.92	2.45	1.60
232591_s_at	TMEM30A	0.67	1.29	2.35	2.69	2.11
225125_at	TMEM32	1.16	0.98	0.80	0.40	0.34
241392_at	TMEM39A	1.05	0.64	0.64	0.17	0.84
231697_s_at	TMEM49	2.73	1.65	1.35	2.62	3.25
218815_s_at	TMEM51	0.43	1.05	0.98	1.22	1.30
223396_at	TMEM60	0.78	2.15	1.90	1.82	1.60
218776_s_at	TMEM62	1.59	19.25	3.01	1.64	1.72
241342_at	TMEM65	1.05	2.23	1.52	1.97	1.66
225228_at	TMEM77	0.95	0.47	0.57	0.92	0.98
227570_at	TMEM86A	0.56	0.68	0.87	2.96	1.12
221255_s_at	TMEM93	1.44	0.51	0.44	0.71	0.88
224321_at	TMEFF2	0.51	2.24	0.80	2.67	1.29
203147_s_at	TRIM14	1.70	5.35	2.20	2.20	1.80
203148_s_at	TRIM14	3.31	9.06	2.80	2.83	2.53
204804_at	TRIM21	5.03	3.18	3.09	2.38	2.96
224806_at	TRIM25	2.17	4.15	2.16	1.63	1.76
202702_at	TRIM26	1.21	2.77	1.94	1.54	1.39
221044_s_at	TRIM34	1.76	3.93	2.25	2.35	2.20
219736_at	TRIM36	0.05	2.74	1.52	0.78	0.63
231876_at	TRIM56	2.24	2.70	1.75	1.63	1.89
227801_at	TRIM59	0.29	0.41	0.77	1.86	0.70
223599_at	TRIM6	0.26	1.69	2.67	3.25	3.42
214657_s_at	TncRNA	0.90	1.59	2.35	2.72	2.95
224566_at	TncRNA	0.82	1.55	1.86	2.22	1.92
227062_at	TncRNA	1.22	1.22	0.89	0.47	0.60
234989_at	TncRNA	0.93	1.30	0.90	0.49	0.56
202749_at	WRB	1.22	0.75	0.65	0.50	0.66
223530_at	TDRKH	1.48	0.45	0.91	0.77	0.68
213361_at	TDRD7	7.43	7.66	2.68	4.08	3.02
224298_s_at	UBAC2	2.08	1.15	1.22	1.20	1.25
238462_at	UBASH3B	0.92	0.60	0.59	0.40	0.62
238587_at	UBASH3B	0.83	0.26	0.24	0.18	0.55
219192_at	UBAP2	1.15	0.37	0.96	0.81	1.27
203991_s_at	UTX	0.94	1.56	2.05	2.52	0.91
220757_s_at	UBXD1	0.87	0.83	0.79	0.67	0.48
212840_at	UBXD7	0.44	0.92	0.81	1.55	1.15
215200_x_at	---	0.47	0.97	1.58	1.25	0.45
202365_at	UNC119B	0.47	0.76	0.62	0.45	0.54
212074_at	UNC84A	0.87	0.47	0.56	0.77	0.90
220998_s_at	UNC93B1	1.45	4.24	2.43	1.45	1.76
225869_s_at	UNC93B1	0.95	39.71	3.88	2.77	1.53
229908_s_at	UNKL	0.44	1.06	1.07	0.64	0.93
222154_s_at	LOC26010	1.20	17.41	6.04	5.00	5.87
241812_at	LOC26010	1.97	4.23	3.21	3.49	7.43
244597_at	LOC26010	10.18	2.75	3.15	3.53	4.40
227899_at	VIT	0.96	0.78	0.80	0.97	0.39
242957_at	VWCE	4.09	1.78	9.77	9.99	10.10
223021_x_at	VTA1	1.04	0.59	1.08	2.02	1.78
224800_at	WDFY1	0.73	3.85	2.42	2.32	1.42
233559_s_at	WDFY1	1.26	2.44	2.25	1.44	1.86

212598_at	WDFY3	0.36	0.71	0.86	0.61	0.24
202250_s_at	WDR42A	0.80	0.71	0.87	0.91	2.02
232075_at	WDR61	0.67	0.99	0.50	1.09	2.96
221744_at	WDR68	1.31	0.49	0.76	1.09	0.88
236381_s_at	WDR8	0.82	0.49	1.04	0.70	1.46
224135_at	WDR87	0.63	1.04	0.69	0.31	0.38
222799_at	WDR91	0.44	0.53	1.17	0.52	0.94
206133_at	XAF1	3.71	10.76	6.48	16.73	18.68
228617_at	XAF1	5.05	27.55	9.77	12.16	28.13
242234_at	XAF1	13.76	13.76	6.61	6.43	6.46
237802_at	XKR4	2.42	0.53	0.95	0.81	0.85
235916_at	YPEL4	0.25	0.97	2.29	1.53	1.59
222408_s_at	YPEL5	0.76	1.11	2.04	1.47	1.07
212787_at	YLPM1	1.07	0.41	0.98	1.03	1.16
208087_s_at	ZBP1	4.23	19.24	12.64	6.46	15.01
231899_at	ZC3H12C	0.29	1.26	1.40	0.43	0.69
213051_at	ZC3HAV1	10.27	3.94	1.36	1.51	1.93
220104_at	ZC3HAV1	5.51	4.87	3.57	1.59	3.34
225634_at	ZC3HAV1	8.61	5.15	1.52	0.59	1.20
226650_at	ZFAND2A	0.72	1.96	2.96	2.74	1.74
226168_at	ZFAND2B	0.70	0.67	0.85	0.80	2.01
217741_s_at	ZFAND5	0.91	1.41	2.06	1.48	1.91
218263_s_at	ZBED5	0.44	0.62	0.80	0.84	0.93
225365_at	ZDHHC20	0.93	0.73	0.91	0.57	0.46
235068_at	ZDHHC21	0.09	0.42	1.51	2.02	0.35
226912_at	ZDHHC23	1.20	1.02	1.39	1.89	2.38
37943_at	ZFYVE26	1.37	2.64	1.54	1.54	1.30

A.3. IFN regulated genes in untreated SLE monocytes.

			Normalized value in		Normalized value in IFN experiment				
Systematic	Gene Symbol	p-value	SLE Monocytes	1hr	6 hrs	24 hrs	48 hrs	72 hrs	
Angiogenesis									
219439_at	C1GALT1	1.59E-03	1.44	1.33	4.64	5.02	3.24	3.29	
Apoptosis									
201301_s_at	ANXA4	1.72E-03	2.36	1.14	3.16	2.28	1.91	2.57	
201302_at	ANXA4	9.25E-03	1.87	1.17	2.88	2.08	1.48	2.01	
202688_at	TNFSF10	2.26E-03	2.76	20.36	56.40	13.44	16.85	45.06	
202971_s_at	DYRK2	2.44E-02	0.51	1.02	0.67	0.94	0.28	0.71	
204780_s_at	FAS	6.08E-03	1.90	2.29	2.75	3.65	3.24	4.32	
209539_at	ARHGEF6	1.27E-03	0.66	1.00	0.87	0.50	0.56	0.77	
211317_s_at	CFLAR	3.82E-01	1.56	0.85	2.38	1.65	0.95	0.69	
226116_at	DFFA	9.71E-03	0.59	0.82	0.41	0.40	0.53	0.44	
226524_at	C3orf38	1.93E-03	2.18	1.53	2.65	1.91	2.14	1.91	
229174_at	C3orf38	6.08E-03	2.62	1.89	3.43	1.55	1.49	2.49	
37384_at	PPM1F	1.66E-02	0.55	0.73	0.46	0.37	0.78	0.47	
Biosynthetic process									
201268_at	NME2	2.57E-02	0.44	1.24	0.69	0.72	0.78	0.43	
203217_s_at	ST3GAL5	6.51E-03	1.64	1.15	2.89	2.15	1.50	1.45	
212864_at	CDS2	1.25E-03	1.59	0.92	2.67	1.65	1.80	1.91	
218809_at	PANK2	1.51E-03	1.40	1.55	1.96	1.73	2.22	1.82	
219017_at	ETNK1	1.74E-05	2.14	1.43	2.23	1.90	1.00	0.89	
226432_at	ETNK1	2.79E-02	2.23	0.22	2.47	1.03	0.94	0.65	
226702_at	LOC129607	2.65E-06	5.14	6.80	16.19	10.04	18.84	29.20	
Catabolic process									
213129_s_at	GCSH	1.01E-05	0.50	0.86	0.66	0.46	0.21	0.35	
Cell adhesion									
201647_s_at	SCARB2	5.89E-03	2.18	1.38	3.46	2.24	1.00	0.76	
204490_s_at	CD44	1.23E-03	0.54	0.90	0.56	0.62	0.54	0.45	
205055_at	ITGAE	5.33E-03	0.50	0.91	0.68	0.39	0.35	0.25	
205718_at	ITGB7	3.51E-02	2.36	0.82	2.26	1.86	3.33	8.10	
209473_at	ENTPD1	6.83E-03	0.67	0.98	0.57	0.51	0.47	0.57	
209835_x_at	CD44	1.58E-02	0.63	1.00	0.66	0.47	0.44	0.42	
211075_s_at	CD47	2.53E-03	1.82	1.20	4.95	2.25	1.68	1.88	
212014_x_at	CD44	2.11E-02	0.55	0.79	0.78	0.43	0.35	0.48	
212063_at	CD44	1.57E-03	0.48	1.03	0.42	0.33	0.26	0.32	
217523_at	CD44	1.22E-02	0.33	0.70	0.46	0.57	0.52	0.72	
219519_s_at	SIGLEC1	1.01E-05	88.12	6.17	107.02	10.07	18.73	93.89	
222838_at	SLAMF7	3.51E-04	5.32	0.87	7.15	5.90	2.44	1.96	

224983_at	SCARB2	3.39E-03	1.72	1.49	2.54	1.43	0.93	0.87
228707_at	CLDN23	5.94E-04	9.26	4.84	6.12	3.48	3.78	2.45
244229_at	PARVG	3.56E-03	0.52	0.29	0.76	1.20	0.74	1.02
44673_at	SIGLEC1	1.80E-04	15.43	1.83	16.21	7.46	14.68	17.54

Cell cycle

202191_s_at	GAS7	2.73E-03	0.49	0.88	0.69	0.49	0.58	0.89
207614_s_at	CUL1	4.10E-04	4.13	1.05	2.10	2.71	2.25	2.76
209588_at	EPHB2	9.70E-03	1.88	1.25	2.68	1.19	1.22	1.45
212698_s_at	SEPT10	7.22E-03	0.46	3.04	0.71	0.74	0.56	0.41
212997_s_at	TLK2	2.42E-03	1.55	0.88	1.69	2.33	1.54	1.71
213331_s_at	NEK1	5.79E-03	1.55	1.63	2.04	1.19	0.84	1.25
225285_at	BCAT1	1.82E-02	0.41	0.70	0.18	0.19	0.08	0.13
225665_at	ZAK	4.03E-02	0.48	1.01	0.42	0.38	0.34	0.33
225814_at	XRN1	1.89E-03	1.79	1.27	5.96	2.57	3.04	2.15
226517_at	BCAT1	2.10E-03	0.43	0.41	0.28	0.23	0.19	0.20
233632_s_at	XRN1	3.72E-03	2.47	1.29	6.29	3.39	2.14	2.62

Cell death

203232_s_at	ATXN1	8.40E-05	0.65	1.16	0.19	0.25	0.39	0.46
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Cell differentiation

204858_s_at	ECGF1	8.26E-03	2.43	1.42	3.43	2.40	1.36	1.07
204929_s_at	VAMP5	2.85E-02	1.71	1.48	4.88	2.08	1.61	2.22
206707_x_at	C6orf32	1.65E-03	1.46	1.30	3.63	2.99	1.14	1.28
217497_at	ECGF1	3.28E-03	1.72	1.76	3.46	2.37	3.28	3.78
226725_at	SLFN5	4.49E-03	2.65	5.20	3.45	2.78	2.90	3.18

Cell migration/Cell motility

221815_at	ABHD2	1.28E-02	0.46	0.99	0.10	0.22	0.18	0.22
225897_at	MARCKS	5.81E-02	1.91	0.72	4.26	4.19	3.27	2.88

Cell proliferation

201324_at	EMP1	4.55E-04	7.29	3.26	3.13	1.12	0.41	0.69
201325_s_at	EMP1	1.40E-04	8.86	4.49	3.68	1.10	0.42	0.62
204698_at	ISG20	2.66E-03	11.10	15.18	177.10	52.33	208.54	270.01
225435_at	SSR1	1.17E-03	0.40	0.96	0.51	0.29	0.19	0.22
33304_at	ISG20	1.04E-02	4.55	8.02	45.72	31.69	39.34	61.38

Cell wall catabolic process

226748_at	LYSMD2	6.01E-03	2.23	1.21	3.47	3.61	3.94	3.63
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Chemotaxis

204533_at	CXCL10	7.57E-03	7.15	161.94	103.46	26.33	28.43	101.97
205098_at	CCR1	1.29E-03	3.27	1.13	1.90	2.78	2.42	1.85
206991_s_at	CCR5	1.85E-03	2.39	1.22	2.15	1.94	1.42	1.38
210163_at	CXCL11	2.26E-02	3.02	79.85	242.16	74.26	25.02	5.69
210772_at	FPRL1	5.60E-03	2.75	1.29	2.69	0.94	0.31	1.75

214038_at	CCL8	2.70E-03	10.96	115.54	117.85	22.79	79.30	108.24
216598_s_at	CCL2	1.24E-03	32.59	8.67	10.84	3.10	14.43	3.06
230422_at	FPRL2	2.98E-03	2.74	0.60	2.10	2.05	2.66	2.57

Cytoskeleton

200897_s_at	PALLD	5.68E-03	0.24	1.39	0.48	0.52	0.40	0.31
200907_s_at	PALLD	9.62E-03	0.28	1.17	0.56	0.48	0.39	0.26

Dephosphorylation

208121_s_at	PTPRO	2.29E-03	4.16	2.02	1.64	1.07	0.70	0.68
235061_at	PPM1K	1.32E-02	4.06	4.72	23.72	5.33	9.34	12.73

Development

207023_x_at	KRT10	7.37E-04	0.30	1.02	0.61	0.37	0.30	0.27
210633_x_at	KRT10	1.55E-03	0.32	1.06	0.68	0.28	0.37	0.27
213287_s_at	KRT10	1.67E-03	0.39	0.88	0.52	0.41	0.54	0.43
223849_s_at	MOV10	2.96E-04	3.56	2.46	15.92	5.51	4.48	8.89
229173_at	KIAA1715	2.12E-02	0.54	1.09	0.40	0.67	0.76	0.66
230480_at	PIWIL4	1.12E-02	1.44	0.46	2.08	6.21	3.22	3.65

DNA repair

202907_s_at	NBN	1.17E-03	1.25	1.54	3.18	1.82	1.14	1.08
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DNA replication

204528_s_at	NAP1L1	1.45E-02	0.37	0.68	1.33	0.85	0.35	0.54
208752_x_at	NAP1L1	1.81E-02	0.57	1.02	1.10	0.61	0.40	0.39
208753_s_at	NAP1L1	1.17E-02	0.50	0.98	0.90	0.57	0.39	0.45
208754_s_at	NAP1L1	1.37E-02	0.37	0.92	0.53	0.38	0.25	0.52

Glycolysis

201037_at	PFKP	1.52E-03	2.27	1.26	1.93	2.29	1.62	1.30
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Glycosylation

205505_at	GCNT1	1.77E-03	2.04	0.53	3.04	1.10	2.65	3.12
239761_at	GCNT1	1.45E-02	1.81	0.93	2.60	1.37	2.15	2.77

Homeostasis

212185_x_at	MT2A	1.81E-02	2.14	1.62	6.10	2.92	4.32	3.24
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Immune response/Defense response

200986_at	SERPING1	8.93E-03	5.87	2.77	11.96	6.45	11.78	17.89
201315_x_at	IFITM2	6.13E-04	5.15	1.11	7.08	6.00	9.80	16.13
201601_x_at	IFITM1	1.66E-03	20.00	3.09	42.61	19.47	65.62	256.86
201641_at	BST2	7.23E-05	2.37	1.42	9.68	4.45	3.26	4.05
202086_at	MX1	9.78E-05	11.37	8.21	24.52	13.35	23.81	53.68
202145_at	LY6E	1.67E-04	10.49	1.32	16.79	15.72	18.02	16.96
202269_x_at	GBP1	7.44E-03	3.70	8.83	22.15	12.53	12.49	13.34
202270_at	GBP1	2.26E-04	5.10	11.09	21.67	14.02	9.82	7.94

202411_at	IFI27	1.81E-04	330.93	4.33	78.82	16.02	25.54	172.87
202869_at	OAS1	1.46E-03	2.49	9.49	27.32	14.01	19.68	30.77
203153_at	IFIT1	2.13E-05	19.00	166.23	88.49	32.70	128.77	1678.43
203595_s_at	IFIT5	3.94E-04	3.85	25.09	13.97	7.65	12.68	29.55
203596_s_at	IFIT5	5.62E-04	6.67	20.42	19.06	22.49	30.52	77.35
204415_at	IFI6	4.96E-05	12.83	2.69	9.07	5.30	15.78	14.23
204747_at	IFIT3	1.92E-04	6.97	45.39	26.38	15.15	17.52	23.96
204972_at	OAS2	3.46E-05	7.27	2.75	17.22	15.22	13.78	26.65
204994_at	MX2	2.55E-04	4.36	4.24	15.57	8.25	12.41	12.93
205552_s_at	OAS1	1.91E-03	4.45	2.76	23.97	10.18	15.94	12.41
205660_at	OASL	3.82E-05	10.77	7.26	14.69	12.60	17.88	20.92
206513_at	AIM2	1.35E-02	1.95	3.32	6.17	4.19	7.73	6.45
206553_at	OAS2	2.22E-03	2.77	2.95	16.76	10.25	11.90	26.56
209417_s_at	IFI35	8.51E-04	4.65	2.05	26.59	7.56	8.92	8.87
209795_at	CD69	9.42E-03	3.68	44.49	21.25	64.66	27.35	8.91
210166_at	TLR5	1.17E-02	0.65	0.86	0.77	0.50	0.75	1.04
210797_s_at	OASL	5.95E-05	9.17	5.29	9.16	9.32	11.54	8.96
212203_x_at	IFITM3	1.43E-04	6.46	1.33	14.62	6.22	12.74	20.11
212657_s_at	IL1RN	2.50E-04	2.86	4.06	5.48	1.78	1.71	0.73
212659_s_at	IL1RN	3.08E-03	1.98	6.51	5.99	1.51	1.75	0.78
214022_s_at	IFITM1	8.61E-04	16.52	2.60	54.89	30.03	74.72	264.41
214059_at	IFI44	8.18E-04	11.50	122.83	28.46	21.15	17.14	37.34
214453_s_at	IFI44	1.37E-05	6.20	3.92	17.66	11.35	16.87	19.04
214511_x_at	FCGR1B	5.81E-04	3.98	2.82	3.05	0.28	0.29	0.87
216243_s_at	IL1RN	5.29E-04	1.91	7.64	5.62	2.21	1.74	0.85
217502_at	IFIT2	1.30E-03	6.17	61.80	29.48	19.82	34.30	33.40
218400_at	OAS3	3.12E-05	8.14	2.61	19.99	9.63	22.61	14.90
218943_s_at	DDX58	2.86E-03	4.27	34.59	46.91	38.95	11.62	14.09
219209_at	IFIH1	6.71E-04	3.89	10.87	12.10	6.09	7.02	11.29
219364_at	DHX58	1.33E-03	4.46	15.89	126.79	10.73	25.64	10.03
222793_at	DDX58	1.21E-02	2.96	3.55	17.65	10.50	10.71	13.23
223434_at	GBP3	5.07E-03	2.82	2.81	19.69	13.66	3.91	4.20
226218_at	IL7R	2.10E-03	5.42	1.49	3.25	2.90	2.51	1.64
226757_at	IFIT2	2.46E-04	13.50	33.51	20.47	11.13	26.69	60.69
227458_at	---	2.27E-03	4.61	45.62	10.68	17.16	5.84	5.41
228607_at	OAS2	9.89E-05	3.99	4.29	8.49	3.63	4.96	3.82
229450_at	IFIT3	5.13E-06	17.68	61.63	46.63	14.93	51.24	110.65
229625_at	GBP5	1.10E-02	4.09	14.95	24.14	30.45	10.82	4.87
231577_s_at	GBP1	2.92E-03	6.63	9.00	35.67	18.31	11.30	14.82
232666_at	OAS3	6.87E-03	2.77	4.21	10.96	4.63	9.29	3.56
235175_at	GBP4	5.79E-02	2.09	4.44	12.90	10.79	3.97	6.71
238581_at	GBP5	3.60E-03	6.26	11.07	76.55	22.17	54.85	29.10
239205_s_at	CR1	1.11E-01	1.99	0.82	2.19	1.81	1.26	0.59

Metabolic process

203058_s_at	PAPSS2	5.20E-04	0.44	1.41	0.32	0.37	0.57	0.48
203127_s_at	SPTLC2	7.57E-03	1.73	1.37	4.22	3.75	7.19	5.60
204224_s_at	GCH1	1.78E-03	2.13	2.12	10.89	18.39	14.84	28.21

207275_s_at	ACSL1	5.85E-03	3.13	1.53	2.15	1.91	0.92	0.71
209213_at	CBR1	4.29E-03	2.66	3.08	5.89	3.92	2.83	2.35
209459_s_at	ABAT	8.19E-03	0.45	1.06	0.48	0.48	0.37	0.61
209460_at	ABAT	5.04E-02	0.47	0.87	0.21	0.45	0.48	0.67
212321_at	SGPL1	3.83E-04	0.57	1.18	0.47	0.66	0.79	1.13
213607_x_at	NADK	2.25E-04	1.34	1.60	3.85	1.86	2.24	1.09
216202_s_at	SPTLC2	2.00E-02	2.61	1.78	6.20	6.18	3.95	7.22
217922_at	MAN1A2	2.87E-02	0.68	1.14	0.51	0.32	0.44	0.63
218017_s_at	HGSNAT	1.69E-03	0.50	1.01	0.74	0.92	0.49	0.99
218421_at	CERK	6.39E-03	0.56	0.95	0.45	0.69	0.68	0.52
219403_s_at	HPSE	1.10E-02	1.54	1.29	3.99	4.19	5.36	3.54
220615_s_at	MLSTD1	9.78E-03	1.43	1.25	4.17	1.42	0.70	1.05
225440_at	AGPAT3	7.09E-04	1.77	1.01	2.53	2.19	1.69	1.82
226733_at	PFKFB2	7.85E-04	0.45	0.76	0.63	0.26	0.42	0.66
228376_at	GGTA1+B238	8.16E-03	0.38	0.97	0.97	0.29	0.18	0.11
231832_at	GALNT4	1.03E-02	1.48	1.21	1.11	2.44	1.76	0.68
235256_s_at	GALM	3.15E-03	3.10	1.53	19.79	2.41	1.18	1.07
242281_at	---	1.91E-04	1.69	2.07	0.97	1.18	0.71	0.58

Methyltransferase activity

211732_x_at	HNMT	2.62E-02	0.46	0.83	0.40	1.34	3.02	1.91
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Nucleic acid metabolism

204187_at	GMPR	1.98E-03	7.07	1.30	21.58	13.14	13.29	21.75
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Nucleosome assembly

208886_at	H1F0	1.39E-02	3.64	0.88	1.31	2.13	2.67	4.78
209398_at	HIST1H1C	6.29E-02	2.46	1.29	0.96	0.65	2.54	2.83
212205_at	H2AFV	3.85E-02	0.62	1.11	0.28	0.28	0.47	0.60
214290_s_at	HIST2H2AA3	5.41E-03	2.63	1.18	3.75	2.44	2.55	3.59
218280_x_at	HIST2H2AA3	4.06E-03	2.49	1.00	3.26	2.74	3.38	4.57

Nucleotide metabolic process

201892_s_at	IMPDH2	8.49E-03	0.37	0.84	0.24	0.52	0.59	0.60
213892_s_at	APRT	4.02E-02	0.66	0.80	0.62	0.50	0.75	0.46
223298_s_at	NT5C3	2.50E-03	3.68	4.84	28.40	10.09	10.28	14.96

Phagocytosis

202877_s_at	CD93	8.18E-03	0.56	0.45	0.27	0.22	0.17	0.32
216950_s_at	FCGR1A	1.11E-03	4.10	3.61	3.07	0.53	0.44	0.58
55692_at	ELMO2	1.35E-02	1.60	1.19	2.14	1.12	0.89	1.17

Platelet activation

202430_s_at	PLSCR1	1.32E-04	1.85	1.86	6.49	4.54	7.54	9.64
202446_s_at	PLSCR1	6.55E-05	2.96	1.85	8.04	4.33	5.63	6.21

Protein amino acid ADP-ribosylation

218543_s_at	PARP12	7.30E-04	4.04	4.09	12.12	6.11	8.56	8.48
220104_at	ZC3HAV1	2.45E-04	3.00	5.51	4.87	3.57	1.59	3.34
223220_s_at	PARP9	5.90E-06	7.54	3.52	18.09	9.46	10.46	10.94
225634_at	ZC3HAV1	2.23E-03	2.08	8.61	5.15	1.52	0.59	1.20
227807_at	PARP9	9.31E-05	3.23	3.26	9.32	4.39	6.35	9.64
229138_at	PARP11	7.64E-03	2.01	1.35	4.59	2.92	1.83	1.81

Protein amino acid phosphorylation

202193_at	LIMK2	1.29E-02	2.26	2.62	1.91	1.39	1.11	1.39
210582_s_at	LIMK2	1.01E-02	2.13	2.35	1.59	0.98	1.58	0.54
227438_at	ALPK1	9.00E-05	3.46	1.37	0.98	2.23	1.26	2.00
238025_at	MLKL	1.50E-02	1.49	3.02	3.54	2.83	1.76	2.10

Protein biosynthetic process

212845_at	SAMD4A	7.01E-03	4.59	14.53	21.36	16.80	14.28	8.54
215495_s_at	SAMD4A	4.76E-03	2.29	3.27	18.30	30.89	31.95	6.60

Protein folding

200880_at	DNAJA1	4.68E-03	2.07	2.96	3.59	2.29	2.44	1.84
200881_s_at	DNAJA1	1.71E-03	1.72	3.12	3.37	2.30	2.73	2.36
202581_at	HSPA1B	1.25E-03	2.35	0.97	4.49	1.96	2.24	1.89
208744_x_at	HSPH1	1.17E-03	3.61	0.23	2.27	0.87	1.33	1.04
209593_s_at	TOR1B	7.53E-04	4.05	4.96	7.97	4.93	5.27	4.57
219283_at	C1GALT1C1	7.08E-03	1.47	1.06	3.03	1.69	2.20	1.75
224856_at	FKBP5	2.23E-03	2.34	1.58	2.19	1.53	1.13	0.88
225061_at	DNAJA4	3.56E-03	2.58	0.96	6.71	1.74	2.72	2.20
226175_at	TTC9C	1.67E-03	1.66	1.01	0.82	2.52	2.25	1.57
229588_at	DNAJC10	5.22E-03	0.46	1.30	0.53	0.74	0.35	0.46
229603_at	BBS12	2.31E-04	12.01	4.10	3.78	1.18	2.39	2.19

Protein homooligomerization

201060_x_at	STOM	6.07E-04	4.24	1.48	22.42	7.00	1.99	4.25
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Protein modification process

228042_at	ADPRH	3.17E-04	2.68	1.59	4.16	3.75	5.19	2.74
230261_at	ST8SIA4	4.50E-04	2.28	0.98	3.62	3.05	3.03	2.48
242943_at	ST8SIA4	5.23E-03	2.99	1.07	2.80	2.57	3.30	3.05

Proteolysis

202087_s_at	CTSL1	6.01E-04	2.85	3.85	2.98	3.08	1.37	1.04
202740_at	ACY1	1.00E-02	0.71	0.84	1.37	0.76	0.72	0.49
204279_at	PSMB9	8.63E-04	2.97	1.31	7.02	3.90	3.06	3.08
209040_s_at	PSMB8	4.13E-03	1.66	1.43	2.97	1.87	1.91	1.99
217933_s_at	LAP3	1.24E-04	2.81	2.28	10.68	4.51	4.23	4.12
227018_at	DPP8	2.74E-02	1.47	0.52	0.97	2.01	1.33	1.24
231234_at	CTSC	1.40E-02	0.23	0.38	3.65	1.46	0.82	0.47
231769_at	FBXO6	4.61E-02	2.81	4.28	8.73	7.18	5.12	4.66

235019_at	CPM	9.39E-03	0.46	0.90	2.66	0.49	0.26	0.25
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Regulation of cell growth

213497_at	ABTB2	4.60E-03	2.17	0.66	4.34	4.06	4.25	1.87
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Regulation of Rab GTPase activity

213982_s_at	RABGAP1L	3.80E-03	2.83	1.47	46.23	6.00	9.08	8.11
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RNA processing

200685_at	SFRS11	7.02E-04	0.45	0.50	0.47	0.39	1.08	0.71
201064_s_at	PABPC4	2.44E-03	0.45	0.80	0.54	0.48	0.26	0.44
201786_s_at	ADAR	4.47E-03	2.13	2.01	5.62	3.15	3.59	4.04
203820_s_at	IGF2BP3	2.77E-03	2.84	1.29	13.09	5.16	1.85	4.54
206111_at	RNASE2	3.57E-03	3.76	1.15	2.42	2.23	1.03	0.78
208113_x_at	PABPC3	8.08E-04	0.47	1.03	0.71	0.50	0.37	0.42
213264_at	PCBP2	8.72E-04	0.45	1.10	0.87	0.50	0.30	0.44
213718_at	RBM4	8.74E-03	0.53	0.98	0.89	0.48	0.95	1.13
215823_x_at	PABPC3	1.84E-03	0.49	0.95	0.90	0.48	0.50	0.29
216559_x_at	HNRNPA1	2.38E-02	0.72	0.91	0.48	0.61	1.10	0.67
222754_at	TRNT1	2.53E-02	1.59	0.54	0.79	2.32	1.35	0.54
223404_s_at	C1orf25	1.71E-04	2.55	1.11	1.83	1.39	2.29	1.53
224741_x_at	GAS5	6.29E-03	0.53	1.10	0.47	0.83	0.93	0.66
224841_x_at	GAS5	2.26E-03	0.49	1.19	0.48	0.95	0.90	0.70
225291_at	PNPT1	9.49E-04	4.26	6.81	19.27	7.54	6.55	5.95
226093_at	DCP1B	1.37E-01	1.32	1.66	0.77	1.43	2.69	2.35

Signal transduction

211985_s_at	CALM1	1.20E-02	2.06	1.69	2.31	1.75	1.32	1.48
200923_at	LGALS3BP	2.27E-04	11.19	0.97	2.63	7.59	13.72	16.25
202073_at	OPTN	2.93E-03	3.41	2.12	15.09	3.23	1.70	1.41
202074_s_at	OPTN	2.18E-03	6.16	6.85	17.31	11.82	6.58	7.33
202686_s_at	AXL	1.22E-02	4.67	2.06	10.24	15.63	12.84	15.37
202760_s_at	AKAP2	1.82E-03	9.96	5.28	25.05	32.33	20.78	8.58
202912_at	ADM	5.25E-02	2.29	1.35	1.66	3.51	2.70	1.47
203236_s_at	LGALS9	7.28E-04	2.73	1.39	4.31	1.97	1.13	0.74
203485_at	RTN1	3.95E-02	0.17	0.94	0.65	0.73	0.36	0.20
203593_at	CD2AP	5.69E-03	2.50	1.73	6.34	4.91	3.17	3.38
204423_at	MKLN1	4.13E-03	1.83	0.96	1.27	1.97	1.69	2.43
205698_s_at	MAP2K6	2.73E-02	1.87	2.42	1.85	1.39	0.67	1.07
205801_s_at	RASGRP3	1.51E-04	10.03	3.24	4.54	2.55	1.01	0.96
205841_at	JAK2	8.58E-03	1.93	1.34	6.84	4.40	2.68	10.31
205842_s_at	JAK2	9.17E-03	2.23	0.90	5.73	3.01	2.34	2.32
206025_s_at	TNFAIP6	2.14E-02	5.13	2.13	2.98	10.29	5.09	16.49
206026_s_at	TNFAIP6	2.31E-02	5.50	2.21	2.52	6.28	2.57	3.52
206170_at	ADRB2	7.89E-02	1.93	2.16	1.82	0.96	0.88	1.41
209392_at	ENPP2	5.52E-01	1.49	28.87	104.52	9.35	35.82	15.94
209568_s_at	RGL1	1.61E-02	4.02	4.83	3.29	3.41	3.21	2.99
209684_at	RIN2	3.04E-03	1.94	5.37	7.71	2.35	1.78	2.69

210561_s_at	WSB1	2.08E-02	1.47	2.42	1.23	1.08	1.03	1.28
210724_at	EMR3	2.33E-03	0.12	0.78	0.15	0.11	0.22	0.18
212706_at	RASA4	7.54E-03	0.24	1.75	1.36	0.38	0.40	1.13
213222_at	PLCB1	3.74E-02	0.47	1.05	0.46	0.97	1.23	0.94
213804_at	INPP5B	2.59E-02	0.57	0.66	0.47	0.66	1.26	1.87
219607_s_at	MS4A4A	2.54E-03	7.72	1.76	5.94	2.93	1.33	0.96
220162_s_at	CARD9	2.97E-02	0.60	0.52	0.58	0.80	0.38	0.66
221345_at	FFAR2	8.06E-04	5.14	2.18	13.13	4.23	4.65	2.67
222591_at	STYXL1	6.65E-02	0.39	1.15	0.30	0.72	0.70	1.36
222986_s_at	SCOTIN	9.97E-04	2.50	0.91	1.98	2.40	4.11	3.08
223358_s_at	---	8.07E-03	2.42	1.08	2.06	2.46	1.32	1.11
223620_at	GPR34	8.05E-03	0.37	0.75	0.34	0.20	0.39	0.49
225056_at	SIPA1L2	1.24E-02	1.74	0.89	1.23	2.06	1.59	1.59
225144_at	BMPR2	1.61E-04	2.34	0.75	2.54	1.66	1.19	1.17
225710_at	GNB4	2.23E-03	1.55	1.82	3.74	1.66	1.20	1.07
226551_at	RIPK1	4.83E-03	1.82	3.26	2.06	2.36	1.69	1.28
226694_at	AKAP2	2.33E-04	14.86	2.86	14.50	19.01	30.23	4.84
227697_at	SOCS3	2.86E-01	2.39	3.98	0.93	1.12	1.21	0.65
234050_at	TAGAP	2.78E-02	2.09	3.63	1.96	1.04	1.30	1.90
243981_at	STK4	7.91E-03	0.44	0.40	0.97	0.73	1.30	1.55
38149_at	ARHGAP25	3.71E-03	2.28	1.30	2.05	3.12	3.05	3.24

Small GTPase mediated signal transduction

203581_at	RAB4A	8.83E-04	0.45	0.92	0.63	0.55	0.48	0.57
206272_at	SPHAR	1.05E-02	0.44	0.81	0.55	0.56	0.45	0.54

Synaptic transmission

208912_s_at	CNP	2.12E-02	2.21	3.83	7.50	3.12	3.60	4.72
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Transcription

200887_s_at	STAT1	9.77E-04	2.43	1.75	6.99	3.89	3.99	5.39
201139_s_at	SSB	2.86E-04	1.83	2.24	2.77	1.93	2.51	2.02
201416_at	SOX4	2.04E-03	0.51	0.87	0.41	0.16	0.29	0.35
202307_s_at	TAP1	7.30E-04	3.81	3.24	4.82	3.55	5.72	3.53
202599_s_at	NRIP1	4.48E-02	1.84	1.52	2.29	1.88	1.83	2.26
202864_s_at	SP100	9.71E-03	1.31	1.62	3.53	2.90	3.76	3.61
203882_at	ISGF3G	2.19E-02	2.13	1.72	2.92	2.92	2.97	2.11
203964_at	NMI	9.11E-05	1.72	2.52	5.63	3.18	3.43	3.77
204211_x_at	EIF2AK2	6.06E-03	3.32	3.40	3.93	2.96	5.29	6.40
205101_at	CIITA	1.98E-03	0.46	1.04	1.29	0.43	0.54	0.62
206332_s_at	IFI16	4.58E-04	1.94	4.57	7.32	3.24	3.57	3.61
206503_x_at	PML	9.30E-04	3.77	22.41	37.87	5.93	3.60	7.73
206715_at	TFEC	2.74E-03	1.68	1.10	3.10	4.58	2.77	3.86
207233_s_at	MITF	1.87E-02	0.68	1.14	1.13	0.57	0.44	0.76
208012_x_at	SP110	3.73E-04	2.12	3.41	14.01	4.11	7.26	7.87
208066_s_at	GTF2B	1.27E-03	1.78	3.31	1.94	2.20	2.46	2.45
208436_s_at	IRF7	7.26E-04	3.39	5.35	6.15	5.02	11.16	15.85
208966_x_at	IFI16	1.03E-03	2.02	3.86	6.33	2.72	4.74	3.55

208991_at	STAT3	2.42E-03	1.50	1.56	2.16	2.25	1.55	1.83
209357_at	CITED2	1.81E-02	2.53	1.46	0.63	3.41	1.47	1.75
209762_x_at	SP110	1.22E-04	2.13	2.80	13.87	4.36	6.71	6.97
209969_s_at	STAT1	8.18E-03	2.39	3.62	9.70	4.88	9.25	12.04
210281_s_at	ZMYM2	8.13E-03	0.44	0.50	0.87	1.53	0.77	0.89
210778_s_at	MXD4	1.40E-03	0.34	0.87	0.16	0.28	0.34	0.53
211012_s_at	PML	1.09E-03	4.86	8.84	95.94	10.97	32.49	10.99
211013_x_at	PML	5.45E-04	3.90	3.67	20.72	6.71	8.69	11.70
211267_at	HESX1	5.42E-05	19.04	2.74	34.09	7.59	40.74	21.33
213293_s_at	TRIM22	4.08E-04	2.20	2.34	8.84	3.07	4.26	6.49
213294_at	---	2.23E-04	3.02	3.18	8.63	4.27	4.68	7.17
214438_at	HLX	1.05E-01	1.95	3.09	1.68	2.00	2.21	1.43
217986_s_at	BAZ1A	2.35E-02	1.53	1.67	1.58	2.01	1.65	1.28
217995_at	SQRDL	2.08E-03	2.01	1.25	2.04	2.09	2.13	1.91
218149_s_at	ZNF395	2.10E-03	0.36	0.55	0.94	0.41	0.50	0.58
218188_s_at	TIMM13	2.07E-02	0.69	0.76	0.32	0.61	0.85	0.69
221680_s_at	ETV7	1.87E-03	2.36	4.88	6.21	1.41	3.30	3.24
222018_at	NACA	1.25E-02	0.46	0.44	0.35	1.02	0.70	1.04
222514_at	RRAGC	5.33E-04	1.47	0.95	2.38	1.65	1.29	0.94
223980_s_at	SP110	4.15E-03	2.15	7.05	13.52	4.36	4.08	6.17
224225_s_at	ETV7	1.54E-04	6.71	1.72	5.14	12.29	2.92	19.71
224701_at	PARP14	7.06E-04	4.74	4.02	10.87	4.71	4.61	4.49
224833_at	ETS1	1.95E-03	2.93	0.28	1.22	1.25	2.02	2.36
225076_s_at	ZNFX1	5.82E-04	2.39	3.01	4.31	3.95	2.41	3.44
225344_at	NCOA7	1.17E-03	4.62	19.57	8.92	4.16	3.64	2.71
225636_at	STAT2	4.55E-03	1.63	2.10	8.19	4.32	4.19	5.06
228230_at	PRIC285	7.38E-03	2.50	2.68	5.34	1.86	7.61	4.13
228439_at	BATF2	3.39E-03	2.46	6.74	5.74	5.50	5.31	4.87
228846_at	MXD1	3.22E-02	2.57	1.75	2.12	2.77	2.83	2.52
232383_at	TFEC	1.22E-01	1.90	0.85	2.88	1.83	2.02	3.61
235508_at	PML	1.28E-02	2.22	9.20	8.70	5.07	4.65	3.65
239412_at	IRF5	1.28E-01	1.86	1.70	1.74	2.10	1.34	1.47
239582_at	PML	1.11E-02	1.56	2.35	3.25	2.12	1.41	1.43
40569_at	MZF1	3.38E-02	0.41	0.85	0.46	0.55	0.79	0.71
M97935_3_at	STAT1	6.56E-05	3.03	1.99	10.46	4.83	4.47	5.79
M97935_MA_at	STAT1	4.26E-03	5.20	2.93	19.24	9.10	10.73	15.21
M97935_MB_at	STAT1	2.45E-03	4.15	2.22	5.16	4.69	3.99	5.25

Translation

200024_at	RPS5	4.21E-03	0.47	1.11	0.66	0.60	0.77	0.49
200036_s_at	RPL10A	8.05E-03	0.45	0.97	0.45	0.36	0.36	0.37
200089_s_at	RPL4	4.91E-04	0.49	1.00	0.53	0.45	0.39	0.38
200094_s_at	EEF2	8.20E-06	0.36	0.98	0.68	0.61	0.46	0.50
200099_s_at	RPS3A	2.65E-05	0.50	0.99	0.75	0.45	0.40	0.43
200628_s_at	WARS	7.26E-02	2.18	2.35	5.78	1.36	0.63	0.46
200629_at	WARS	2.84E-02	2.02	2.51	3.86	1.90	0.80	0.70
200705_s_at	EEF1B2	3.62E-04	0.38	1.03	0.53	0.53	0.49	0.50
200715_x_at	RPL13A	7.09E-04	0.54	0.87	0.43	0.63	0.55	0.57

200858_s_at	RPS8	5.32E-03	0.54	0.93	0.70	0.57	0.68	0.48
200869_at	RPL18A	3.90E-03	0.50	0.98	0.48	0.78	0.95	0.86
200888_s_at	RPL23	3.09E-03	0.51	1.34	0.49	0.56	0.61	0.55
200937_s_at	RPL5	1.52E-02	0.51	0.88	0.46	0.36	0.34	0.32
201154_x_at	RPL4	4.08E-04	0.42	0.99	0.52	0.38	0.35	0.34
210949_s_at	EIF3C	6.51E-03	0.70	1.08	0.41	0.56	0.72	0.57
211710_x_at	RPL4	5.56E-04	0.47	0.96	0.58	0.40	0.40	0.33
211937_at	EIF4B	4.70E-04	0.31	0.80	0.37	0.27	0.32	0.35
211938_at	EIF4B	1.88E-03	0.50	0.86	0.46	0.37	0.40	0.40
211972_x_at	RPLP0	7.53E-04	0.48	1.00	0.54	0.37	0.54	0.55
212042_x_at	RPL7	2.08E-04	0.51	0.96	0.58	0.52	0.50	0.59
212191_x_at	RPL13	9.47E-03	0.44	0.91	0.69	0.50	0.72	0.54
212270_x_at	RPL17	2.67E-03	0.64	1.14	0.59	0.55	0.48	0.63
212537_x_at	RPL17	2.70E-03	0.55	1.06	0.57	0.52	0.49	0.62
213080_x_at	RPL5	7.05E-04	0.43	1.05	0.52	0.42	0.49	0.41
213750_at	RSL1D1	2.25E-03	0.43	0.92	0.44	0.55	0.55	0.56
213969_x_at	RPL29	6.58E-03	0.54	1.08	0.59	0.49	0.68	0.65
214042_s_at	RPL22	7.28E-04	0.47	0.81	0.79	0.40	0.46	0.44
214167_s_at	RPLP0	2.33E-04	0.33	0.89	0.47	0.47	0.38	0.45
217719_at	EIF3EIP	4.66E-04	0.30	1.18	0.38	0.33	0.37	0.41
217846_at	QARS	5.32E-06	0.53	1.07	0.76	0.59	0.45	0.67
219599_at	EIF4B	4.14E-04	0.22	0.85	1.07	0.60	0.49	0.47
220960_x_at	RPL22	2.31E-03	0.62	0.99	0.74	0.46	0.45	0.65
221476_s_at	RPL15	9.78E-04	0.47	1.18	0.55	0.40	0.43	0.45
221726_at	RPL22	8.96E-03	0.39	0.86	0.61	0.43	0.32	0.32
224763_at	RPL37	9.09E-03	0.47	0.83	0.61	0.48	1.36	0.82
225546_at	EEF2K	8.26E-03	0.52	0.83	0.45	0.37	0.37	0.44
227708_at	EEF1A1	2.59E-02	0.60	0.96	0.63	0.37	0.28	0.33
234873_x_at	RPL7A	9.77E-04	0.42	1.46	0.58	0.66	0.33	0.50
242550_at	EIF3B	1.42E-02	0.69	0.46	0.60	0.72	0.99	1.05

Transport

201106_at	GPX4	4.40E-02	0.62	1.19	0.91	0.73	0.42	0.65
203771_s_at	BLVRA	1.56E-03	3.72	0.96	8.08	1.94	1.57	1.82
203773_x_at	BLVRA	1.23E-03	3.03	1.34	5.65	2.42	2.23	2.90
205241_at	SCO2	1.70E-03	1.85	1.97	3.68	3.69	9.22	8.92
205306_x_at	KMO	5.42E-03	3.57	1.56	2.54	2.01	1.24	1.31
208581_x_at	MT1X	1.60E-02	2.93	2.12	3.67	3.08	6.15	4.86
211138_s_at	KMO	9.07E-03	3.50	1.67	2.52	2.26	1.24	1.25
211729_x_at	BLVRA	7.06E-03	2.22	1.24	5.72	2.24	2.93	2.24
218498_s_at	ERO1L	2.56E-03	3.05	1.10	1.01	2.01	1.34	0.70
222453_at	CYBRD1	5.00E-02	0.42	0.67	0.43	0.28	0.25	0.27
230966_at	IL4I1	1.29E-02	1.86	2.59	4.53	5.61	4.91	2.77
238199_x_at	LOC440552	5.79E-03	0.50	0.92	0.85	0.45	0.50	0.23
200657_at	SLC25A5	5.67E-03	0.74	0.98	0.51	0.51	0.38	0.45
202114_at	SNX2	2.38E-03	1.30	0.97	1.94	1.64	1.65	2.84
203164_at	SLC33A1	6.14E-03	0.63	0.34	0.94	0.53	0.90	0.88
203509_at	SORL1	2.67E-04	0.37	0.74	0.33	0.22	0.42	0.58

204043_at	TCN2	3.59E-03	2.39	1.24	1.44	3.41	2.42	1.47
206491_s_at	NAPA	2.54E-03	2.15	1.16	2.89	1.88	2.35	1.18
206600_s_at	SLC16A5	3.74E-02	0.51	0.70	0.43	0.63	0.77	0.81
208751_at	NAPA	1.69E-05	2.88	1.17	4.83	2.98	2.14	1.93
209546_s_at	APOL1	5.57E-05	1.90	2.67	21.88	9.47	3.94	5.86
211600_at	---	3.78E-02	0.47	0.88	0.87	0.40	0.33	0.53
211953_s_at	RANBP5	1.35E-02	0.51	1.15	0.41	0.46	0.67	0.52
211954_s_at	RANBP5	1.28E-03	0.48	0.92	0.66	0.51	0.50	0.46
211955_at	RANBP5	4.30E-04	0.45	1.27	0.76	0.59	0.54	0.44
212085_at	SLC25A6	9.47E-03	0.44	0.82	0.52	0.55	0.38	0.50
214255_at	ATP10A	1.69E-03	3.71	0.77	4.90	5.43	4.35	5.26
214934_at	ATP9B	1.00E-03	0.64	0.75	0.40	0.38	0.41	0.37
217897_at	FXVD6	1.46E-02	2.16	1.00	3.10	2.36	1.30	2.25
218085_at	CHMP5	1.04E-04	2.12	2.12	2.06	2.18	2.21	2.02
218485_s_at	SLC35C1	2.52E-02	0.82	1.44	0.87	0.92	0.45	0.70
219344_at	SLC29A3	1.08E-02	0.61	1.56	0.70	0.64	0.53	0.38
219356_s_at	CHMP5	4.08E-06	2.53	1.34	2.85	2.13	2.56	3.04
219684_at	RTP4	1.20E-04	3.99	29.66	86.51	15.06	14.92	13.77
219716_at	APOL6	5.59E-04	6.84	7.30	8.27	5.61	2.98	5.11
220576_at	PGAP1	3.06E-02	3.31	1.96	3.38	1.19	1.85	1.55
223441_at	SLC17A5	5.67E-04	1.71	0.76	2.41	1.60	1.03	1.09
223464_at	OSBPL5	2.28E-03	1.70	1.11	8.29	4.10	3.07	2.77
225447_at	GPD2	3.92E-04	3.24	0.84	5.07	3.18	2.43	1.70
225765_at	TNPO1	1.64E-02	2.04	0.72	1.25	2.03	1.30	1.52
226259_at	EXOC6	2.66E-03	2.15	1.12	2.16	1.16	1.23	1.34
228299_at	KCTD20	7.94E-03	0.74	0.81	0.47	0.52	0.69	0.68
230707_at	SORL1	1.29E-03	0.40	0.63	0.41	0.51	1.04	1.45
239725_at	PGAP1	2.75E-01	1.85	3.73	3.41	1.83	2.06	1.63
241869_at	APOL6	1.98E-03	3.02	3.13	7.67	3.35	1.65	3.74

Ubiquitin cycle

201178_at	FBXO7	2.36E-03	1.39	1.09	2.29	1.55	1.16	1.07
201305_x_at	ANP32B	1.59E-02	0.51	0.79	0.35	0.71	0.72	0.82
201649_at	UBE2L6	5.20E-04	3.08	1.39	17.26	7.39	7.62	6.85
202317_s_at	UBE4B	1.20E-03	0.66	0.86	0.53	0.62	0.52	0.45
205483_s_at	ISG15	1.09E-04	10.62	14.04	48.11	14.90	48.70	78.18
205559_s_at	TRAF6	2.75E-03	0.33	0.92	0.46	0.32	0.69	0.80
208760_at	UBE2I	1.01E-02	0.51	0.86	0.42	0.46	0.51	0.57
219211_at	USP18	1.13E-04	23.37	29.64	283.28	15.16	20.56	89.55
219352_at	HERC6	2.49E-03	4.82	6.68	38.78	8.70	9.56	13.27
219863_at	HERC5	1.27E-04	7.60	11.10	39.16	10.16	23.64	22.84
225414_at	RNF149	2.80E-01	1.68	1.02	2.59	1.55	1.89	1.17
231948_s_at	UBE2F	2.90E-02	1.40	1.52	3.37	1.59	1.22	1.15

Unknown

200042_at	C22orf28	1.30E-03	1.97	2.24	8.47	3.65	3.85	3.83
200651_at	GNB2L1	2.91E-03	0.58	0.96	0.61	0.55	0.56	0.44
201297_s_at	MOBK1B	4.00E-03	1.37	0.97	2.08	3.23	1.72	1.30

201380_at	CRTAP	8.45E-04	0.45	0.96	0.87	0.57	0.43	0.74
201999_s_at	DYNLT1	3.48E-03	1.65	1.41	4.87	2.67	3.27	2.80
202594_at	LEPROTL1	1.10E-02	3.07	1.20	1.14	1.53	1.74	2.13
202816_s_at	SS18	2.53E-03	2.08	0.84	1.27	2.37	1.23	2.95
202837_at	TRAFD1	2.05E-02	3.33	3.23	11.02	14.73	6.85	4.76
203143_s_at	KIAA0040	2.16E-02	1.58	1.84	8.69	3.95	3.08	1.75
203148_s_at	TRIM14	1.20E-04	2.71	3.31	9.06	2.80	2.83	2.53
203799_at	CD302	2.50E-02	0.59	1.00	0.82	0.24	0.22	0.39
204439_at	IFI44L	1.59E-05	17.52	3.88	74.47	33.31	104.55	560.91
204601_at	N4BP1	2.07E-03	2.42	2.30	3.99	2.53	2.64	1.79
204715_at	PANX1	3.23E-03	1.89	1.66	2.24	1.94	1.47	1.56
204745_x_at	MT1G	6.48E-03	1.76	2.43	4.31	4.89	2.94	1.31
204804_at	TRIM21	1.72E-03	2.72	5.03	3.18	3.09	2.38	2.96
205583_s_at	CXorf45	2.52E-02	0.41	0.67	0.48	0.74	0.79	1.42
206090_s_at	DISC1	6.47E-04	1.44	1.05	1.08	1.19	2.32	1.44
206133_at	XAF1	4.07E-05	3.70	3.71	10.76	6.48	16.73	18.68
207996_s_at	C18orf1	1.30E-02	0.51	1.50	0.35	0.40	0.54	0.82
208073_x_at	TTC3	8.47E-03	0.60	0.94	0.42	0.39	0.48	0.49
208087_s_at	ZBP1	2.25E-03	4.51	4.23	19.24	12.64	6.46	15.01
208661_s_at	TTC3	3.00E-03	0.39	1.09	0.61	0.33	0.75	0.64
208662_s_at	TTC3	4.30E-06	0.38	1.00	0.54	0.51	0.45	0.52
208663_s_at	TTC3	9.32E-04	0.42	0.92	0.23	0.33	0.30	0.38
209155_s_at	NT5C2	3.19E-04	1.70	1.20	2.37	1.95	1.52	1.62
209536_s_at	EHD4	5.27E-02	1.94	1.79	2.52	1.84	1.64	1.71
210645_s_at	TTC3	5.66E-03	0.49	1.13	0.48	0.32	0.34	0.62
212074_at	UNC84A	8.46E-03	0.60	0.87	0.47	0.56	0.77	0.90
212177_at	SFRS18	4.25E-03	0.64	0.63	0.44	0.81	0.53	0.54
212380_at	KIAA0082	2.77E-03	2.01	1.68	4.38	3.21	3.16	4.05
212560_at	C11orf32	1.53E-04	0.26	0.85	0.21	0.21	0.37	0.47
212605_s_at	---	2.52E-03	0.51	1.03	0.59	0.34	0.38	0.77
212825_at	PAXIP1	1.29E-02	0.73	1.25	0.46	0.71	0.94	0.81
213069_at	HEG1	6.36E-04	3.43	2.33	2.47	2.96	4.27	3.54
213361_at	TDRD7	3.01E-04	3.19	7.43	7.66	2.68	4.08	3.02
213387_at	ATAD2B	8.35E-04	2.28	0.67	0.67	1.22	1.18	2.46
213508_at	C14orf147	7.98E-04	0.80	1.35	0.60	0.43	0.49	0.55
213797_at	RSAD2	2.22E-04	25.23	105.49	446.67	45.18	51.52	680.86
213839_at	KIAA0500	7.66E-05	0.57	0.80	0.42	0.49	0.40	0.70
214722_at	NOTCH2NL	2.14E-02	0.34	0.48	0.66	0.73	0.90	1.34
214807_at	---	9.10E-04	0.51	0.78	0.39	0.32	0.47	0.70
215392_at	---	1.38E-02	0.41	0.12	0.59	0.43	1.18	0.97
216022_at	---	7.67E-05	0.33	0.76	0.86	0.49	0.76	0.63
216565_x_at	LOC391020	2.52E-04	8.34	1.38	13.38	17.70	23.75	6.98
217092_x_at	LOC646912	9.66E-04	0.51	1.54	0.53	0.60	0.28	0.40
217122_s_at	SLC35E2	2.48E-03	0.65	1.00	0.38	0.57	0.58	0.71
217379_at	LOC442171	2.29E-05	0.35	1.13	0.83	0.66	0.66	0.46
217549_at	---	9.24E-03	0.70	1.09	0.45	0.30	0.55	0.79
218429_s_at	FLJ11286	2.24E-03	1.62	3.21	4.20	3.19	2.53	2.77
218446_s_at	FAM18B	2.01E-03	1.70	0.55	1.49	2.15	0.87	1.16

218805_at	GIMAP5	2.15E-02	2.18	2.16	2.56	4.71	3.12	2.88
218853_s_at	MOSPD1	2.50E-03	0.69	1.16	0.94	0.82	0.73	0.49
218986_s_at	FLJ20035	8.93E-05	5.00	2.20	17.03	4.55	4.88	5.39
219014_at	PLAC8	4.23E-03	3.72	0.95	4.26	5.90	14.43	12.49
219062_s_at	ZCCHC2	1.68E-04	2.70	1.42	3.75	3.93	2.83	2.83
219093_at	PID1	6.51E-03	0.09	1.12	0.16	0.05	0.08	0.10
219176_at	C2orf47	3.37E-04	2.07	0.98	1.29	1.41	2.37	1.57
219243_at	GIMAP4	1.39E-02	2.38	0.79	3.52	3.65	3.59	3.56
219691_at	SAMD9	9.99E-04	3.31	6.27	12.50	8.08	8.30	7.66
219714_s_at	CACNA2D3	9.23E-03	0.19	1.10	0.64	0.32	0.50	0.38
219777_at	GIMAP6	2.12E-02	2.05	0.88	4.94	4.93	3.12	4.47
219895_at	FAM70A	9.98E-03	4.33	4.31	3.54	5.01	2.52	2.95
220577_at	GVIN1	2.52E-02	1.43	1.00	2.02	2.34	1.29	2.76
221042_s_at	CLMN	2.09E-02	0.50	1.01	0.45	0.45	0.62	0.80
221044_s_at	TRIM34	7.06E-04	2.66	1.76	3.93	2.25	2.35	2.20
221986_s_at	KLHL24	5.33E-03	0.36	1.28	1.62	1.00	0.47	3.22
222154_s_at	LOC26010	1.15E-04	7.06	1.20	17.41	6.04	5.00	5.87
222488_s_at	DCTN4	1.81E-02	1.82	0.75	1.25	2.11	1.15	1.16
222631_at	PI4K2B	5.04E-03	2.27	2.18	6.89	2.61	2.97	2.45
222699_s_at	PLEKHF2	1.88E-02	2.15	1.13	2.42	1.67	1.50	1.20
222816_s_at	ZCCHC2	1.22E-02	2.51	2.10	3.44	2.83	2.14	2.82
222872_x_at	OBFC2A	5.24E-02	2.00	0.91	1.63	2.19	0.77	0.49
223060_at	C14orf119	1.56E-03	1.73	0.45	1.39	2.20	1.64	1.18
223097_at	ADPRHL2	2.23E-03	2.12	3.97	7.91	2.72	3.62	3.14
223484_at	C15orf48	3.19E-02	4.38	1.18	1.31	4.78	3.87	3.28
223599_at	TRIM6	1.07E-03	3.60	0.26	1.69	2.67	3.25	3.42
224413_s_at	TM2D2	2.74E-03	1.60	1.33	2.14	1.32	1.15	1.05
224806_at	TRIM25	3.96E-03	2.23	2.17	4.15	2.16	1.63	1.76
224850_at	ATAD1	2.77E-02	1.64	0.92	0.99	1.49	2.11	1.54
224900_at	ANKFY1	1.76E-04	2.10	1.50	3.22	2.35	1.43	2.10
225123_at	---	3.37E-02	0.71	0.72	0.31	0.32	0.42	0.46
225136_at	PLEKHA2	4.68E-03	1.51	0.99	2.27	1.45	1.18	1.42
225155_at	SNHG5	2.42E-02	0.31	1.04	0.89	0.66	0.66	0.41
225225_at	KRTAP4-7	4.42E-03	0.61	0.92	0.37	0.53	0.43	0.48
225274_at	---	4.75E-02	0.57	0.80	0.56	0.19	0.26	0.23
225415_at	DTX3L	5.27E-05	4.54	3.24	6.35	4.14	3.24	3.04
225466_at	FLJ36874	4.44E-03	2.23	1.59	2.27	1.75	2.25	1.55
225468_at	FLJ36874	1.19E-03	2.56	2.16	4.45	2.70	1.41	1.38
225716_at	---	4.03E-02	0.54	0.95	0.38	0.27	0.24	0.31
225834_at	FAM72A	2.14E-02	1.60	2.32	4.23	3.04	1.53	2.04
225869_s_at	UNC93B1	1.12E-02	1.62	0.95	39.71	3.88	2.77	1.53
225918_at	LOC146346	2.43E-03	0.49	0.99	0.63	0.46	0.41	0.59
225922_at	KIAA1450	1.93E-05	1.68	0.68	2.76	1.09	0.96	1.20
225929_s_at	RNF213	2.23E-05	3.34	1.78	11.29	4.31	5.47	4.79
225931_s_at	RNF213	2.47E-03	3.06	0.89	11.25	5.13	3.74	5.60
226103_at	NEXN	1.60E-04	6.96	7.82	254.21	4.51	58.83	172.78
226117_at	TIFA	2.79E-03	3.44	5.08	1.06	2.37	1.38	0.90
226155_at	KIAA1600	1.13E-02	1.50	1.01	2.28	1.44	1.17	1.04

226416_at	THEX1	8.36E-04	1.49	4.98	0.96	1.26	1.51	1.61
226419_s_at	FLJ44342	2.05E-02	0.46	1.05	0.64	0.18	0.42	0.33
226438_at	---	4.60E-02	1.85	0.77	2.19	0.86	1.62	0.89
226603_at	SAMD9L	5.17E-05	9.54	9.73	34.78	12.96	20.22	22.16
226656_at	CRTAP	5.55E-03	0.43	0.80	0.63	0.38	0.31	0.24
226773_at	---	2.25E-04	3.16	1.81	8.52	3.14	2.41	2.53
227152_at	C12orf35	1.08E-03	0.49	0.33	1.41	0.96	1.47	2.01
227211_at	PHF19	1.50E-03	0.57	0.45	0.67	1.13	1.59	1.04
227565_at	---	2.21E-03	0.53	1.10	0.57	0.52	0.49	0.69
227609_at	EPSTI1	1.53E-07	11.89	2.60	16.27	10.29	12.68	15.87
227765_at	---	4.99E-03	0.47	0.97	0.54	0.36	0.28	0.52
227856_at	C4orf32	1.51E-02	1.63	1.48	2.88	1.95	2.15	1.33
228071_at	GIMAP7	2.20E-02	1.80	1.80	1.95	3.38	3.56	3.93
228083_at	CACNA2D4	3.14E-03	0.55	0.74	0.78	0.37	0.36	0.52
228152_s_at	FLJ31033	8.24E-04	2.31	2.42	2.16	5.02	5.43	6.68
228174_at	---	2.11E-02	0.52	2.42	1.21	0.30	0.45	0.91
228315_at	---	1.62E-02	0.50	0.76	0.46	0.73	0.85	0.84
228531_at	SAMD9	1.36E-04	6.81	11.12	17.16	10.14	12.35	12.47
228617_at	XAF1	1.02E-04	3.78	5.05	27.55	9.77	12.16	28.13
228810_at	---	4.66E-03	1.55	1.18	3.52	1.39	1.40	0.88
228854_at	---	1.49E-02	0.46	1.00	0.28	1.40	0.14	0.36
228869_at	---	2.08E-04	1.78	1.64	2.04	2.27	1.87	2.11
228925_at	---	9.10E-03	0.58	0.29	1.14	0.14	0.78	1.09
228959_at	---	4.73E-05	0.49	0.99	0.69	0.32	0.32	0.48
228971_at	---	1.97E-03	0.41	0.38	0.31	0.23	0.40	0.33
229059_at	C9orf109	1.37E-05	12.60	0.73	1.09	3.64	1.98	2.25
229200_at	LOC729810	3.87E-03	2.62	1.59	2.67	2.00	1.82	2.50
229699_at	---	8.62E-03	0.46	0.82	0.25	0.29	0.35	0.55
229841_at	---	4.30E-04	0.36	0.73	0.39	0.71	0.59	0.82
230000_at	RNF213	7.25E-02	2.00	3.35	12.42	6.21	5.90	9.65
230036_at	SAMD9L	8.81E-05	7.18	5.72	34.94	13.39	14.94	16.90
230314_at	---	1.49E-03	1.85	3.99	3.37	2.69	3.02	3.87
230383_x_at	---	2.36E-02	2.32	2.73	6.55	2.30	2.22	2.34
230435_at	LOC375190	3.89E-02	0.70	1.30	0.85	0.78	0.78	0.43
230503_at	---	4.76E-02	2.65	2.61	3.22	4.75	4.88	4.47
230970_at	---	8.56E-02	0.34	0.28	0.60	0.61	0.83	1.30
231455_at	FLJ42418	9.77E-03	4.12	0.56	1.79	3.22	5.65	2.45
231956_at	KIAA1618	2.30E-02	2.20	9.70	15.63	4.79	4.01	7.12
232034_at	LOC203274	3.69E-02	2.34	3.12	3.16	3.04	4.94	4.41
232138_at	MBNL2	1.75E-02	0.35	0.67	0.75	0.45	0.85	1.50
232155_at	KIAA1618	3.91E-04	7.86	0.66	101.28	16.88	62.48	93.70
232375_at	---	6.37E-03	2.87	17.02	7.99	3.77	5.11	10.45
201798_s_at	FER1L3	5.06E-03	2.02	1.20	4.09	1.00	0.64	0.57
232576_at	---	1.93E-02	0.37	1.56	0.46	1.23	0.11	0.39
233425_at	ZCCHC2	3.80E-02	2.12	4.12	4.52	4.49	1.62	1.95
234512_x_at	LOC728179	1.31E-03	0.51	1.09	0.71	0.55	0.64	0.48
235157_at	---	3.50E-02	2.44	6.82	15.65	17.35	6.87	8.60
235203_at	---	4.21E-03	0.37	0.70	0.44	0.14	0.37	0.32

235274_at	---	1.17E-02	0.44	0.48	0.53	0.84	0.86	0.81
235276_at	EPSTI1	7.74E-05	8.29	2.29	22.99	11.20	21.67	22.09
235643_at	SAMD9L	7.25E-04	5.07	5.75	25.29	12.55	12.94	20.09
236191_at	---	1.97E-01	2.88	28.72	6.81	3.42	13.66	3.75
236203_at	---	2.42E-02	0.20	1.15	0.31	0.56	0.40	0.69
236285_at	---	9.02E-04	8.92	1.77	5.77	7.11	7.43	20.61
236322_at	---	3.62E-02	0.43	0.36	0.88	1.18	0.78	1.13
236832_at	LOC221442	1.12E-02	0.57	0.40	0.83	0.48	0.82	0.92
236966_at	ARMC8	1.53E-02	0.60	0.46	0.93	0.98	0.74	1.00
237105_at	---	2.69E-02	1.85	2.16	13.03	5.14	10.38	6.75
238439_at	ANKRD22	1.31E-02	8.27	7.17	110.36	6.02	4.27	11.12
238513_at	PRRG4	7.78E-02	1.85	0.37	3.16	1.68	1.76	1.53
239033_at	---	9.55E-04	3.04	1.32	2.51	2.55	2.51	2.06
239131_at	---	1.77E-03	0.54	1.06	0.94	0.70	0.49	0.70
239196_at	ANKRD22	2.88E-02	3.67	3.61	5.01	3.32	3.10	1.49
239450_at	---	8.20E-04	0.30	1.03	0.67	0.18	0.78	0.23
239646_at	---	8.79E-02	0.37	0.18	0.47	1.11	0.66	0.47
239979_at	---	2.22E-04	5.05	16.72	10.77	7.99	8.51	17.25
241342_at	TMEM65	1.26E-02	1.80	1.05	2.23	1.52	1.97	1.66
242234_at	XAF1	2.27E-03	4.31	13.76	13.76	6.61	6.43	6.46
242625_at	RSAD2	3.34E-05	28.35	70.33	99.17	29.33	67.33	251.61
243221_at	---	3.23E-01	2.22	2.58	0.84	1.07	0.35	0.19
243271_at	---	7.73E-04	7.92	76.86	33.65	12.02	15.71	30.81
243286_at	---	6.96E-02	2.33	2.39	2.34	2.28	2.12	3.75
243495_s_at	---	7.02E-02	0.38	0.72	0.30	0.44	0.39	0.90
243546_at	---	3.25E-02	0.32	0.79	0.18	0.37	0.41	0.85
243561_at	---	2.81E-02	0.45	0.24	0.84	0.87	1.01	1.26
243754_at	---	7.90E-03	4.21	0.72	2.46	4.80	3.69	3.83
243819_at	---	2.94E-03	0.35	0.51	1.04	0.50	0.58	0.51
243966_at	---	1.93E-03	0.55	1.10	1.21	0.90	0.48	1.26
35254_at	TRAFFD1	9.10E-03	1.62	2.27	4.63	3.24	2.60	1.95
64064_at	GIMAP5	1.30E-02	2.32	2.04	1.77	3.20	2.43	2.81
65472_at	---	9.88E-03	0.45	0.69	0.20	0.45	0.69	0.69

A.4. Genes expressed in blood circulating mDC.

<i>Systematic</i>	<i>Gene Symbol</i>	<i>p-value</i>	<i>Average Normalized value in blood mDC</i>
<i>Actomyosin structure organization and biogenesis</i>			
212328_at	LIMCH1	3.12E-04	8.38
<i>Acute-phase response</i>			
202833_s_at	SERPINA1	3.93E-04	0.17
203645_s_at	CD163	6.62E-04	0.49
211429_s_at	SERPINA1	2.39E-04	0.18
215049_x_at	CD163	2.19E-04	0.48
<i>Anatomical structure morphogenesis</i>			
201688_s_at	TPD52	2.44E-04	5.90
201690_s_at	TPD52	2.78E-04	6.77
203184_at	FBN2	4.15E-03	0.17
<i>Angiogenesis</i>			
200610_s_at	NCL	3.38E-02	1.41
202510_s_at	TNFAIP2	4.70E-03	0.47
202859_x_at	IL8	5.71E-02	0.10
203665_at	HMOX1	4.25E-02	0.35
206295_at	IL18	5.92E-05	2.77
209500_x_at	TNFSF13	8.69E-04	0.41
210314_x_at	TNFSF13	2.94E-04	0.46
218534_s_at	AGGF1	3.28E-03	1.34
224741_x_at	GAS5	1.03E-01	1.99
224841_x_at	GAS5	1.34E-01	2.07
225036_at	SHB	3.32E-04	1.52
<i>Apoptosis</i>			
200797_s_at	MCL1	2.51E-03	0.56
200799_at	HSPA1A	3.69E-04	0.29
200800_s_at	HSPA1A B69	6.01E-05	0.27
201086_x_at	SON	7.48E-03	1.20
201448_at	TIA1	4.54E-04	1.54
201631_s_at	IER3	1.98E-03	0.12
202687_s_at	TNFSF10	7.06E-05	0.33
202688_at	TNFSF10	1.59E-04	0.22
202887_s_at	DDIT4	1.58E-02	4.53
203110_at	PTK2B	1.11E-02	0.61
203508_at	TNFRSF1B	7.54E-04	0.35
203685_at	BCL2	5.03E-05	5.67
204352_at	TRAF5	5.35E-05	2.91
205554_s_at	DNASE1L3	4.47E-04	9.58
205681_at	BCL2A1	3.45E-03	0.30

208296_x_at	TNFAIP8	4.03E-03	1.37
208424_s_at	CIAPIN1	5.12E-05	1.55
208637_x_at	ACTN1	1.75E-03	0.66
209354_at	TNFRSF14	1.36E-02	0.55
209723_at	SERPINB9	1.75E-03	0.69
213581_at	PDCD2	1.56E-03	1.50
214306_at	OPA1	2.84E-03	1.45
214329_x_at	TNFSF10	7.17E-03	0.21
218100_s_at	IFT57	2.20E-03	2.17
218252_at	CKAP2	5.57E-03	1.48
218698_at	APIP	7.85E-03	1.26
218732_at	PTRH2	3.24E-03	0.64
218856_at	TNFRSF21	1.10E-04	16.80
219002_at	FASTKD1	6.66E-05	1.73
219043_s_at	PDCL3	5.32E-04	2.24
221478_at	BNIP3L	4.04E-02	0.66
221571_at	TRAF3	3.29E-03	0.71
222392_x_at	PERP	6.68E-02	7.79
222986_s_at	SCOTIN	3.27E-03	0.45
224638_at	UNQ1887	4.66E-04	1.42
224639_at	UNQ1887	4.54E-03	1.42
224736_at	CCAR1	1.85E-03	1.28
224849_at	TTC17	5.55E-03	1.42
225606_at	BCL2L11	3.22E-03	0.43
242814_at	SERPINB9	9.55E-04	0.29

Autophagy

213836_s_at	WIPI1	1.13E-02	0.48
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Biosynthetic process

200077_s_at	OAZ1	1.43E-03	0.85
200768_s_at	MAT2A	1.68E-03	1.75
201013_s_at	PAICS	3.11E-05	2.74
201014_s_at	PAICS	1.03E-02	2.49
201196_s_at	AMD1	9.38E-05	1.78
201197_at	AMD1	1.08E-04	1.83
201253_s_at	CDIPT	1.16E-03	0.63
201577_at	NME1	2.39E-02	1.89
201892_s_at	IMPDH2	4.34E-04	2.67
201995_at	EXT1	1.65E-05	0.31
202144_s_at	ADSL	1.99E-03	1.49
202309_at	MTHFD1	3.01E-03	1.95
202392_s_at	PISD	1.65E-03	0.55
202562_s_at	C14orf1	6.18E-04	2.13
202671_s_at	PDXK	1.61E-02	0.45
202854_at	HPRT1	5.71E-04	1.63
203066_at	GALNAC4S-6ST	1.45E-04	0.06
203178_at	GATM	5.11E-04	3.41
204169_at	IMPDH1	1.32E-03	0.55
205047_s_at	ASNS	5.74E-04	5.94

206656_s_at	C20orf3	1.30E-03	1.38
208130_s_at	TBXAS1	4.18E-02	0.45
208678_at	ATP6V1E1	3.34E-02	0.73
208788_at	ELOVL5	4.03E-03	1.48
209340_at	UAP1	2.56E-03	2.72
209434_s_at	PPAT	1.46E-03	1.71
209619_at	CD74	5.27E-02	1.93
210250_x_at	ADSL	1.28E-03	1.29
212995_x_at	FAM128B	7.18E-03	2.00
213070_at	PIK3C2A	9.86E-04	1.63
213149_at	DLAT	1.82E-02	1.43
213725_x_at	XYLT1	1.49E-02	2.23
213738_s_at	ATP5A1	1.76E-04	1.47
217869_at	HSD17B12	1.82E-03	1.66
217989_at	HSD17B11	1.67E-03	0.48
218473_s_at	GLT25D1	7.28E-05	0.54
221504_s_at	ATP6V1H	1.61E-02	1.44
222416_at	ALDH18A1	6.32E-04	7.01
224967_at	UGCG	1.45E-04	3.16
225547_at	SNHG6	6.91E-03	1.43
225903_at	PIGU	3.22E-02	1.88
226390_at	STARD4	8.63E-02	1.78
226649_at	PANK1	1.97E-04	3.90
227556_at	NME7	1.18E-04	6.88
36994_at	ATP6V0C	1.73E-03	0.54

Blood circulation

204526_s_at	TBC1D8	2.75E-03	0.51
225051_at	EPB41	1.55E-03	1.63

Catabolic process

202030_at	BCKDK	4.06E-03	0.67
204084_s_at	CLN5	2.05E-02	0.72
204224_s_at	GCH1	2.08E-03	0.47
209623_at	MCCC2	4.93E-04	1.82
210029_at	INDO	3.89E-03	4.99
210662_at	KYNU	1.03E-01	0.36
212334_at	GNS	9.11E-04	0.44
212335_at	GNS	3.13E-04	0.39
212690_at	DDHD2	1.16E-04	2.20
213129_s_at	GCSH	9.28E-04	2.22
213133_s_at	GCSH	2.17E-03	1.83
218440_at	MCCC1	1.15E-05	1.78
219293_s_at	OLA1	4.22E-03	1.38
219443_at	TASP1	5.36E-03	1.94
226748_at	LYSMD2	1.11E-05	0.64
227158_at	C14orf126	2.67E-03	1.87

Cell adhesion

201131_s_at	CDH1	9.38E-06	29.56
201506_at	TGFB1	1.26E-03	0.74
201951_at	ALCAM	1.90E-03	4.86
201952_at	ALCAM	1.31E-05	4.52
203336_s_at	ITGB1BP1	6.48E-05	1.48
204489_s_at	CD44	3.97E-03	0.46
204490_s_at	CD44	2.11E-03	0.55
204619_s_at	VCAN	2.60E-03	0.28
204620_s_at	VCAN	2.09E-03	0.29
205718_at	ITGB7	1.13E-04	9.26
205786_s_at	ITGAM	8.06E-05	0.14
206488_s_at	CD36	5.61E-04	0.40
207111_at	EMR1	1.36E-03	0.36
209555_s_at	CD36	2.24E-03	0.45
209835_x_at	CD44	7.78E-06	0.48
211178_s_at	PSTPIP1	6.30E-03	0.52
211571_s_at	VCAN	1.25E-03	0.26
212014_x_at	CD44	2.04E-04	0.55
212254_s_at	DST	7.59E-04	3.41
215016_x_at	DST	8.67E-04	3.10
215646_s_at	VCAN	1.11E-03	0.23
215754_at	SCARB2	6.55E-05	0.47
217523_at	CD44	1.54E-03	0.51
221731_x_at	VCAN	1.19E-03	0.32
222108_at	AMIGO2	4.08E-05	3.31
222838_at	SLAMF7	1.45E-03	6.60
224374_s_at	EMILIN2	2.17E-04	0.62
224685_at	MLLT4	1.10E-03	2.55
224983_at	SCARB2	3.65E-04	0.51
227747_at	---	3.92E-03	1.71
228766_at	CD36	5.54E-04	0.41
229221_at	CD44	5.44E-03	0.26
229461_x_at	NEGR1	1.04E-02	3.92
230518_at	MPZL2	1.62E-02	1.40
232098_at	DST	1.73E-03	4.14
233849_s_at	ARHGAP5	1.68E-04	8.95
235635_at	ARHGAP5	2.41E-03	3.53
242197_x_at	CD36	7.87E-04	0.24
243357_at	NEGR1	2.85E-04	3.18

Cell communication

203006_at	INPP5A	4.38E-04	0.36
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Cell cycle

204170_s_at	CKS2	1.71E-02	1.74
208796_s_at	CCNG1	3.07E-04	1.87
200712_s_at	MAPRE1	1.91E-03	0.75
200778_s_at	SEPT2	5.96E-03	1.64
200953_s_at	CCND2	5.99E-06	2.54

201041_s_at	DUSP1	1.57E-02	0.19
201307_at	SEPT11	3.30E-05	2.64
201589_at	SMC1A	2.80E-02	1.29
201938_at	CDK2AP1	6.56E-04	1.53
202191_s_at	GAS7	8.06E-03	0.41
202192_s_at	GAS7	7.38E-04	0.56
203531_at	CUL5	1.41E-04	1.54
204093_at	CCNH	8.06E-02	1.34
205677_s_at	DLEU1	9.86E-05	6.46
206205_at	MPHOSPH9	5.12E-05	7.75
209112_at	CDKN1B	2.38E-03	1.64
209662_at	CETN3	7.53E-04	1.90
209974_s_at	BUB3	1.17E-03	1.33
210416_s_at	CHEK2	1.97E-05	6.34
211067_s_at	GAS7	7.73E-04	0.29
212306_at	CLASP2	1.35E-04	1.93
212309_at	CLASP2	5.76E-03	1.54
212330_at	TFDP1	1.19E-03	1.58
213198_at	ACVR1B	6.18E-04	0.46
213524_s_at	G0S2	1.99E-02	0.39
215731_s_at	MPHOSPH9	4.31E-04	1.94
217728_at	S100A6	1.64E-04	0.73
218039_at	NUSAP1	1.33E-04	2.02
218158_s_at	APPL1	6.61E-04	2.63
218662_s_at	NCAPG	4.96E-03	2.42
221511_x_at	CCPG1	6.00E-03	0.41
222431_at	SPIN1	4.50E-03	2.11
222538_s_at	APPL1	1.02E-03	1.68
224578_at	RCC2	5.98E-04	1.58
224847_at	CDK6	4.34E-04	3.03
224848_at	CDK6	1.18E-03	1.69
224851_at	CDK6	7.96E-04	4.62
225662_at	ZAK	3.86E-03	1.53
225665_at	ZAK	1.75E-03	1.72
225684_at	FAM33A	3.17E-03	1.62
226994_at	DNAJA2	1.00E-03	0.70
227013_at	LATS2	1.59E-05	0.60
229943_at	TRIM13	4.18E-02	1.86
230192_at	TRIM13	4.87E-03	3.43

Cell differentiation

234072_at	SEMA4A	1.31E-03	1.70
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Cell division

222163_s_at	SPATA5L1	9.93E-03	1.38
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Cell growth

1598_g_at	GAS6	3.56E-04	1.94
201163_s_at	IGFBP7	2.70E-03	1.90
201829_at	NET1	4.44E-04	8.47

201830_s_at	NET1	1.77E-05	24.98
202666_s_at	ACTL6A	1.79E-04	1.92
212281_s_at	TMEM97	6.88E-05	36.81
212282_at	TMEM97	4.41E-04	6.61
226008_at	NDNL2	2.03E-02	2.13

Cell migration/Cell motility

200920_s_at	BTG1	4.25E-03	0.43
200921_s_at	BTG1	8.81E-03	0.53
205566_at	ABHD2	3.55E-02	0.57
200748_s_at	FTH1	9.81E-03	0.65
200972_at	TSPAN3	1.02E-02	1.44
201005_at	CD9	3.26E-02	0.14
201087_at	PXN	1.87E-02	0.39
201669_s_at	MARCKS	1.89E-03	0.47
201670_s_at	MARCKS	4.07E-03	0.42
202205_at	VASP	7.40E-03	0.60
202910_s_at	CD97	9.09E-03	0.45
203037_s_at	MTSS1	9.37E-05	0.17
205844_at	VNN1	1.21E-03	0.34
205922_at	VNN2	6.58E-05	0.03
208981_at	PECAM1	9.90E-05	0.44
208982_at	PECAM1	1.26E-04	0.34
209906_at	C3AR1	2.31E-05	0.13
210715_s_at	SPINT2	1.63E-04	1.55
210845_s_at	PLAUR	1.37E-02	0.71
211970_x_at	ACTG1	7.87E-03	1.18
211995_x_at	ACTG1	5.50E-05	1.74
212363_x_at	ACTG1	1.99E-05	1.71
213002_at	MARCKS	3.15E-03	0.52
213214_x_at	ACTG1	3.28E-04	1.28
213475_s_at	ITGAL	2.10E-03	0.50
221607_x_at	ACTG1	1.50E-03	1.28
224585_x_at	ACTG1	9.84E-04	1.38
225098_at	ABI2	1.84E-03	1.77
225112_at	ABI2	5.12E-03	1.69
225897_at	MARCKS	6.62E-03	0.41
230422_at	FPRL2	1.08E-02	3.57
236172_at	LTB4R	5.77E-05	0.56

Cell proliferation

200891_s_at	SSR1	4.94E-06	1.70
205588_s_at	FGFR1OP	3.80E-03	1.78
210139_s_at	PMP22	1.85E-03	3.44
217850_at	GNL3	9.78E-04	1.85
218163_at	MCTS1	2.39E-03	1.29
225435_at	SSR1	1.14E-03	2.21
39817_s_at	C6orf108	3.86E-04	1.90

Cell-cell signaling

205239_at	AREG	3.47E-01	3.60
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Chemotaxis

205098_at	CCR1	5.06E-05	0.22
205099_s_at	CCR1	3.13E-03	0.39
206361_at	GPR44	5.97E-04	4.93
206991_s_at	CCR5	3.39E-05	6.04
209828_s_at	IL16	9.24E-05	2.25
213194_at	ROBO1	8.50E-04	12.78
224880_at	RALA	5.78E-04	1.86
226017_at	CMTM7	1.65E-02	0.69

Chromatin assembly or disassembly

201074_at	SMARCC1	1.09E-03	1.54
209715_at	CBX5	7.83E-04	1.70
225031_at	CHD6	2.66E-04	1.81

Chromatin modification

218788_s_at	SMYD3	2.16E-03	1.91
235338_s_at	SETDB2	6.36E-04	1.91
235339_at	SETDB2	9.61E-05	2.11

Chromosome organization and biogenesis

212577_at	SMCHD1	1.83E-03	0.64
212579_at	SMCHD1	2.80E-03	0.70

Circadian rhythm

218450_at	HEBP1	2.95E-02	0.72
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Cytokine production

206278_at	PTAFR	6.37E-06	0.36
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Cytokinesis

201022_s_at	DSTN	6.55E-02	1.28
205726_at	DIAPH2	2.76E-03	0.69
213666_at	SEPT6	3.85E-06	3.07

Cytoskeleton

200696_s_at	GSN	1.05E-04	2.90
201719_s_at	EPB41L2	7.79E-05	3.29
202197_at	MTMR3	1.42E-05	0.37
202890_at	MAP7	2.48E-05	4.96
206710_s_at	EPB41L3	7.11E-02	0.56
208622_s_at	EZR	4.53E-02	1.66
208623_s_at	EZR	1.16E-03	1.95
212071_s_at	SPTBN1	1.83E-04	3.32
217234_s_at	EZR	2.16E-03	2.11
217892_s_at	LIMA1	2.28E-04	2.85
220966_x_at	ARPC5L	2.20E-03	1.32

222457_s_at	LIMA1	2.29E-04	4.49
226080_at	SSH2	1.14E-03	0.56
226915_s_at	ARPC5L	1.27E-02	1.33
227811_at	FGD3	2.10E-04	0.60

Development

200790_at	ODC1	3.28E-03	2.20
201324_at	EMP1	8.75E-05	10.81
202016_at	MEST	2.91E-05	2.46
206453_s_at	NDRG2	4.71E-05	8.97
208833_s_at	ATXN10	4.61E-04	1.92
209170_s_at	GPM6B	2.09E-03	8.44
209199_s_at	MEF2C	2.38E-04	1.51
210251_s_at	RUFY3	1.47E-04	2.71
212222_at	PSME4	3.71E-03	1.31
213437_at	RUFY3	2.19E-03	2.02
213939_s_at	RUFY3	1.36E-04	2.89
217732_s_at	ITM2B	2.10E-04	0.41
218603_at	HECA	2.20E-03	0.66
224726_at	MIB1	1.05E-04	0.64
224772_at	NAV1	4.45E-05	5.98
225384_at	DOCK7	1.60E-04	2.26
227584_at	NAV1	1.17E-06	9.92
227594_at	ZMYM6	4.51E-04	1.89
230529_at	HECA	2.44E-02	0.42

DNA methylation

209189_at	FOS	5.59E-02	0.37
224771_at	NAV1	6.41E-05	17.86
224774_s_at	NAV1	2.71E-05	11.86

DNA recombination

207785_s_at	RBPJ	3.44E-04	2.41
211762_s_at	KPNA2	1.19E-04	1.89
211974_x_at	RBPJ	1.95E-04	1.63

DNA repair

200792_at	XRCC6	3.79E-03	1.27
201223_s_at	RAD23B	5.07E-04	1.53
201236_s_at	BTG2	9.73E-05	0.45
202412_s_at	USP1	2.36E-03	1.55
203241_at	UVRAG	1.36E-05	1.92
203427_at	ASF1A	8.50E-04	2.51
203428_s_at	ASF1A	3.86E-03	2.25
203554_x_at	PTTG1	5.81E-03	2.31
203678_at	MTMR15	5.53E-03	1.96
208860_s_at	ATRX	3.42E-03	1.54
209607_x_at	SULT1A3	4.78E-03	0.42
209849_s_at	RAD51C	1.44E-03	2.92
209902_at	ATR	5.43E-04	2.19

209903_s_at	ATR	8.43E-03	1.52
210027_s_at	APEX1	2.55E-03	2.33
210580_x_at	SULT1A3	2.41E-03	0.44
212917_x_at	RECQL	2.30E-03	1.37
213677_s_at	PMS1	1.61E-02	1.31
218397_at	FANCL	6.02E-04	1.85
235478_at	DCLRE1C	6.69E-05	3.56
239289_x_at	MTMR15	8.80E-04	2.63
242927_at	DCLRE1C	6.09E-05	2.92

DNA replication

200631_s_at	SET	2.18E-03	1.43
200957_s_at	SSRP1	4.49E-03	1.41
201092_at	RBBP7	4.70E-04	1.54
201890_at	RRM2	1.08E-03	41.41
201930_at	MCM6	2.49E-04	4.06
202268_s_at	NAE1	2.41E-04	1.75
203748_x_at	RBMS1	2.38E-05	0.49
206102_at	GINS1	3.57E-05	3.57
207266_x_at	RBMS1	2.10E-03	0.47
208752_x_at	NAP1L1	5.08E-05	1.77
208753_s_at	NAP1L1	2.37E-02	1.56
208754_s_at	NAP1L1	5.95E-03	2.02
209773_s_at	RRM2	4.56E-02	5.41
212967_x_at	NAP1L1	5.52E-05	2.12
217815_at	SUPT16H	2.93E-03	1.59
219041_s_at	REPIN1	1.91E-04	2.56
219258_at	TIPIN	3.93E-03	2.96
219387_at	CCDC88A	5.32E-03	2.54
221078_s_at	CCDC88A	3.52E-03	1.70
222036_s_at	MCM4	1.42E-03	2.04
225045_at	CCDC88A	1.42E-03	2.71
225265_at	RBMS1	3.36E-04	0.53
225269_s_at	RBMS1	1.05E-03	0.45
225802_at	TOP1MT	1.35E-04	11.79
40189_at	SET	1.22E-03	1.62

Endocytosis

201412_at	LRP10	8.06E-04	0.74
202679_at	NPC1	3.87E-04	0.56
203105_s_at	DNM1L	4.23E-03	1.77
204438_at	MRC1	1.52E-04	6.61
205668_at	LY75	1.10E-03	3.61
206130_s_at	ASGR2	2.16E-03	0.75
206682_at	CLEC10A	3.57E-05	25.52
209684_at	RIN2	4.70E-04	0.25
209898_x_at	ITSN2	1.51E-04	2.00
212807_s_at	SORT1	2.00E-03	0.51
222258_s_at	SH3BP4	7.56E-06	7.27
226154_at	DNM1L	1.55E-04	1.63

226364_at	HIP1	1.45E-05	3.47
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Exocytosis

200693_at	YWHAQ	1.05E-04	1.55
201336_at	VAMP3	8.26E-04	0.57

Glycolysis

209916_at	DHTKD1	2.10E-04	2.38
213011_s_at	TPI1	4.71E-04	1.57
221531_at	WDR61	1.36E-02	1.59
221532_s_at	WDR61	8.03E-04	1.63
227094_at	DHTKD1	1.62E-03	1.70

Glycosylation

203102_s_at	MGAT2	3.15E-05	1.54
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Golgi orgnization and biogenesis

201057_s_at	GOLGB1	1.94E-02	1.40
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GTPase activity

203020_at	RABGAP1L	9.66E-05	0.39
206414_s_at	DDEF2	1.72E-03	2.99
212956_at	TBC1D9	9.03E-03	1.88
213531_s_at	RAB3GAP1	9.89E-04	1.64

Homeostasis

201482_at	QSOX1	4.67E-04	0.42
220940_at	KIAA1641	5.88E-03	2.09
225892_at	IREB2	4.66E-03	2.06

Immune response/Defense response

200905_x_at	HLA-E	5.38E-03	0.52
200983_x_at	CD59	3.89E-03	2.75
200985_s_at	CD59	1.65E-03	3.32
201137_s_at	HLA-DPB1	7.49E-04	3.70
202748_at	GBP2	2.87E-03	0.34
202948_at	IL1R1	1.88E-04	2.63
203290_at	HLA-DQA1	1.24E-01	8.78
203561_at	FCGR2A	1.23E-02	0.39
203569_s_at	OFD1	1.70E-03	2.38
203591_s_at	CSF3R	2.49E-03	0.40
204122_at	TYROBP	1.36E-01	0.75
204806_x_at	HLA-F	7.10E-03	0.55
204924_at	TLR2	7.00E-05	0.37
205403_at	IL1R2	1.85E-04	6.01
205419_at	EBI2	1.75E-02	7.91
205987_at	CD1C	1.15E-06	18.29
205992_s_at	IL15	1.78E-03	0.25
206200_s_at	ANXA11	1.64E-02	0.76
206271_at	TLR3	1.19E-03	2.68

206420_at	IGSF6	1.56E-02	0.69
206584_at	LY96	1.66E-03	0.43
206618_at	IL18R1	1.69E-05	24.53
206637_at	P2RY14	1.89E-06	31.57
206641_at	TNFRSF17	3.76E-03	19.83
207565_s_at	MR1	7.92E-03	0.64
207697_x_at	LILRB2	7.31E-04	0.40
207857_at	LILRA2	6.39E-04	0.42
208306_x_at	HLA-DRB1	8.48E-06	2.26
208783_s_at	CD46	3.31E-03	0.85
208894_at	HLA-DRA	2.45E-03	3.85
208910_s_at	C1QBP	8.97E-05	2.96
209030_s_at	CADM1	3.95E-03	2.48
209031_at	CADM1	1.15E-04	23.31
209312_x_at	HLA-DRB1	1.22E-05	2.47
209575_at	IL10RB	1.46E-03	0.61
209823_x_at	HLA-DQB1	5.07E-02	4.57
209949_at	NCF2	6.61E-03	0.52
210146_x_at	LILRB2	5.60E-04	0.26
210166_at	TLR5	1.98E-03	0.55
210660_at	LILRA1	1.23E-03	0.39
210982_s_at	HLA-DRA	1.42E-03	4.06
211101_x_at	LILRA2	1.36E-02	0.31
211336_x_at	LILRB1	1.68E-02	0.51
211372_s_at	IL1R2	2.75E-04	3.11
211654_x_at	HLA-DQB1	5.43E-03	5.07
211656_x_at	HLA-DQB1	3.72E-02	4.33
211734_s_at	FCER1A	9.96E-08	48.04
211990_at	HLA-DPA1	4.91E-03	1.58
211991_s_at	HLA-DPA1	1.07E-03	5.22
212195_at	IL6ST	1.72E-03	0.40
212196_at	IL6ST	4.96E-02	0.47
212463_at	CD59	2.21E-04	4.92
212671_s_at	HLA-DQA1	3.34E-04	44.76
212998_x_at	HLA-DQB1	1.17E-03	6.21
212999_x_at	HLA-DQB1	1.91E-01	2.50
213537_at	HLA-DPA1	1.28E-03	5.16
214214_s_at	C1QBP	1.03E-03	2.43
215193_x_at	HLA-DRB1 /	2.36E-04	3.45
215313_x_at	HLA-A	4.44E-04	0.67
215784_at	CD1E	2.53E-04	7.87
216834_at	RGS1	1.14E-01	13.64
217456_x_at	HLA-E	2.27E-02	0.70
217478_s_at	HLA-DMA	8.11E-04	2.30
219434_at	TREM1	1.20E-03	0.23
221491_x_at	HLA-DRB1	1.93E-01	2.31
221978_at	HLA-F	1.34E-03	0.53
223502_s_at	TNFSF13B	1.46E-03	0.56
223750_s_at	TLR10	2.53E-05	4.48
224341_x_at	TLR4	5.47E-06	0.24

229560_at	TLR8	1.11E-04	0.37
229937_x_at	LILRB1	6.81E-05	0.27
231747_at	CYSLTR1	2.59E-03	0.70
232311_at	B2M	2.57E-02	0.39
236226_at	BTLA	2.72E-04	7.52
239975_at	HLA-DPB2	6.59E-06	14.80
242907_at	---	2.09E-03	0.37
242961_x_at	DDX58	1.81E-02	0.63
244313_at	CR1	4.41E-06	0.07

Inflammatory response

202917_s_at	S100A8	4.16E-04	0.16
203535_at	S100A9	2.46E-04	0.09
205863_at	S100A12	6.53E-05	0.15
206214_at	PLA2G7	8.28E-04	0.18
207643_s_at	TNFRSF1A	1.06E-04	0.50
209901_x_at	AIF1	2.31E-04	0.47
212517_at	ATRN	4.31E-04	1.34
213095_x_at	AIF1	6.92E-04	0.41
215051_x_at	AIF1	1.60E-03	0.48
222881_at	HPSE	2.43E-05	0.09
233011_at	ANXA1	1.95E-01	0.27
243099_at	NFAM1	3.47E-04	0.31

Membrane fusion

203765_at	GCA	3.55E-04	0.52
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Metabolic process

200681_at	GLO1	2.62E-04	1.94
200708_at	GOT2	6.59E-04	1.87
200832_s_at	SCD	3.97E-04	4.90
200866_s_at	PSAP	8.00E-03	0.49
200871_s_at	PSAP	5.41E-04	0.43
200947_s_at	GLUD1	4.86E-04	1.28
200958_s_at	SDCBP	2.16E-04	0.55
201036_s_at	HADH	1.13E-03	2.70
201135_at	ECHS1	5.92E-04	1.55
201364_s_at	OAZ2	1.40E-01	0.53
201463_s_at	TALDO1	2.98E-04	0.46
201470_at	GSTO1	2.74E-07	0.64
201571_s_at	DCTD	3.31E-03	1.58
201625_s_at	INSIG1	1.82E-02	1.28
201626_at	INSIG1	6.48E-02	2.02
201627_s_at	INSIG1	8.75E-03	2.56
201963_at	ACSL1	8.63E-05	0.30
201968_s_at	PGM1	7.48E-03	1.46
202069_s_at	IDH3A	2.50E-03	1.86
202070_s_at	IDH3A	9.95E-04	2.31
202201_at	BLVRB	2.43E-03	0.45
202377_at	LEPR	8.99E-04	0.50

202447_at	DECR1	9.15E-04	1.40
202499_s_at	SLC2A3	3.65E-02	0.33
202589_at	TYMS	8.32E-05	9.64
202613_at	CTPS	1.92E-04	2.61
202780_at	OXCT1	7.10E-04	2.33
202838_at	FUCA1	1.46E-04	0.33
202922_at	GCLC	1.75E-04	2.33
202923_s_at	GCLC	1.11E-05	2.65
202990_at	PYGL	1.82E-04	0.30
203041_s_at	LAMP2	2.75E-04	0.45
203042_at	LAMP2	2.10E-03	0.38
203127_s_at	SPTLC2	7.99E-03	0.61
203159_at	GLS	3.20E-04	2.65
203302_at	DCK	1.27E-03	1.68
203397_s_at	GALNT3	2.51E-05	2.91
203566_s_at	AGL	1.46E-03	1.67
203615_x_at	SULT1A1	1.83E-03	0.35
203778_at	MANBA	5.57E-03	0.63
203944_x_at	BTN2A1	1.71E-04	0.68
204417_at	GALC	2.25E-03	0.52
204588_s_at	SLC7A7	3.69E-04	0.14
205260_s_at	ACYP1	3.50E-03	1.86
207122_x_at	SULT1A2	2.59E-04	0.48
207275_s_at	ACSL1	5.68E-03	0.29
207431_s_at	DEGS1	2.42E-03	2.02
208070_s_at	REV3L	1.59E-03	1.55
208699_x_at	TKT	3.49E-03	0.44
208700_s_at	TKT	4.10E-05	0.35
208758_at	ATIC	1.19E-02	1.84
208918_s_at	NADK	4.83E-05	0.35
208919_s_at	NADK	4.12E-05	0.37
208956_x_at	DUT	7.43E-04	1.65
209184_s_at	IRS2	7.83E-03	0.19
209185_s_at	IRS2	6.91E-03	0.14
209218_at	SQLE	2.55E-03	2.67
209250_at	DEGS1	9.08E-03	1.63
209439_s_at	PHKA2	1.96E-02	0.75
209440_at	PRPS1	8.54E-05	1.41
209460_at	ABAT	5.93E-03	0.40
209892_at	FUT4	1.45E-02	0.57
210980_s_at	ASAH1	3.55E-04	0.37
211256_x_at	BTN2A1	5.06E-03	0.71
211284_s_at	GRN	5.58E-03	0.69
211423_s_at	SC5DL	8.36E-04	1.53
211569_s_at	HADH	4.05E-05	4.80
211794_at	FYB	5.42E-03	0.39
211795_s_at	FYB	5.71E-04	0.36
212175_s_at	AK2	1.25E-04	1.53
212829_at	PIP4K2A	3.99E-05	1.73
212958_x_at	PAM	5.43E-03	0.37

213374_x_at	HIBCH	8.39E-03	1.94
213379_at	COQ2	2.25E-04	0.55
213624_at	SMPDL3A	4.26E-06	0.11
213702_x_at	ASAH1	2.15E-05	0.40
213902_at	ASAH1	1.94E-03	0.43
214430_at	GLA	5.84E-04	0.62
215001_s_at	GLUL	3.94E-04	0.45
215299_x_at	SULT1A1	1.61E-04	0.34
215493_x_at	BTN2A1	4.92E-03	0.70
215535_s_at	AGPAT1	1.14E-03	2.20
216212_s_at	DKC1	1.61E-02	3.79
217745_s_at	NAT13	4.73E-03	1.54
217848_s_at	PPA1	2.06E-06	3.86
217884_at	NAT10	1.99E-03	1.57
217956_s_at	ENOPH1	2.10E-03	1.44
218025_s_at	PECI	1.40E-03	2.45
218096_at	AGPAT5	1.07E-03	1.43
218102_at	DERA	1.61E-03	1.39
218322_s_at	ACSL5	9.05E-05	2.12
218557_at	NIT2	2.33E-02	1.79
218718_at	PDGFC	5.30E-03	0.37
218844_at	ACSF2	4.64E-05	3.40
218923_at	CTBS	2.15E-03	0.65
218924_s_at	CTBS	1.18E-03	0.48
219099_at	C12orf5	6.53E-04	1.85
220741_s_at	PPA2	5.49E-03	1.58
221485_at	B4GALT5	3.94E-03	0.81
221750_at	HMGCS1	6.35E-03	1.68
221760_at	MAN1A1	3.81E-03	2.53
221957_at	PDK3	2.52E-03	0.76
222819_at	CTPS2	2.16E-02	1.94
223183_at	AGPAT3	1.96E-02	1.54
223306_at	EBPL	6.66E-03	1.71
223671_x_at	DPH5	3.28E-03	1.90
223839_s_at	SCD	4.56E-02	2.08
223912_s_at	CLN8	2.28E-02	2.46
224480_s_at	MAG1	4.05E-04	2.21
224509_s_at	RTN4IP1	8.57E-04	1.82
224560_at	TIMP2	2.22E-04	0.51
224655_at	AK3	1.22E-04	1.71
224776_at	AGPAT6	1.56E-04	1.51
224777_s_at	PAFAH1B2	1.87E-02	0.86
224826_at	RP5-1022P6.2	4.67E-03	0.62
224835_at	RP5-1022P6.2	2.59E-04	0.57
225039_at	RPE	1.76E-02	1.81
225040_s_at	RPE	8.95E-04	2.46
225207_at	PDK4	1.11E-01	0.40
225272_at	SAT2	3.01E-04	0.46
225420_at	GPAM	4.71E-03	2.20
225520_at	MTHFD1L	4.16E-04	6.29

225853_at	GNPNAT1	9.37E-04	1.84
226671_at	LAMP2	1.88E-02	0.56
227266_s_at	FYB	1.75E-04	0.40
228499_at	PFKFB4	3.61E-06	0.31
228667_at	AGPAT4	6.14E-04	0.37
230492_s_at	RP5-1022P6.2	1.17E-03	0.46
231579_s_at	TIMP2	8.37E-05	0.54
231736_x_at	MGST1	1.08E-02	0.51
235333_at	B4GALT6	1.73E-03	2.24
235340_at	GANC	1.56E-03	2.02
235802_at	PLD4	4.31E-03	3.45
236077_at	GANC	6.45E-04	2.76
238435_at	---	1.50E-02	0.64
239108_at	MLSTD1	4.55E-05	0.12
239647_at	CHST13	7.77E-03	0.47
239711_at	ADAL	2.98E-04	1.65

Methylation

221570_s_at	METTL5	4.42E-03	1.17
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Microtubule-based movement

203087_s_at	KIF2A	8.47E-03	1.64
212242_at	TUBA4A	8.34E-04	0.41
225878_at	KIF1B	7.37E-03	0.58
226480_at	KIF2A	1.75E-05	1.94
226968_at	KIF1B	5.95E-03	0.60

Myelination

233914_s_at	SBF2	2.23E-02	0.59
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Nucleosome assembly

212928_at	TSPYL4	2.35E-03	1.32
213122_at	TSPYL5	3.39E-04	2.29
218445_at	H2AFY2	2.00E-03	3.03
228063_s_at	NAP1L5	1.61E-03	2.30
228213_at	H2AFJ	4.99E-01	1.62

Peptidyl-amino acid modification

227014_at	ASPHD2	8.36E-05	2.39
227015_at	ASPHD2	2.00E-03	1.76

Peptidyl-tyrosine sulfation

204079_at	TPST2	1.43E-02	0.39
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Phagocytosis

201743_at	CD14	3.38E-05	0.03
202877_s_at	CD93	2.54E-03	0.32
202878_s_at	CD93	1.48E-03	0.45
204513_s_at	ELMO1	9.42E-04	1.94
221698_s_at	CLEC7A	1.37E-03	0.54

Phospholipid dephosphorylation

213511_s_at	MTMR1	1.69E-03	2.23
216095_x_at	MTMR1	6.66E-05	2.66

Pigmentation

227139_s_at	HPS3	7.24E-03	1.81
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Protein amino acid phosphorylation

201244_s_at	RAF1	4.06E-03	0.75
202193_at	LIMK2	1.72E-04	0.48
202478_at	TRIB2	8.96E-05	11.99
202970_at	DYRK2	1.64E-03	2.10
202971_s_at	DYRK2	2.81E-04	3.45
204220_at	GMFG	4.63E-04	0.65
204825_at	MELK	5.61E-02	1.79
205051_s_at	KIT	5.31E-05	9.00
208018_s_at	HCK	3.89E-03	0.45
209193_at	PIM1	5.06E-04	0.61
212565_at	STK38L	4.22E-04	1.78
212572_at	STK38L	2.25E-05	2.23
213034_at	KIAA0999	1.48E-03	0.64
218236_s_at	PRKD3	4.85E-04	2.25
218909_at	RPS6KC1	1.41E-03	1.77
221918_at	PCTK2	3.44E-03	1.71
222663_at	RIOK2	3.04E-02	1.22
225330_at	IGF1R	1.40E-02	0.37
225613_at	MAST4	2.48E-05	4.96
225927_at	MAP3K1	7.49E-04	0.72
225997_at	MOBKL1A	2.63E-04	1.50
226126_at	MGC16169	3.54E-03	1.88
228565_at	KIAA1804	9.94E-03	2.36
235252_at	KSR1	3.69E-05	0.43
235421_at	MAP3K8	7.47E-03	3.94
238025_at	MLKL	1.10E-03	0.38

Protein amino acid sulfation

205139_s_at	UST	1.40E-05	4.70
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Protein folding

200064_at	HSP90AB1	3.69E-03	2.33
200666_s_at	DNAJB1	2.34E-03	0.76
200691_s_at	HSPA9	5.09E-04	1.85
200692_s_at	HSPA9	2.81E-03	1.96
200806_s_at	HSPD1	9.21E-03	2.71
200807_s_at	HSPD1	1.30E-03	2.18
200812_at	CCT7	5.21E-03	2.49
200877_at	CCT4	5.90E-05	1.74
200881_s_at	DNAJA1	1.62E-03	0.73
200967_at	PPIB	1.63E-02	2.12
201186_at	LRPAP1	1.60E-03	0.44

201472_at	VBP1	9.12E-05	1.72
201947_s_at	CCT2	1.83E-03	2.38
203279_at	EDEM1	2.51E-04	2.37
205133_s_at	HSPE1	1.76E-03	1.60
205361_s_at	PFDN4	2.16E-03	1.60
208959_s_at	TXNDC4	1.91E-03	0.57
209593_s_at	TOR1B	2.84E-03	0.60
210338_s_at	HSPA8	4.51E-02	2.58
212432_at	GRPEL1	1.58E-02	1.28
213262_at	SACS	5.45E-05	2.42
214359_s_at	HSP90AB1	3.36E-02	2.85
218003_s_at	FKBP3	1.28E-02	1.44
219117_s_at	FKBP11	1.31E-02	2.18
226336_at	PPIA	1.60E-03	1.68
234107_s_at	DTD1	5.03E-03	1.53
242712_x_at	RANBP2 B854	7.16E-01	1.23

Protein modification process

202185_at	PLOD3	1.28E-02	0.80
208940_at	SEPHS1	3.95E-05	2.31
224827_at	UBTD2	5.36E-05	1.73
224878_at	UBFD1	9.86E-03	1.64
229344_x_at	FAM80B	1.14E-02	0.62
230261_at	ST8SIA4	4.00E-03	0.63

Protein palmitoylation

218606_at	ZDHHC7	2.98E-05	0.42
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Protein repair

217977_at	SEPX1	1.29E-05	0.36
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Proteolysis

200838_at	CTSB	8.98E-04	0.42
200839_s_at	CTSB	7.76E-04	0.52
201212_at	LGMN	2.73E-06	18.86
201462_at	SCRN1	3.38E-05	5.28
201494_at	PRCP	2.67E-03	1.88
201749_at	ECE1	4.82E-04	0.42
201940_at	CPD	8.65E-04	0.48
201941_at	CPD	2.57E-04	0.45
202087_s_at	CTSL1	2.90E-03	0.29
202381_at	ADAM9	6.60E-03	0.65
202450_s_at	CTSK	4.42E-03	0.68
202604_x_at	ADAM10	1.25E-04	0.43
202901_x_at	CTSS	1.09E-03	0.27
202902_s_at	CTSS	1.41E-04	0.27
203501_at	PGCP	1.12E-02	0.63
205174_s_at	QPCT	4.05E-03	0.28
205997_at	ADAM28	4.88E-05	6.97
207890_s_at	MMP25	1.82E-02	0.56

208268_at	ADAM28	5.23E-04	7.40
208269_s_at	ADAM28	5.34E-05	4.87
208771_s_at	LTA4H	6.20E-05	0.34
209790_s_at	CASP6	2.94E-02	1.61
213275_x_at	CTSB	1.69E-03	0.51
213596_at	CASP4	3.16E-03	0.58
213652_at	PCSK5	9.42E-04	0.53
213935_at	ABHD5	4.07E-03	0.32
217752_s_at	CNDP2	4.64E-03	1.71
218217_at	SCPEP1	5.28E-04	0.33
218739_at	ABHD5	8.54E-03	0.34
219276_x_at	C9orf82	1.61E-04	1.88
220419_s_at	USP25	2.44E-02	0.73
222603_at	ERMP1	6.71E-04	2.03
223099_s_at	LONP2	5.03E-04	0.71
226038_at	LONRF1	3.64E-03	2.44
227639_at	PIGK	9.18E-04	2.78
227961_at	CTSB	2.24E-02	0.41
228055_at	NAPSB	6.29E-05	6.01
228056_s_at	NAPSB	2.78E-05	5.32
229025_s_at	IMMP1L	1.49E-04	3.08
232617_at	CTSS	1.20E-04	0.31
235033_at	NPEPL1	9.15E-04	0.77
239629_at	CFLAR	2.92E-02	0.60
241446_at	ADAM28	8.17E-03	3.22

Regulation of cell shape

202760_s_at	AKAP2	1.20E-05	240.21
226694_at	AKAP2	5.83E-05	86.12

Respiratory gaseous exchange

228772_at	HNMT	8.23E-03	0.60
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Ribosome biogenesis and assembly

213189_at	MINA	6.40E-04	1.82
218155_x_at	TSR1	5.04E-02	0.78
220688_s_at	MRTO4	9.73E-04	2.98

RNA processing

203436_at	RPP30	5.30E-05	1.47
218617_at	TRIT1	5.09E-03	1.39
241937_s_at	WDR4	3.00E-03	2.27
47105_at	DUS2L	7.89E-04	0.51
200014_s_at	HNRNPC	7.30E-04	1.43
200016_x_at	HNRNPA1	2.50E-06	1.19
200069_at	SART3	1.88E-03	1.30
200594_x_at	HNRNPU	1.68E-02	1.35
200687_s_at	SF3B3	1.22E-03	1.49
200781_s_at	RPS15A	2.29E-02	1.23
200870_at	STRAP	4.89E-04	1.48

201054_at	HNRNPA0	1.36E-04	2.04
201064_s_at	PABPC4	3.71E-03	1.57
201385_at	DHX15	5.59E-05	1.72
201478_s_at	DKC1	7.66E-04	2.64
201479_at	DKC1	5.16E-03	1.44
201501_s_at	GRSF1	7.37E-04	1.48
201517_at	NCBP2	7.74E-05	1.61
201531_at	ZFP36	3.64E-02	0.45
201726_at	ELAVL1	5.81E-04	1.63
201786_s_at	ADAR	5.73E-03	0.79
202690_s_at	SNRPD1	2.49E-04	1.63
203181_x_at	SRPK2	1.25E-03	0.51
203232_s_at	ATXN1	1.94E-03	0.41
203316_s_at	SNRPE	2.63E-04	1.78
203378_at	PCF11	9.02E-06	1.31
203721_s_at	UTP18	1.70E-04	1.38
205644_s_at	SNRPG	5.65E-03	1.23
206055_s_at	SNRPA1	3.19E-03	2.07
206989_s_at	SFRS2IP	3.14E-03	1.61
208672_s_at	SFRS3	3.55E-04	1.55
208673_s_at	SFRS3	1.03E-03	1.84
209104_s_at	NOLA2	4.38E-03	1.59
211185_s_at	SF3B1	1.85E-02	1.16
211623_s_at	FBL	6.57E-06	3.12
211929_at	HNRPA3	7.77E-05	1.98
211932_at	HNRPA3	8.85E-04	1.39
211933_s_at	HNRPA3	8.39E-03	1.43
211951_at	NOLC1	9.01E-03	1.49
212846_at	RRP1B	7.75E-04	1.72
212885_at	MPHOSPH10	1.10E-02	1.53
212905_at	CSTF2T	7.22E-05	1.46
212919_at	DCP2	4.19E-05	2.10
213876_x_at	ZRSR2	5.34E-04	0.51
214789_x_at	SFRS2B	8.04E-05	2.08
214806_at	BICD1	2.34E-04	2.66
217833_at	SYNCRIP	2.97E-03	1.34
218269_at	RNASEN	4.86E-03	1.57
218493_at	C16orf33	2.85E-03	2.24
218882_s_at	WDR3	6.51E-04	1.66
220890_s_at	DDX47	1.02E-03	1.44
221514_at	UTP14A	2.52E-03	1.84
222754_at	TRNT1	1.41E-02	1.37
223110_at	KIAA1429	1.71E-03	1.65
224308_s_at	INTS2	3.73E-04	1.59
224617_at	ROD1	4.91E-02	0.86
225082_at	CPSF3	7.42E-04	1.68
225386_s_at	HNRPLL	1.24E-03	1.63
225394_s_at	ZCRB1	1.66E-03	1.96
225399_at	C1orf19	1.65E-04	1.98
226093_at	DCP1B	1.84E-03	1.66

229666_s_at	CSTF3	5.08E-03	1.62
230180_at	DDX17	6.27E-02	1.84
231784_s_at	WDSOF1	6.11E-03	1.61
234295_at	DBR1	1.02E-02	1.41
236696_at	SR140	7.45E-03	0.39

Sensory perception of sound

202795_x_at	TRIOBP	3.37E-03	0.45
203695_s_at	DFNA5	1.25E-02	3.31
216210_x_at	TRIOBP	2.54E-03	0.52
225331_at	CCDC50	2.61E-05	2.40
226713_at	CCDC50	2.12E-04	2.49
228693_at	CCDC50	3.13E-04	2.38
235051_at	CCDC50	1.02E-04	2.84

Signal transduction

200090_at	FNTA	1.04E-03	1.49
200093_s_at	HINT1	1.14E-07	2.25
201443_s_at	ATP6AP2	1.21E-02	0.69
201444_s_at	ATP6AP2	2.85E-04	0.71
201642_at	IFNGR2	8.93E-04	0.54
201810_s_at	SH3BP5	6.42E-03	1.32
201888_s_at	IL13RA1	6.96E-05	2.23
202020_s_at	LANCL1	1.31E-03	1.87
202078_at	COPS3	2.59E-03	1.64
202117_at	ARHGAP1	3.79E-03	0.36
202206_at	ARL4C	1.83E-03	6.68
202207_at	ARL4C	8.27E-04	7.81
202208_s_at	ARL4C	8.77E-03	4.16
202548_s_at	ARHGEF7	6.85E-02	1.34
202626_s_at	LYN	5.68E-04	0.71
202686_s_at	AXL	1.59E-04	14.45
202741_at	PRKACB	4.37E-05	3.25
202742_s_at	PRKACB	4.06E-04	2.49
202787_s_at	MAPKAPK3	1.33E-03	0.47
202788_at	MAPKAPK3	2.21E-03	0.38
202974_at	MPP1	1.18E-03	0.48
203156_at	AKAP11	1.73E-03	1.91
203355_s_at	PSD3	9.39E-04	5.65
203485_at	RTN1	1.98E-03	1.85
203514_at	MAP3K3	2.94E-04	0.52
203538_at	CAMLG	5.09E-04	1.30
203552_at	MAP4K5	1.27E-03	1.82
203593_at	CD2AP	6.78E-03	1.90
203843_at	RPS6KA3	1.21E-04	1.68
203907_s_at	IQSEC1	5.13E-03	0.57
204214_s_at	RAB32	1.41E-02	0.78
204319_s_at	RGS10	1.33E-03	2.15
204882_at	ARHGAP25	9.71E-04	0.47
205068_s_at	ARHGAP26	1.95E-04	0.55

205119_s_at	FPR1	2.89E-04	0.13
205220_at	GPR109B	3.76E-03	0.25
205327_s_at	ACVR2A	3.23E-02	0.53
206060_s_at	PTPN22	1.85E-03	1.66
206296_x_at	MAP4K1	3.23E-06	8.93
206385_s_at	ANK3	1.13E-04	16.99
206571_s_at	MAP4K4	1.02E-03	0.27
206631_at	PTGER2	3.16E-04	0.30
206674_at	FLT3	1.67E-05	8.50
206729_at	TNFRSF8	1.63E-02	0.53
207238_s_at	PTPRC	1.06E-02	0.66
207610_s_at	EMR2	1.84E-04	0.49
207651_at	GPR171	2.51E-04	25.03
207721_x_at	HINT1	9.70E-05	1.93
208091_s_at	ECOP	3.55E-04	2.95
208248_x_at	APLP2	3.57E-02	0.59
208702_x_at	APLP2	2.89E-04	0.28
208704_x_at	APLP2	2.60E-03	0.48
208801_at	SRP72	1.30E-02	1.50
208820_at	PTK2	1.81E-03	2.60
208826_x_at	HINT1	7.86E-04	1.75
208891_at	DUSP6	2.29E-04	0.05
208892_s_at	DUSP6	1.26E-04	0.08
209012_at	TRIO	2.95E-03	1.81
209288_s_at	CDC42EP3	8.65E-05	0.35
209409_at	GRB10	5.60E-04	0.36
209514_s_at	RAB27A	5.11E-04	0.28
209515_s_at	RAB27A	6.47E-04	0.32
209568_s_at	RGL1	4.45E-02	1.92
209794_at	SRGAP3	1.63E-02	2.19
210222_s_at	RTN1	7.09E-04	1.93
210279_at	GPR18	5.06E-05	20.03
210384_at	PRMT2	5.90E-03	2.40
210951_x_at	RAB27A	9.15E-07	0.23
211404_s_at	APLP2	2.19E-04	0.33
211612_s_at	IL13RA1	2.29E-03	1.48
211984_at	CALM1	1.21E-02	1.63
211985_s_at	CALM1	5.11E-03	2.40
212184_s_at	MAP3K7IP2	2.89E-02	2.41
212252_at	CAMKK2	7.14E-04	0.54
213094_at	GPR126	1.95E-05	16.95
213111_at	PIP5K3	3.65E-03	1.65
213135_at	TIAM1	2.52E-02	0.50
213222_at	PLCB1	2.33E-03	0.23
213618_at	CENTD1	2.85E-04	0.37
213812_s_at	CAMKK2	6.91E-03	0.42
214075_at	NENF	8.15E-04	3.65
214219_x_at	MAP4K1	2.15E-07	6.12
214230_at	CDC42	4.08E-03	2.11
214339_s_at	MAP4K1	3.56E-05	2.90

214875_x_at	APLP2	5.88E-04	0.35
216199_s_at	MAP3K4	1.46E-03	1.53
216835_s_at	DOK1	1.04E-03	0.64
218150_at	ARL5A	3.52E-03	1.57
218181_s_at	MAP4K4	2.21E-03	0.39
218501_at	ARHGEF3	7.06E-04	0.58
218568_at	AGK	1.50E-03	2.15
218589_at	P2RY5	9.39E-03	0.38
218728_s_at	CNIH4	2.26E-03	0.60
218807_at	VAV3	7.37E-04	2.03
218858_at	DEPDC6	5.86E-06	43.89
218870_at	ARHGAP15	6.34E-04	1.87
219032_x_at	OPN3	6.51E-05	1.96
219183_s_at	PSCD4	2.77E-02	0.82
219666_at	MS4A6A	7.61E-03	0.54
220005_at	P2RY13	8.01E-03	0.51
221564_at	PRMT2	3.62E-04	2.20
221613_s_at	ZFAND6	3.96E-02	1.19
221656_s_at	ARHGEF10L	4.20E-03	0.51
221736_at	KIAA1219	5.03E-02	1.20
221830_at	RAP2A	5.77E-04	2.72
222218_s_at	PILRA	3.99E-04	0.49
222404_x_at	PTPLAD1	2.51E-03	1.79
222442_s_at	ARL8B	1.71E-03	0.59
222912_at	ARRB1	1.84E-04	0.46
223280_x_at	MS4A6A	8.20E-03	0.67
223343_at	MS4A7	6.66E-04	0.24
223358_s_at	---	4.48E-04	2.63
223423_at	GPR160	2.46E-03	1.93
223531_x_at	GPR89A	7.65E-03	1.78
223551_at	PKIB	6.05E-04	8.33
223553_s_at	DOK3	5.27E-05	0.07
223862_at	GHRL	6.46E-03	2.14
223993_s_at	CNIH4	7.53E-03	0.60
224356_x_at	MS4A6A	5.01E-03	0.67
224709_s_at	CDC42SE2	1.07E-03	1.63
225463_x_at	GPR89A	4.29E-04	1.52
225585_at	RAP2A	6.88E-03	2.43
225637_at	DEF8	1.17E-03	0.45
226056_at	CDGAP	1.65E-03	1.47
226335_at	RPS6KA3	4.41E-02	1.96
226440_at	DUSP22	3.79E-05	0.62
226617_at	ARL5A	3.53E-03	1.43
226859_at	bA16L21.2.1	1.08E-03	2.07
226979_at	MAP3K2	7.99E-04	0.66
227084_at	DTNA	2.85E-05	8.92
227131_at	MAP3K3	3.17E-03	0.58
227232_at	EVL	2.15E-03	2.30
227684_at	EDG5	2.61E-04	3.86
227692_at	GNAI1	1.46E-03	3.71

228234_at	TICAM2	9.22E-06	0.73
228725_x_at	PRMT2	3.36E-03	1.68
228834_at	TOB1	2.65E-01	1.57
229510_at	NYD-SP21	1.19E-03	0.26
229584_at	LRRK2	8.88E-06	0.23
230100_x_at	PAK1	4.85E-04	1.70
230252_at	GPR92	3.43E-05	17.89
230424_at	C5orf13	6.61E-05	3.70
230550_at	MS4A6A	8.40E-04	0.64
230563_at	RASGEF1A	2.04E-03	4.09
231166_at	GPR155	1.31E-03	0.45
232724_at	MS4A6A	1.14E-03	0.51
233813_at	PPP1R16B	2.61E-03	1.95
234000_s_at	PTPLAD1	1.09E-02	1.31
236223_s_at	RIT1	5.81E-04	0.54
236224_at	RIT1	4.15E-04	0.39
236281_x_at	HTR7	7.71E-02	2.22
236295_s_at	NLRC3	6.01E-01	1.43
238909_at	S100A10	3.39E-04	0.36
239660_at	C20orf74	4.09E-03	0.61
241627_x_at	FLJ10357	6.72E-05	0.21
241742_at	PRAM1	7.78E-04	0.44
243296_at	PBEF1	4.61E-02	0.19
243463_s_at	RIT1	8.85E-04	0.49
34206_at	CENTD2	1.85E-04	0.42
38149_at	ARHGAP25	2.78E-06	0.40
38398_at	MADD	2.41E-05	0.75
38671_at	PLXND1	4.10E-05	0.47

Spermatogenesis

212470_at	SPAG9	2.48E-03	1.33
218224_at	PNMA1	5.00E-02	1.95

Telomere maintenance

204354_at	POT1	1.84E-03	1.81
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Transcription

200034_s_at	RPL6	1.02E-04	1.49
200052_s_at	ILF2	4.06E-03	2.61
200085_s_at	TCEB2	1.91E-04	0.60
200704_at	LITAF	6.03E-03	1.42
201010_s_at	TXNIP	2.26E-02	0.69
201023_at	TAF7	3.00E-04	1.86
201084_s_at	BCLAF1	9.80E-03	1.63
201101_s_at	BCLAF1	1.16E-02	1.74
201217_x_at	RPL3	8.33E-03	1.30
201328_at	ETS2	4.49E-04	2.80
201466_s_at	JUN	4.60E-04	0.16
201566_x_at	ID2	2.23E-03	3.59
201606_s_at	PWP1	3.05E-03	1.97

201833_at	HDAC2	6.30E-04	1.72
202080_s_at	TRAK1	1.18E-03	1.53
202337_at	PMF1	3.06E-03	0.75
202355_s_at	GTF2F1	3.24E-03	0.54
202360_at	MAML1	1.61E-02	0.72
202364_at	MXI1	1.59E-04	0.23
202370_s_at	CBFB	6.14E-04	1.31
202371_at	TCEAL4	4.57E-02	1.76
202396_at	TCERG1	1.34E-02	1.39
202445_s_at	NOTCH2	1.38E-02	0.37
202449_s_at	RXRA	4.57E-03	0.39
202484_s_at	MBD2	1.17E-04	0.68
202491_s_at	IKBKAP	4.51E-04	1.54
202813_at	TARBP1	1.76E-03	2.41
202925_s_at	PLAGL2	2.57E-03	0.53
202963_at	RFX5	5.34E-04	1.82
202983_at	HLTF	3.00E-04	2.68
203278_s_at	PHF21A	1.84E-04	0.35
203358_s_at	EZH2	2.46E-04	2.33
203419_at	MLL4	3.17E-03	0.58
203542_s_at	KLF9	1.01E-02	2.74
203574_at	NFIL3	1.88E-02	0.35
203604_at	ZNF516	1.05E-02	0.57
203753_at	TCF4	1.70E-05	2.73
203796_s_at	BCL7A	8.13E-04	3.03
203973_s_at	CEBPD	9.89E-03	0.32
204045_at	TCEAL1	1.05E-03	1.73
204057_at	IRF8	2.42E-02	1.48
204131_s_at	FOXO3	4.53E-04	0.36
204197_s_at	RUNX3	3.30E-01	1.44
204334_at	KLF7	8.97E-04	0.48
204562_at	IRF4	1.75E-03	5.09
204622_x_at	NR4A2	5.90E-01	1.58
204791_at	NR2C1	3.50E-03	1.74
204798_at	MYB	5.61E-03	0.51
204959_at	MNDA	1.32E-04	0.49
205004_at	NKRF	1.48E-02	1.41
205101_at	CIITA	1.53E-03	4.83
205339_at	STIL	1.55E-03	1.88
205497_at	ZNF175	2.73E-03	2.01
205659_at	HDAC9	7.03E-04	2.79
206135_at	ST18	5.49E-05	24.57
206314_at	ZNF167	7.19E-06	2.72
206544_x_at	SMARCA2	2.52E-04	1.74
206572_x_at	ZNF85	7.28E-05	7.23
206861_s_at	CGGBP1	7.92E-04	0.62
207002_s_at	PLAGL1	5.83E-03	1.33
207483_s_at	CAND1	1.12E-02	1.21
207630_s_at	CREM	4.21E-03	1.52
208078_s_at	SNF1LK	2.09E-01	1.84

208407_s_at	CTNND1	1.35E-04	2.14
208734_x_at	RAB2A	5.80E-04	0.61
208763_s_at	TSC22D3	8.12E-03	0.49
208838_at	---	1.14E-03	2.13
208961_s_at	KLF6	1.42E-04	0.31
208986_at	TCF12	5.05E-03	1.37
208989_s_at	FBXL11	5.50E-03	0.55
208991_at	STAT3	1.94E-03	0.60
209034_at	PNRC1	1.20E-03	0.57
209102_s_at	HBP1	1.95E-03	0.68
209107_x_at	NCOA1	7.04E-03	0.52
209153_s_at	TCF3	2.90E-04	2.48
209187_at	DR1	2.99E-03	1.79
209272_at	NAB1	2.20E-02	1.41
209318_x_at	PLAGL1	1.93E-03	1.42
209523_at	TAF2	1.72E-03	1.44
209572_s_at	EED	9.39E-04	2.11
209753_s_at	TMPO	4.61E-04	0.57
209905_at	HOXA9	2.60E-04	9.30
209969_s_at	STAT1	1.63E-03	0.47
210347_s_at	BCL11A	3.79E-04	3.71
211073_x_at	RPL3	1.98E-03	1.37
211352_s_at	NCOA3	1.10E-03	1.97
211615_s_at	LRPPRC	5.30E-05	1.66
211666_x_at	RPL3	1.44E-03	2.67
211698_at	EID1	2.76E-05	3.25
211961_s_at	RAB7A	1.17E-02	1.29
211971_s_at	LRPPRC	2.93E-03	1.48
212036_s_at	PNN	2.43E-03	1.33
212037_at	PNN	1.79E-03	2.05
212368_at	ZNF292	1.88E-03	1.42
212382_at	TCF4	3.23E-03	2.61
212385_at	TCF4	3.27E-04	2.77
212492_s_at	JMJD2B	1.50E-02	0.56
212501_at	CEBPB	1.54E-03	0.24
212557_at	ZNF451	1.49E-03	1.51
212614_at	ARID5B	1.08E-03	3.54
212689_s_at	JMJD1A	1.85E-03	1.72
212758_s_at	ZEB1	3.85E-04	8.22
212764_at	---	1.56E-04	6.18
212857_x_at	SUB1	1.94E-03	2.34
212893_at	ZZZ3	5.50E-03	1.51
213006_at	CEBPD	1.66E-03	0.23
213269_at	ZNF248	1.26E-03	2.10
213281_at	JUN	9.55E-05	0.45
214173_x_at	C19orf2	1.04E-02	1.34
214651_s_at	HOXA9	9.68E-05	7.57
214743_at	CUX1	3.96E-03	0.67
214746_s_at	ZNF467	5.81E-03	0.62
214800_x_at	BTF3	6.09E-03	1.29

214948_s_at	TMF1	7.68E-05	1.97
215091_s_at	GTF3A	1.34E-03	1.69
215223_s_at	SOD2	5.86E-05	0.21
215307_at	ZNF529	1.32E-03	2.27
216241_s_at	TCEA1	1.99E-04	1.51
216248_s_at	NR4A2	6.46E-01	1.44
216841_s_at	SOD2	1.01E-04	0.28
217627_at	ZNF573	1.23E-03	2.06
217707_x_at	SMARCA2	2.87E-03	1.55
217952_x_at	PHF3	5.47E-03	0.72
217986_s_at	BAZ1A	3.56E-02	1.22
217995_at	SQRDL	7.72E-03	0.57
218005_at	ZNF22	1.40E-02	1.32
218149_s_at	ZNF395	8.39E-05	0.32
218152_at	HMG20A	9.47E-04	1.46
218229_s_at	POGK	4.19E-04	1.90
218401_s_at	ZNF281	5.60E-02	0.54
218430_s_at	RFXDC2	1.38E-03	1.87
218559_s_at	MAFB	1.07E-04	0.04
218902_at	NOTCH1	8.23E-03	0.44
219126_at	PHF10	7.16E-03	1.52
219371_s_at	KLF2	8.20E-05	0.16
219870_at	ATF7IP2	3.33E-03	1.47
220358_at	BATF3	1.59E-04	8.79
220617_s_at	ZNF532	3.55E-05	2.49
221234_s_at	BACH2	5.90E-04	7.18
221727_at	---	6.26E-05	2.47
221842_s_at	ZNF131	1.84E-02	1.49
221873_at	ZNF143	1.26E-03	0.79
222146_s_at	TCF4	5.63E-05	2.56
222204_s_at	RRN3	4.39E-04	1.27
222237_s_at	ZNF228	5.45E-04	1.93
222619_at	ZNF281	3.43E-04	0.49
222630_at	RFXDC2	7.23E-04	1.61
222636_at	MED28	2.19E-01	1.84
222651_s_at	TRPS1	7.43E-03	0.67
222777_s_at	WHSC1	5.06E-04	2.49
222981_s_at	RAB10	4.04E-04	0.52
223049_at	GRB2	7.87E-03	0.70
223134_at	BBX	1.52E-03	1.58
223135_s_at	BBX	3.80E-04	1.67
224428_s_at	CDCA7	3.76E-03	3.49
224586_x_at	SUB1	1.43E-03	1.49
224587_at	SUB1	1.19E-02	2.12
224606_at	KLF6	2.55E-03	0.54
224654_at	DDX21	4.90E-04	1.28
224711_at	YY1	4.13E-03	1.20
224833_at	ETS1	7.69E-03	3.28
224891_at	FOXO3	1.05E-03	0.52
224944_at	TMPO	1.14E-03	0.59

225021_at	ZNF532	3.16E-04	1.88
225252_at	SRXN1	5.37E-04	0.31
225262_at	FOSL2	1.01E-04	0.45
225346_at	MTERFD3	4.01E-02	1.94
225434_at	DEDD2	8.73E-05	0.45
225539_at	ZNF295	9.84E-03	1.69
225645_at	EHF	9.82E-05	11.03
225798_at	JAZF1	2.37E-02	0.52
225848_at	ZNF746	8.10E-04	0.55
225956_at	C5orf41	1.07E-02	0.63
226037_s_at	TAF9B	1.34E-04	1.58
226090_x_at	RABL3	6.67E-04	2.01
226157_at	TFDP2	1.03E-04	1.94
226163_at	ZBTB9	1.02E-03	1.98
226215_s_at	FBXL10	8.80E-04	1.85
226255_at	ZBTB33	5.68E-04	2.13
226275_at	MXD1	1.57E-03	0.48
226297_at	HIPK3	2.25E-04	0.68
226371_at	JARID1A	6.97E-02	1.38
226388_at	TCEA3	6.29E-05	20.43
226509_at	ZNF641	5.42E-04	1.76
226590_at	ZNF618	1.70E-04	2.65
226633_at	RAB8B	1.57E-03	0.80
226646_at	KLF2	1.09E-03	0.29
226797_at	MBTD1	8.36E-03	1.64
226991_at	NFATC2	1.49E-05	103.95
227077_at	ZNF286A	1.26E-03	1.55
227111_at	ZBTB34	2.06E-02	0.74
227210_at	---	2.55E-03	1.82
227261_at	KLF12	1.48E-04	4.60
227329_at	ZBTB46	1.31E-04	5.42
227404_s_at	EGR1	4.12E-03	0.18
228099_at	ZNF550	2.55E-03	1.82
228482_at	CDRT4	4.07E-04	2.19
228562_at	ZBTB10	3.61E-03	1.80
228630_at	ZNF84	5.65E-03	2.46
228718_at	ZNF44	1.01E-02	1.78
228785_at	ZNF281	1.07E-03	0.36
228904_at	HOXB3	4.57E-05	3.71
228964_at	PRDM1	8.96E-03	2.15
229228_at	CREB5	5.39E-03	0.66
229431_at	RFXAP	2.38E-03	1.64
229464_at	MYEF2	9.77E-05	5.64
229676_at	PAPD1	7.39E-03	1.48
229707_at	ZNF606	6.08E-03	2.27
230108_at	ERCC6	9.99E-04	1.61
230440_at	ZNF469	2.38E-04	9.06
230511_at	CREM	3.30E-03	3.02
230986_at	KLF8	1.04E-05	7.02
231059_x_at	SCAND1	6.06E-02	0.80

232008_s_at	BBX	6.97E-05	1.94
232231_at	RUNX2	9.56E-06	3.57
232360_at	EHF	1.70E-01	3.08
232676_x_at	MYEF2	7.53E-05	5.06
234394_at	ZNF124	2.22E-03	2.00
235179_at	ZNF641	3.79E-04	1.72
235231_at	ZNF789	7.47E-05	2.16
235233_s_at	---	5.19E-04	1.33
235409_at	MGA	6.67E-04	1.53
235593_at	ZEB2	9.90E-04	0.38
235668_at	PRDM1	4.91E-02	1.48
236128_at	ZNF91	2.06E-03	6.09
236796_at	BACH2	6.57E-05	4.12
238035_at	SP3	5.36E-03	0.54
238076_at	GATAD2B	4.67E-02	3.79
238520_at	TRERF1	6.84E-03	2.06
238940_at	KLF12	2.81E-04	2.43
239585_at	PCAF	4.91E-04	1.59
242602_x_at	ZNF254	3.81E-04	1.52
242919_at	ZNF253	2.97E-03	4.11
243496_at	RAB18	5.33E-03	0.58
243790_at	ZNF585A	6.29E-03	1.58
244406_at	ZNF20	4.60E-03	2.03
36711_at	MAFF	1.26E-03	15.71
54970_at	ZMIZ2	2.89E-04	1.65
78383_at	TOPORS	1.34E-03	0.52

Translation

200002_at	RPL35	2.22E-04	2.34
200013_at	RPL24	1.44E-04	1.21
200018_at	RPS13	4.31E-03	1.27
200024_at	RPS5	1.50E-02	2.32
200027_at	NARS	1.32E-03	0.78
200029_at	RPL19	8.03E-04	1.55
200036_s_at	RPL10A	2.27E-05	1.89
200081_s_at	RPS6	1.92E-05	1.90
200091_s_at	RPS25	3.47E-05	1.40
200099_s_at	RPS3A	7.92E-03	1.31
200689_x_at	EEF1G	2.48E-03	1.91
200705_s_at	EEF1B2	2.10E-04	2.02
200715_x_at	RPL13A	2.69E-04	1.87
200808_s_at	ZYX	1.22E-03	0.57
200819_s_at	RPS15	9.78E-04	1.52
200933_x_at	RPS4X	8.27E-03	1.30
200937_s_at	RPL5	6.16E-04	1.60
201033_x_at	RPLP0	1.56E-03	1.62
201049_s_at	RPS18	7.92E-05	1.33
201254_x_at	RPS6	2.29E-04	1.56
201310_s_at	C5orf13	5.57E-05	4.00
201330_at	RARS	1.85E-02	1.44

201436_at	EIF4E	2.53E-04	1.75
201623_s_at	DARS	3.44E-03	1.49
202042_at	HARS	3.32E-03	1.78
202231_at	EIF3M	1.63E-03	1.34
202461_at	EIF2B2	1.66E-04	1.49
203034_s_at	RPL27A	2.14E-02	1.34
204744_s_at	IARS	3.11E-04	2.15
204905_s_at	EEF1E1	9.56E-04	2.39
208692_at	RPS3	4.63E-04	1.89
208756_at	EIF3I	2.39E-03	1.50
208787_at	MRPL3	5.27E-04	2.11
208856_x_at	RPLP0	3.69E-03	1.58
208985_s_at	EIF3J	4.10E-04	1.75
209134_s_at	RPS6	6.52E-03	1.20
209467_s_at	MKNK1	1.07E-03	0.49
209609_s_at	MRPL9	3.39E-04	2.37
211345_x_at	EEF1G	6.14E-03	1.65
211487_x_at	RPS17	4.61E-03	1.40
211594_s_at	MRPL9	2.11E-04	2.31
211720_x_at	RPLP0	4.13E-03	1.63
211787_s_at	EIF4A1	1.44E-03	1.42
211927_x_at	EEF1G	2.18E-04	1.85
211956_s_at	EIF1	3.46E-04	0.80
211972_x_at	RPLP0	3.59E-03	1.78
212288_at	FNBP1	2.86E-03	1.19
212652_s_at	SNX4	1.06E-03	2.08
212788_x_at	FTL	1.51E-04	0.35
212790_x_at	RPL13A	1.45E-03	1.71
212820_at	DMXL2	3.12E-05	0.15
212971_at	CARS	9.49E-04	0.68
213187_x_at	FTL	1.12E-02	0.43
213801_x_at	RPSA	1.57E-05	2.42
213941_x_at	RPS7	2.92E-03	1.29
214042_s_at	RPL22	9.19E-04	1.64
214097_at	RPS21	7.95E-03	2.99
214167_s_at	RPLP0	1.72E-03	3.37
214744_s_at	---	4.72E-04	1.53
217809_at	BZW2	2.82E-04	1.82
217882_at	TMEM111	1.18E-02	0.76
218027_at	MRPL15	3.44E-04	1.55
218153_at	CARS2	2.58E-04	0.56
218654_s_at	MRPS33	2.32E-03	1.92
218773_s_at	MSRB2	1.49E-03	0.49
219190_s_at	EIF2C4	2.27E-04	0.65
219762_s_at	RPL36	3.41E-03	1.44
220960_x_at	RPL22	1.08E-02	1.50
221726_at	RPL22	2.62E-04	2.10
221905_at	CYLD	7.22E-04	1.56
222427_s_at	LARS	1.55E-03	2.03
222768_s_at	TRMT6	1.47E-02	1.52

223035_s_at	FARSB	5.65E-03	1.57
224415_s_at	HINT2	3.52E-02	1.42
224763_at	RPL37	2.70E-03	1.78
224767_at	RPL37	1.54E-05	3.78
225164_s_at	EIF2AK4	3.26E-04	2.24
225939_at	EIF4E3	5.61E-02	0.26
225940_at	EIF4E3	1.80E-02	0.10
225941_at	EIF4E3	6.29E-04	0.17
226296_s_at	MRPS15	4.00E-03	1.66
226749_at	MRPS9	3.14E-04	2.18
229590_at	RPL13	4.98E-04	1.58
233970_s_at	TRMT6	1.68E-03	2.09
234873_x_at	RPL7A	8.48E-03	2.06
235309_at	RPS15A	9.94E-03	1.41
235689_at	MTFMT	2.81E-04	2.23
243256_at	MKNK1	1.31E-03	0.46
243423_at	TNIP1	1.67E-03	1.63

Transport

200030_s_at	SLC25A3	2.00E-05	1.50
200063_s_at	NPM1	1.69E-03	2.00
200086_s_at	COX4I1	2.37E-03	1.28
200701_at	NPC2	2.09E-04	0.42
200788_s_at	PEA15	1.88E-04	1.57
200992_at	IPO7	1.28E-03	1.86
200993_at	IPO7	1.39E-05	1.87
200994_at	IPO7	2.29E-03	1.96
201111_at	CSE1L	2.83E-03	1.66
201112_s_at	CSE1L	1.18E-03	1.47
201118_at	PGD	2.74E-02	0.59
201242_s_at	ATP1B1	3.57E-04	6.27
201243_s_at	ATP1B1	6.92E-05	7.45
201393_s_at	IGF2R	9.07E-04	0.17
201398_s_at	TRAM1	2.54E-03	1.26
201502_s_at	NFKBIA	1.30E-02	0.54
201503_at	G3BP1	3.04E-04	1.68
201721_s_at	LAPTM5	4.61E-04	0.70
201739_at	SGK1	6.93E-02	0.35
201754_at	COX6C	1.75E-03	1.37
201831_s_at	USO1	1.51E-04	1.41
201872_s_at	ABCE1	1.11E-05	2.10
201873_s_at	ABCE1	1.70E-04	1.73
201917_s_at	SLC25A36	4.67E-04	1.97
201918_at	SLC25A36	2.67E-02	1.33
201931_at	ETFA	8.11E-04	1.49
202083_s_at	SEC14L1	4.93E-04	0.60
202084_s_at	SEC14L1	1.24E-05	0.63
202119_s_at	CPNE3	2.20E-02	1.66
202180_s_at	MVP	2.34E-04	0.69
202233_s_at	UQCRH	7.58E-03	1.27

202345_s_at	FABP5	4.39E-05	3.85
202399_s_at	AP3S2	2.02E-03	0.64
202502_at	ACADM	8.36E-04	1.93
202783_at	NNT	4.92E-03	2.31
203196_at	ABCC4	5.97E-06	4.97
203300_x_at	AP1S2	5.57E-04	0.58
203410_at	AP3M2	8.62E-03	1.86
203504_s_at	ABCA1	9.99E-04	0.33
203505_at	ABCA1	1.61E-03	0.20
203509_at	SORL1	6.08E-05	0.47
203517_at	MTX2	8.66E-05	1.88
203518_at	LYST	2.74E-03	0.68
203530_s_at	STX4	7.36E-02	0.90
203679_at	TMED1	2.41E-02	0.35
203710_at	ITPR1	1.47E-02	1.94
203773_x_at	BLVRA	6.65E-04	0.32
203922_s_at	CYBB	1.68E-04	0.22
203923_s_at	CYBB	2.30E-04	0.27
204158_s_at	TCIRG1	4.72E-03	0.60
204204_at	SLC31A2	1.91E-04	0.32
204226_at	STAU2	5.96E-03	1.29
204446_s_at	ALOX5	1.01E-02	0.43
205198_s_at	ATP7A	5.25E-04	1.49
205237_at	FCN1	4.93E-05	0.19
205241_at	SCO2	1.79E-03	0.63
206600_s_at	SLC16A5	7.08E-05	0.36
206662_at	GLRX	2.05E-03	0.53
207332_s_at	TFRC	3.95E-04	2.20
207507_s_at	ATP5G3	4.02E-04	1.66
207677_s_at	NCF4	2.76E-03	0.36
207819_s_at	ABCB4	4.93E-06	14.03
208691_at	TFRC	1.18E-04	2.16
208905_at	CYCS	3.95E-06	2.32
209143_s_at	CLNS1A	4.74E-04	1.56
209222_s_at	OSBPL2	1.15E-03	0.74
209267_s_at	SLC39A8	9.31E-03	2.12
209389_x_at	DBI	2.36E-02	1.36
209627_s_at	OSBPL3	1.31E-04	2.21
209711_at	SLC35D1	7.55E-03	1.62
209884_s_at	SLC4A7	5.61E-05	3.92
209975_at	CYP2E1	3.32E-04	4.99
209994_s_at	ABCB1	2.77E-05	26.36
210357_s_at	SMOX	3.21E-02	2.18
210428_s_at	HGS	9.13E-04	0.66
210766_s_at	CSE1L	3.31E-03	1.50
210849_s_at	VPS41	1.00E-02	1.41
211070_x_at	DBI	3.52E-03	1.31
211729_x_at	BLVRA	9.03E-05	0.30
211755_s_at	ATP5F1	2.45E-04	1.36
211953_s_at	RANBP5	1.96E-03	1.96

211954_s_at	RANBP5	4.97E-04	2.16
211955_at	RANBP5	1.16E-04	1.69
212038_s_at	VDAC1	1.32E-03	2.86
212112_s_at	STX12	7.30E-03	0.71
212295_s_at	SLC7A1	2.64E-06	1.83
212297_at	ATP13A3	4.13E-03	1.52
212316_at	NUP210	1.61E-03	1.84
212352_s_at	TMED10	4.95E-03	1.50
212625_at	STX10	7.40E-04	0.56
212810_s_at	SLC1A4	1.30E-03	2.18
212811_x_at	SLC1A4	6.63E-03	1.55
212907_at	SLC30A1	2.61E-03	0.66
212944_at	SLC5A3	7.20E-04	2.50
213119_at	SLC36A1	2.05E-03	0.40
213326_at	VAMP1	8.83E-04	2.03
213415_at	CLIC2	8.19E-07	16.52
213682_at	NUP50	8.79E-03	0.69
214439_x_at	BIN1	2.96E-06	2.55
214749_s_at	ARMCX6	3.23E-03	1.77
214769_at	CLCN4	7.78E-03	16.24
215171_s_at	TIMM17A	2.28E-03	1.81
215716_s_at	ATP2B1	6.11E-04	2.07
217746_s_at	PDCD6IP	1.16E-02	0.77
217789_at	SNX6	4.07E-03	0.79
217888_s_at	ARFGAP1	4.78E-03	0.73
217961_at	SLC25A38	7.67E-03	1.65
218091_at	HRB	1.30E-02	0.64
218139_s_at	C14orf108	6.72E-06	1.72
218204_s_at	FYCO1	1.33E-04	0.37
218237_s_at	SLC38A1	2.93E-07	87.51
218404_at	SNX10	9.91E-03	0.76
218699_at	RAB7L1	1.13E-03	1.79
218826_at	SLC35F2	2.49E-04	3.03
219229_at	SLCO3A1	3.47E-03	0.41
219282_s_at	TRPV2	1.45E-03	1.96
219549_s_at	RTN3	9.62E-06	0.38
219714_s_at	CACNA2D3	6.43E-05	3.25
220416_at	ATP8B4	6.88E-05	3.19
221483_s_at	ARPP-19	2.09E-03	1.28
221620_s_at	APOO	6.20E-04	1.78
221691_x_at	NPM1	1.72E-02	2.08
221923_s_at	NPM1	1.22E-03	1.95
221931_s_at	SEH1L	4.95E-05	3.19
222906_at	FLVCR1	2.79E-03	2.41
223027_at	SNX9	2.29E-04	2.39
223092_at	ANKH	1.95E-04	5.88
223181_at	C18orf55	8.64E-03	1.42
223296_at	SLC25A33	7.57E-04	2.19
223798_at	SLC41A2	1.10E-05	19.50
223816_at	SLC46A2	8.30E-03	0.37

224049_at	KCNK17	7.67E-02	2.78
224564_s_at	RTN3	8.04E-05	0.31
224579_at	SLC38A1	1.26E-05	49.82
224580_at	SLC38A1	2.08E-07	13.43
225001_at	RAB3D	8.77E-04	0.34
225022_at	GOPC	3.01E-03	1.26
225057_at	SLC15A4	5.05E-03	0.56
225295_at	SLC39A10	2.50E-04	2.40
225835_at	SLC12A2	2.97E-03	2.71
225881_at	SLC35B4	1.92E-04	1.66
225882_at	SLC35B4	2.49E-04	1.93
226026_at	DIRC2	4.34E-05	0.37
226177_at	GLTP	9.01E-03	0.68
226249_at	SNX30	9.25E-04	1.92
226274_at	CLCN5	1.46E-04	1.95
226393_at	CYP2U1	3.23E-03	1.77
226879_at	HVCN1	9.79E-04	0.50
226923_at	SCFD2	9.55E-03	1.84
227109_at	CYP2R1	3.00E-03	1.68
227134_at	SYTL1	1.11E-04	2.56
227176_at	SLC2A13	9.40E-03	0.78
227367_at	SLCO3A1	2.45E-04	0.58
227620_at	---	1.72E-03	0.52
227647_at	KCNE3	6.36E-04	0.39
227987_at	VPS13A	3.03E-04	2.28
228153_at	RNF144B	1.23E-04	0.62
228164_at	AP4E1	3.10E-03	1.31
228355_s_at	NDUFA12L	3.63E-03	1.31
228415_at	---	8.65E-03	0.69
228418_at	EXOC5	3.66E-04	1.31
228497_at	SLC22A15	7.16E-05	0.13
228754_at	SLC6A6	2.18E-03	0.49
228758_at	BCL6	1.55E-03	0.39
229141_at	WDR33	1.06E-03	2.21
229426_at	COX5A	5.22E-03	1.42
229981_at	SNX5	1.29E-02	1.74
230075_at	RAB39B	1.48E-05	27.55
230110_at	MCOLN2	3.08E-05	22.62
230179_at	LOC285812	9.03E-03	0.57
230259_at	C10orf125	9.69E-03	0.65
230707_at	SORL1	1.25E-03	0.47
230748_at	SLC16A6	3.52E-02	0.38
232233_at	SLC22A16	3.45E-03	0.42
232551_at	SLC26A6	1.34E-04	0.71
233656_s_at	VPS54	2.49E-03	0.62
233864_s_at	VPS35	3.43E-02	1.32
236019_at	RAB12	3.06E-02	0.74
237003_at	BEST3	3.17E-03	2.20
237159_x_at	AP1S3	5.29E-04	9.60
238519_at	RSC1A1	3.14E-04	1.60

238695_s_at	RAB39B	7.77E-04	2.59
243894_at	SLC41A2	1.36E-05	8.97
243969_at	SLC24A4	7.23E-05	0.24
45572_s_at	GGA1	6.02E-05	0.40
50277_at	GGA1	5.96E-03	0.47

Ubiquitin cycle

1294_at	UBA7	8.98E-03	0.76
201177_s_at	UBA2	2.04E-03	1.50
201274_at	PSMA5	1.55E-03	1.43
201317_s_at	PSMA2	5.54E-04	1.62
201381_x_at	CACYBP	7.35E-03	1.38
201736_s_at	MARCH3	1.05E-03	0.78
205356_at	USP13	2.60E-04	2.83
209004_s_at	FBXL5	1.15E-05	0.52
209005_at	FBXL5	5.85E-04	0.35
209115_at	UBA3	8.86E-04	0.81
209142_s_at	UBE2G1	2.06E-02	1.51
210681_s_at	USP15	1.34E-04	0.50
211761_s_at	CACYBP	1.14E-03	1.63
211764_s_at	UBE2D1	5.88E-05	0.49
212066_s_at	USP34	9.28E-03	1.18
212229_s_at	FBXO21	2.60E-04	1.69
212296_at	PSMD14	2.86E-04	1.70
212666_at	SMURF1	1.08E-02	0.51
216091_s_at	BTRC	1.05E-01	0.41
217824_at	UBE2J1	2.76E-02	1.72
217902_s_at	HERC2	1.89E-05	2.92
217988_at	CCNB1IP1	1.72E-05	2.90
218289_s_at	UBA5	1.71E-03	1.76
218306_s_at	HERC1	9.38E-05	1.66
218449_at	C4orf20	2.78E-03	1.27
219863_at	HERC5	3.89E-03	0.43
221654_s_at	USP3	9.13E-03	0.74
222579_at	UBA5	1.91E-03	2.04
223014_at	UBE2R2	6.58E-03	0.73
223493_at	FBXO4	3.60E-04	1.53
225414_at	RNF149	2.20E-03	0.34
225898_at	WDR54	1.78E-03	1.41
227489_at	SMURF2	8.13E-03	1.31
227607_at	STAMBPL1	1.90E-03	2.97
228190_at	CTR9	6.69E-03	2.51
228492_at	USP9Y	4.90E-01	1.44
228980_at	RFFL	6.02E-03	0.59
230029_x_at	UBR3	4.56E-03	1.44
230083_at	USP53	2.57E-04	4.80
231913_s_at	BRCC3	1.94E-02	1.34
231990_at	USP15	9.15E-04	0.22
235536_at	RNF149	1.39E-05	0.55
237439_at	USP43	3.93E-02	1.65

238523_at	C16orf44	1.15E-04	2.74
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Viral reproduction

210817_s_at	CALCOCO2	2.19E-03	0.66
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Visual perception

223763_at	DTNBP1	1.37E-01	0.79
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Wnt receptor signaling pathway

218364_at	LRRFIP2	9.53E-03	0.53
219889_at	FRAT1	2.22E-05	0.48
220610_s_at	LRRFIP2	1.08E-03	0.55

Unknown

200028_s_at	STARD7	6.81E-04	1.33
200616_s_at	KIAA0152	7.06E-04	1.96
200617_at	KIAA0152	2.66E-04	1.95
200794_x_at	DAZAP2	1.19E-03	0.73
200943_at	HMGN1	8.12E-02	1.65
200944_s_at	HMGN1	2.97E-05	2.42
200998_s_at	CKAP4	1.62E-04	0.17
200999_s_at	CKAP4	6.18E-04	0.10
201361_at	TMEM109	8.26E-03	2.13
201421_s_at	WDR77	5.51E-04	2.10
201552_at	LAMP1	1.95E-05	0.31
201553_s_at	LAMP1	1.25E-05	0.29
201569_s_at	SAMM50	9.85E-06	2.30
201570_at	SAMM50	5.75E-04	2.49
201779_s_at	RNF13	8.27E-03	0.69
201780_s_at	RNF13	1.30E-02	0.57
201876_at	PON2	2.99E-05	6.97
201924_at	AFF1	1.06E-02	1.60
201973_s_at	C7orf28A	6.11E-03	1.24
202060_at	CTR9	1.66E-04	1.42
202081_at	IER2	1.03E-02	0.46
202085_at	TJP2	3.81E-03	0.41
202352_s_at	PSMD12	1.99E-02	0.82
202365_at	UNC119B	3.00E-03	2.30
202391_at	BASP1	1.34E-03	2.66
202427_s_at	BRP44	2.49E-03	1.62
202441_at	ERLIN1	1.69E-03	0.69
202459_s_at	LPIN2	4.53E-03	0.68
202603_at	---	7.22E-03	0.67
202797_at	SACM1L	4.25E-03	1.38
203044_at	CHSY1	4.31E-03	0.51
203048_s_at	KIAA0372	2.17E-03	1.50
203253_s_at	HISPPD1	2.84E-04	1.70
203257_s_at	C11orf49	1.92E-03	1.47
203345_s_at	MTF2	1.42E-04	1.51
203403_s_at	RNF6	4.69E-03	1.39

203405_at	PSMG1	8.18E-03	1.46
203607_at	INPP5F	2.27E-04	2.33
203656_at	FIG4	9.90E-04	0.52
203712_at	KIAA0020	1.46E-03	1.71
203760_s_at	SLA	5.88E-03	0.72
203776_at	GPLOW	1.02E-02	0.71
203834_s_at	TGOLN2	1.08E-03	0.45
204030_s_at	SCHIP1	1.56E-04	4.59
204135_at	FILIP1L	5.42E-03	2.98
204137_at	GPR137B	1.64E-03	0.50
204215_at	C7orf23	4.05E-04	1.44
204301_at	KBTBD11	9.64E-03	0.37
204439_at	IFI44L	7.81E-02	0.47
204544_at	HPS5	2.63E-05	2.80
204546_at	KIAA0513	1.21E-04	0.29
204687_at	DKFZP564O0823	2.16E-05	4.72
204716_at	CCDC6	3.09E-03	1.52
204774_at	EVI2A	2.93E-04	0.45
205299_s_at	BTN2A2	1.91E-05	2.45
205353_s_at	PEBP1	4.49E-04	2.94
205441_at	OCEL1	1.13E-03	0.40
205541_s_at	GSPT2	4.59E-05	4.57
207320_x_at	STAU1	4.48E-03	0.78
207996_s_at	C18orf1	1.26E-04	2.52
208662_s_at	TTC3	3.33E-04	1.71
208663_s_at	TTC3	7.51E-04	1.78
208735_s_at	CTDSP2	6.98E-04	0.51
208798_x_at	GOLGA8A	5.65E-04	4.91
208934_s_at	LGALS8	1.35E-03	0.76
208949_s_at	LGALS3	6.96E-05	0.48
209216_at	WDR45	4.09E-04	0.58
209217_s_at	WDR45	1.43E-03	0.68
209444_at	RAP1GDS1	1.45E-04	2.23
209721_s_at	HOM-TES-103	3.57E-03	0.32
209787_s_at	HMGN4	7.54E-04	1.27
210425_x_at	GOLGA8B	5.42E-03	2.71
210434_x_at	JTB	3.19E-04	0.78
210645_s_at	TTC3	1.12E-04	2.53
210731_s_at	LGALS8	1.72E-03	0.65
210825_s_at	PEBP1	8.20E-04	2.57
210830_s_at	PON2	9.01E-06	4.30
211068_x_at	FAM21C	4.65E-04	0.52
211458_s_at	GABARAPL1	7.30E-02	0.39
211742_s_at	EVI2B	2.92E-04	0.62
211941_s_at	PEBP1	6.28E-04	2.66
212040_at	TGOLN2	9.49E-04	0.61
212043_at	TGOLN2	8.25E-04	0.78
212098_at	LOC151162	1.79E-03	1.46
212126_at	---	2.23E-04	3.74
212145_at	MRPS27	1.33E-04	2.20

212248_at	MTDH	1.85E-03	2.05
212250_at	MTDH	5.54E-03	1.46
212251_at	MTDH	9.36E-04	1.40
212264_s_at	WAPAL	7.81E-05	1.81
212268_at	SERPINB1	5.48E-03	0.70
212276_at	LPIN1	8.56E-03	1.67
212314_at	KIAA0746	1.38E-04	8.82
212441_at	KIAA0232	4.29E-04	0.60
212500_at	ADO	3.22E-04	1.26
212505_s_at	KIAA0892	7.36E-03	0.72
212507_at	TMEM131	1.58E-03	1.76
212539_at	CHD1L	1.88E-03	2.41
212543_at	AIM1	1.22E-03	1.52
212552_at	HPCAL1	9.03E-04	0.60
212560_at	C11orf32	3.14E-05	0.47
212606_at	WDFY3	2.50E-03	0.65
212640_at	PTPLB	9.62E-05	1.87
212646_at	RFTN1	1.15E-03	1.44
212658_at	LHFPL2	1.07E-04	0.40
212675_s_at	CEP68	6.21E-03	2.13
212692_s_at	LRBA	4.12E-04	2.75
212712_at	CAMSAP1	1.24E-03	0.68
212731_at	ANKRD46	5.44E-03	1.63
212779_at	KIAA1109	4.80E-02	1.97
212794_s_at	KIAA1033	7.36E-02	0.76
212812_at	---	1.45E-02	0.67
212830_at	MEGF9	2.66E-04	0.33
212875_s_at	C2CD2	1.37E-04	2.11
212882_at	KLHL18	1.95E-04	0.57
212946_at	KIAA0564	5.65E-03	1.52
213017_at	ABHD3	2.85E-03	0.52
213054_at	KIAA0841	7.23E-04	8.62
213088_s_at	DNAJC9	4.00E-05	2.47
213113_s_at	SLC43A3	2.48E-04	0.66
213140_s_at	SS18L1	1.98E-03	1.31
213166_x_at	FAM128A	1.92E-04	2.42
213508_at	C14orf147	9.44E-04	0.39
213638_at	PHACTR1	2.29E-04	4.93
213689_x_at	FAM69A	1.41E-03	2.94
213701_at	C12orf29	2.06E-02	1.73
213733_at	MYO1F	9.31E-04	0.63
213737_x_at	GOLGA8G	1.58E-03	2.66
214085_x_at	GLIPR1	3.91E-02	0.86
214109_at	LRBA	4.37E-06	2.99
214124_x_at	---	1.15E-03	2.40
214349_at	---	5.53E-03	0.18
214657_s_at	TncRNA	1.85E-02	0.46
214949_at	---	5.27E-05	2.15
215128_at	---	1.21E-02	2.27
215151_at	DOCK10	1.31E-02	1.74

215206_at	---	6.47E-03	0.32
215221_at	---	1.18E-03	0.56
215525_at	---	1.09E-03	0.59
215553_x_at	---	1.17E-02	0.60
215828_at	---	1.42E-02	0.39
216028_at	DKFZP564C152	7.17E-03	1.72
216044_x_at	FAM69A	5.07E-04	4.97
216342_x_at	---	8.16E-04	1.56
217379_at	LOC442171	2.44E-02	2.59
217499_x_at	OR7E37P	6.04E-04	0.60
217591_at	---	9.04E-01	0.92
217629_at	---	2.44E-05	2.08
217649_at	LOC732229	8.47E-02	0.34
217730_at	TMBIM1	4.19E-02	0.59
217768_at	C14orf166	1.17E-02	1.22
217802_s_at	NUCKS1	2.67E-04	2.17
217814_at	CCDC47	5.15E-02	2.69
217835_x_at	C20orf24	4.25E-05	0.52
217855_x_at	SDF4	9.15E-04	0.46
217868_s_at	METTL9	9.95E-04	0.45
217883_at	C2orf25	7.81E-05	1.43
217966_s_at	FAM129A	8.81E-04	2.21
217967_s_at	FAM129A	7.18E-03	1.68
218035_s_at	RBM47	1.97E-03	0.71
218055_s_at	WDR41	2.46E-01	1.59
218069_at	XTP3TPA	1.09E-04	2.88
218093_s_at	ANKRD10	4.93E-03	1.50
218104_at	TEX10	3.34E-03	1.24
218113_at	TMEM2	2.83E-03	0.49
218140_x_at	SRPRB	2.24E-03	1.51
218176_at	MAGEF1	5.06E-05	3.51
218288_s_at	CCDC90B	2.46E-03	1.39
218319_at	PELI1	7.43E-04	0.21
218320_s_at	NDUFB11	2.53E-02	1.23
218348_s_at	ZC3H7A	4.04E-03	0.68
218454_at	FLJ22662	1.62E-03	0.42
218477_at	TMEM14A	2.96E-05	39.15
218558_s_at	MRPL39	3.07E-03	1.59
218566_s_at	CHORDC1	1.32E-03	1.67
218583_s_at	DCUN1D1	5.68E-04	1.36
218610_s_at	FLJ11151	1.05E-02	0.43
218633_x_at	ABHD10	1.09E-03	1.71
218656_s_at	LHFP	1.37E-04	4.56
218684_at	LRRC8D	1.56E-03	0.69
218694_at	ARMCX1	4.38E-04	2.62
218710_at	TTC27	2.92E-04	2.60
218842_at	RPAP3	2.56E-03	1.95
218854_at	DSE	2.48E-04	2.17
218888_s_at	NETO2	4.92E-03	0.35
218889_at	NOC3L	5.78E-04	2.13

218966_at	MYO5C	3.03E-04	6.66
219008_at	C2orf43	1.06E-04	2.40
219033_at	PARP8	2.69E-04	0.60
219130_at	CCDC76	1.19E-03	2.23
219137_s_at	C2orf33	1.08E-02	1.42
219202_at	RHBDF2	7.60E-05	0.40
219243_at	GIMAP4	3.40E-04	0.25
219279_at	DOCK10	2.08E-04	3.51
219284_at	HSPBAP1	6.64E-03	0.59
219297_at	WDR44	7.02E-03	1.53
219334_s_at	OBFC2A	2.54E-03	0.50
219342_at	CASD1	5.94E-03	2.07
219363_s_at	MTERFD1	1.97E-03	1.55
219386_s_at	SLAMF8	4.22E-04	3.72
219460_s_at	TMEM127	9.99E-03	0.58
219506_at	C1orf54	4.23E-03	1.99
219520_s_at	WWC3	1.30E-02	0.42
219639_x_at	PARP6	1.79E-03	0.84
219644_at	CCDC41	4.88E-04	2.70
219670_at	C1orf165	3.31E-05	6.33
219696_at	C1orf218	9.20E-05	3.15
219777_at	GIMAP6	7.51E-04	0.37
219806_s_at	C11orf75	4.90E-04	0.46
219833_s_at	EFHC1	3.83E-03	2.20
220147_s_at	FAM60A	1.21E-03	1.64
220239_at	KLHL7	9.34E-03	0.59
220306_at	FAM46C	1.08E-03	4.86
220486_x_at	TMEM164	4.18E-04	0.58
220755_s_at	C6orf48	2.43E-03	1.57
220856_x_at	---	2.21E-03	0.52
220933_s_at	ZCCHC6	6.14E-04	0.58
220942_x_at	C3orf28	7.57E-05	2.83
220952_s_at	PLEKHA5	8.87E-03	2.44
220990_s_at	MIRN21	2.10E-04	0.39
221002_s_at	TSPAN14	3.15E-03	0.61
221193_s_at	ZCCHC10	1.51E-03	1.56
221207_s_at	NBEA	2.36E-04	2.55
221452_s_at	TMEM14B	3.53E-03	1.54
221477_s_at	MGC5618	8.50E-03	0.21
221523_s_at	RRAGD	2.50E-02	0.53
221524_s_at	RRAGD	1.38E-02	0.39
221699_s_at	DDX50	3.52E-04	1.47
221751_at	SLC2A3P1	9.54E-04	1.37
221804_s_at	FAM45A	1.01E-03	0.46
221904_at	FAM131A	1.78E-02	0.68
221970_s_at	NOL11	4.41E-03	1.57
221985_at	KLHL24	4.74E-03	0.68
222154_s_at	LOC26010	9.84E-05	6.21
222294_s_at	---	3.16E-03	0.30
222447_at	METTL9	4.68E-03	0.51

222459_at	C1orf108	1.10E-02	1.39
222468_at	KIAA0319L	9.71E-04	0.39
222496_s_at	RBM47	4.22E-04	0.43
222498_at	AZI2	7.58E-05	0.30
222593_s_at	SPATS2	1.51E-04	2.24
222614_at	RWDD2B	4.42E-03	2.79
222642_s_at	TMEM33	1.28E-02	0.60
222740_at	ATAD2	6.39E-05	1.99
222745_s_at	C15orf29	4.08E-04	1.98
222785_x_at	C11orf1	3.01E-02	1.32
222824_at	---	2.08E-04	2.86
222845_x_at	TMBIM4	1.04E-04	0.71
222848_at	CENPK	6.75E-05	9.89
223065_s_at	STARD3NL	4.86E-04	0.72
223105_s_at	TMEM14C	1.78E-04	1.55
223106_at	TMEM14C	2.47E-03	1.74
223136_at	AIG1	4.98E-05	4.16
223145_s_at	C6orf166	4.32E-03	0.66
223191_at	C14orf112	6.89E-03	1.52
223193_x_at	C3orf28	1.88E-05	3.40
223204_at	C4orf18	1.06E-05	0.21
223231_at	TATDN1	3.05E-03	1.49
223263_s_at	FGFR1OP2	9.95E-03	0.54
223314_at	TSPAN14	8.66E-03	0.44
223376_s_at	BRI3	2.03E-04	0.32
223440_at	C16orf70	4.48E-05	0.69
223497_at	FAM135A	3.50E-03	2.20
223591_at	RNF135	8.73E-03	0.68
223592_s_at	RNF135	1.44E-03	0.58
223640_at	HCST	1.14E-02	0.58
223764_x_at	NIPSNAP3B	1.13E-03	3.51
223769_x_at	HYI	1.20E-04	2.16
223797_at	PRO2852	2.85E-03	0.40
223800_s_at	LIMS3	7.07E-03	0.67
223846_at	AZI2	1.90E-03	0.43
223880_x_at	C20orf24	4.89E-03	0.61
224345_x_at	C3orf28	4.58E-05	3.24
224452_s_at	MGC12966	4.27E-03	1.66
224467_s_at	PDCD2L	5.93E-03	1.93
224559_at	MALAT1	5.27E-03	0.59
224565_at	TncRNA	3.24E-03	0.58
224566_at	TncRNA	1.87E-03	0.43
224574_at	RNASEK	9.23E-04	2.40
224582_s_at	---	1.81E-03	1.83
224610_at	SNHG1	1.38E-03	1.76
224632_at	GPATCH4	1.76E-03	1.67
224634_at	GPATCH4	1.46E-04	1.78
224647_at	---	9.72E-05	0.65
224651_at	CCNY	1.17E-04	0.44
224652_at	CCNY	1.47E-04	0.52

224702_at	TMEM167	1.63E-03	0.49
224721_at	WDR75	7.59E-04	1.62
224759_s_at	C12orf23	1.78E-03	3.85
224820_at	FAM36A	2.24E-03	1.56
224828_at	CPEB4	9.86E-03	0.47
224829_at	CPEB4	2.29E-03	0.41
224850_at	ATAD1	4.01E-03	2.03
224893_at	---	6.93E-04	1.64
224898_at	WDR26	7.24E-04	0.59
224900_at	ANKFY1	7.00E-03	0.65
224903_at	CIRH1A	1.40E-02	1.75
224906_at	TMEM16F	2.21E-03	0.79
224916_at	TMEM173	2.59E-02	0.60
224917_at	MIRN21	2.19E-02	0.44
224927_at	KIAA1949	9.12E-03	0.64
224937_at	PTGFRN	9.98E-04	3.41
224973_at	FAM46A	1.14E-02	1.42
225010_at	CCDC6	5.68E-05	2.69
225032_at	FNDC3B	1.46E-03	0.45
225046_at	LOC389831	1.12E-01	2.62
225059_at	AGTRAP	8.07E-04	0.44
225065_x_at	C17orf45	4.66E-02	2.05
225086_at	FAM98B	1.26E-04	2.51
225129_at	CPNE2	2.88E-02	0.24
225220_at	SNHG8	4.19E-02	2.06
225232_at	MTMR12	7.12E-03	2.28
225239_at	---	9.75E-04	0.23
225256_at	---	1.03E-02	2.35
225317_at	ACBD6	7.10E-04	1.77
225351_at	FAM45A	4.70E-04	0.40
225372_at	C10orf54	2.04E-03	0.51
225373_at	C10orf54	2.95E-03	0.67
225484_at	TSGA14	2.64E-03	1.79
225567_at	---	6.31E-04	0.67
225589_at	SH3RF1	1.27E-04	3.16
225599_s_at	LOC286144	9.95E-02	0.44
225600_at	LOC286144	4.34E-05	0.34
225603_s_at	LOC286144	7.26E-03	0.59
225685_at	---	4.59E-04	0.26
225696_at	COPS7B	2.31E-02	2.11
225716_at	---	2.66E-05	1.97
225722_at	---	4.83E-04	1.92
225748_at	LTV1	2.51E-03	1.86
225752_at	NIPA1	9.66E-03	1.60
225763_at	RCSD1	8.71E-05	0.72
225786_at	LOC284702	3.37E-01	1.48
225809_at	DKFZP564O0823	6.13E-06	19.69
225831_at	LUZP1	2.59E-03	1.54
225863_s_at	C19orf12	1.05E-02	1.35
225876_at	NPAL3	5.24E-05	2.73

225883_at	ATG16L2	5.28E-03	0.64
225887_at	C13orf23	2.59E-03	1.46
225922_at	KIAA1450	9.26E-04	2.29
225924_at	KIAA1450	2.36E-04	2.01
226000_at	CTTNBP2NL	1.84E-04	3.29
226025_at	ANKRD28	4.62E-04	3.18
226085_at	---	3.27E-04	2.87
226098_at	IFT80	2.21E-04	2.38
226106_at	RNF141	4.52E-04	0.45
226117_at	TIFA	5.45E-03	2.04
226185_at	---	2.00E-04	6.04
226208_at	ZSWIM6	1.40E-04	0.50
226222_at	KIAA1432	8.55E-04	0.64
226254_s_at	KIAA1430	1.80E-03	2.61
226264_at	SUSD1	7.43E-03	0.60
226349_at	C12orf45	6.33E-02	2.54
226353_at	SPPL2A	5.27E-03	0.58
226362_at	---	6.82E-03	1.63
226382_at	LOC283070	7.02E-04	2.81
226397_s_at	---	1.63E-04	4.95
226413_at	LOC400027	3.22E-03	1.87
226425_at	CLIP4	1.71E-04	0.12
226437_at	YIF1B	3.13E-03	2.34
226459_at	PIK3AP1	3.09E-05	0.61
226460_at	KIAA1450	2.90E-04	1.87
226499_at	NRARP	7.99E-02	2.86
226528_at	MTX3	8.06E-03	2.02
226529_at	TMEM106B	2.21E-03	0.57
226545_at	CD109	1.63E-04	5.05
226556_at	---	1.11E-03	2.02
226568_at	FAM102B	3.55E-06	2.26
226608_at	LOC388272	7.05E-04	1.43
226712_at	---	1.32E-03	1.94
226720_at	PWWP2A	1.14E-03	0.59
226750_at	LARP2	1.03E-02	1.57
226752_at	TMEM157	3.80E-03	0.74
226756_at	---	7.87E-03	2.69
226757_at	IFIT2	2.18E-03	0.41
226763_at	SESTD1	2.18E-03	0.65
226796_at	LOC116236	2.30E-03	1.69
226811_at	FAM46C	1.03E-02	21.48
226818_at	MPEG1	4.23E-02	0.74
226841_at	MPEG1	2.87E-03	0.63
226844_at	MOBKL2B	4.17E-04	2.72
226876_at	FAM101B	1.79E-04	0.34
226880_at	NUCKS1	1.26E-02	2.11
226886_at	---	1.50E-02	1.48
226892_at	C10orf12	1.26E-02	2.21
226905_at	FAM101B	8.14E-05	0.22
226934_at	---	1.11E-01	1.99

226941_at	---	6.75E-03	0.76
226959_at	LOC283070	6.90E-05	1.88
227017_at	ERICH1	4.33E-04	0.55
227020_at	YPEL2	1.38E-04	0.57
227062_at	TncRNA	4.37E-08	0.18
227091_at	CCDC146	1.28E-03	1.64
227095_at	---	8.92E-04	0.56
227117_at	---	2.93E-02	1.82
227119_at	CNOT6L	4.15E-02	1.38
227135_at	ASAH1	7.12E-03	0.67
227167_s_at	---	2.33E-03	0.50
227184_at	---	1.12E-04	0.50
227193_at	---	6.30E-04	2.76
227235_at	---	2.39E-05	4.64
227239_at	FAM126A	2.06E-02	1.55
227247_at	---	1.15E-02	1.67
227270_at	LOC285550	1.20E-03	0.32
227291_s_at	BOLA3	2.24E-04	2.75
227368_at	---	1.03E-02	0.35
227379_at	MBOAT1	1.12E-03	0.60
227388_at	TUSC1	3.31E-03	2.29
227451_s_at	CCDC90A	1.54E-03	2.90
227478_at	LOC284262	1.78E-01	1.71
227517_s_at	GAS5	4.86E-03	2.07
227525_at	GLCC1	4.51E-02	3.70
227534_at	C9orf21	1.75E-05	0.67
227536_at	ZC3H13	8.17E-03	1.38
227559_at	---	5.83E-04	2.15
227618_at	---	1.17E-04	0.46
227645_at	PIK3R5	1.71E-03	0.61
227656_at	C6orf70	9.64E-03	1.51
227713_at	KATNAL1	4.17E-02	1.68
227721_at	CPAMD8	5.58E-02	0.38
227728_at	---	1.54E-02	0.75
227732_at	ATXN7L1	3.52E-03	0.49
227788_at	---	1.64E-02	1.52
227802_at	---	8.19E-03	1.66
227904_at	AZI2	1.14E-03	0.40
227983_at	RILPL2	3.60E-03	0.63
228032_s_at	---	1.91E-03	2.62
228040_at	LOC728903	3.92E-03	2.05
228049_x_at	---	1.12E-03	2.39
228069_at	FAM54A	1.22E-04	5.02
228071_at	GIMAP7	2.30E-03	0.32
228080_at	LAYN	3.70E-05	6.20
228088_at	---	5.14E-03	0.54
228152_s_at	FLJ31033	2.05E-03	0.40
228162_at	ESD	2.79E-03	1.74
228174_at	---	5.25E-04	1.68
228191_at	---	1.49E-03	2.66

228220_at	FCHO2	1.46E-05	0.46
228242_at	---	1.66E-04	2.38
228245_s_at	OVOS2	1.58E-02	2.08
228280_at	ZC3HAV1L	1.30E-03	10.33
228291_s_at	C20orf19	2.28E-03	0.64
228314_at	---	2.69E-02	1.19
228325_at	KIAA0146	2.81E-03	0.38
228351_at	HEATR1	3.48E-04	2.34
228365_at	CPNE8	7.11E-04	0.46
228372_at	C10orf128	8.87E-05	10.19
228387_at	---	4.00E-02	4.56
228442_at	---	5.89E-06	26.27
228479_at	---	7.91E-03	0.64
228495_at	CCDC75	5.44E-04	2.03
228551_at	MGC24039	6.65E-04	4.72
228573_at	---	1.00E-02	1.46
228606_at	TCTEX1D2	1.08E-03	1.90
228611_s_at	---	1.09E-03	2.10
228647_at	LOC100049716	1.36E-03	0.50
228661_s_at	---	1.46E-02	2.26
228728_at	C7orf58	8.52E-05	2.33
228745_at	SGTB	2.11E-04	0.29
228826_at	---	1.14E-03	2.44
228841_at	LYRM7	1.44E-04	2.34
228843_at	---	3.86E-04	3.10
228869_at	---	1.14E-03	1.57
228891_at	C9orf164	3.00E-03	0.57
228955_at	---	1.12E-02	2.11
228970_at	ZBTB8OS	1.76E-03	0.68
228974_at	---	2.73E-03	3.09
229072_at	---	1.00E-02	17.48
229101_at	LOC150166	4.58E-04	0.51
229202_at	---	2.21E-05	5.67
229242_at	---	2.79E-02	1.79
229253_at	THEM4	4.65E-04	2.29
229268_at	FAM105B	7.14E-03	1.23
229295_at	LOC150166	6.21E-03	0.67
229307_at	ANKRD28	1.33E-03	0.33
229333_at	---	1.23E-03	1.98
229334_at	---	9.88E-05	1.91
229366_at	---	3.02E-02	2.05
229373_at	---	1.89E-02	0.48
229389_at	ATG16L2	1.35E-02	0.50
229450_at	IFIT3	5.20E-03	0.34
229512_at	FAM120C	6.85E-03	1.73
229629_at	---	2.03E-03	1.87
229699_at	---	1.12E-04	0.44
229710_at	---	8.17E-04	1.39
229713_at	---	6.52E-04	1.69
229733_s_at	---	3.46E-03	1.55

229735_s_at	NPAL3	5.39E-03	2.35
229860_x_at	LOC401115	7.39E-03	0.72
229900_at	CD109	1.50E-03	2.28
230000_at	RNF213	4.21E-02	0.60
230082_at	---	2.00E-03	0.48
230292_at	---	1.21E-04	0.44
230298_at	LOC153364	3.82E-03	2.00
230304_at	---	3.48E-02	2.07
230305_at	---	1.12E-02	1.64
230329_s_at	NUDT6	1.20E-04	2.19
230343_at	---	9.39E-04	3.35
230362_at	INPP5F	5.69E-03	2.18
230395_at	METTL9	4.25E-02	0.57
230444_at	---	8.54E-02	1.25
230454_at	ICA1L	2.78E-06	4.05
230466_s_at	---	2.94E-04	0.32
230590_at	---	3.36E-03	0.22
230659_at	---	1.19E-03	2.01
230728_at	---	3.29E-04	4.27
230733_at	---	1.13E-02	1.44
230741_at	---	3.58E-04	0.56
230787_at	---	2.71E-03	2.16
230894_s_at	---	7.76E-02	1.82
230952_at	LOC730092	4.16E-04	1.76
230968_at	---	3.76E-04	4.11
230970_at	---	9.99E-04	0.34
230980_x_at	---	1.78E-03	1.94
231013_at	---	9.02E-04	5.12
231038_s_at	---	5.32E-03	2.23
231175_at	C6orf65	5.37E-04	19.17
231274_s_at	---	2.62E-02	0.63
231513_at	---	2.75E-04	0.22
231644_at	---	2.47E-04	0.16
231650_s_at	SEZ6L	3.53E-04	6.90
231810_at	BRI3BP	1.25E-03	1.74
231862_at	---	1.55E-04	3.56
231925_at	---	3.87E-03	3.20
231932_at	TRAF3IP3	3.68E-04	2.17
231956_at	KIAA1618	6.60E-03	0.44
231972_at	---	1.13E-05	20.90
232024_at	GIMAP2	5.83E-04	0.38
232045_at	PHACTR1	1.31E-02	5.04
232172_at	LOC401577	1.13E-03	0.66
232174_at	---	1.46E-03	0.26
232210_at	---	3.12E-04	3.85
232213_at	PELI1	5.44E-04	0.27
232239_at	hCG_2024094	4.61E-03	2.61
232286_at	---	8.30E-05	11.92
232304_at	PELI1	7.66E-06	0.14
232323_s_at	TTC17	1.13E-03	1.42

232333_at	---	4.28E-04	0.48
232493_at	---	2.43E-04	0.55
232555_at	---	3.59E-03	0.48
232614_at	---	9.06E-06	7.31
232653_at	---	1.35E-02	0.41
232687_at	---	1.21E-06	6.10
232842_at	DOCK8	3.94E-03	0.68
232935_at	---	4.25E-03	11.09
233086_at	C20orf106	8.95E-04	2.21
233176_at	---	5.09E-03	2.07
233239_at	---	1.80E-03	0.60
233369_at	---	3.69E-03	0.51
233473_x_at	---	1.20E-02	0.44
233642_s_at	HEATR5B	1.20E-05	2.56
233824_at	---	1.36E-02	0.60
233951_at	---	8.40E-04	2.17
234044_at	---	5.25E-04	0.15
234151_at	---	4.67E-04	1.80
234512_x_at	LOC728179	1.34E-03	1.65
234985_at	---	1.10E-02	0.47
234987_at	---	2.31E-03	1.60
234989_at	TncRNA	8.37E-04	0.33
235072_s_at	---	5.76E-05	0.43
235107_at	---	2.20E-03	1.39
235146_at	---	4.81E-03	0.59
235151_at	LOC283357	1.79E-02	1.72
235198_at	OSTM1	1.98E-03	0.47
235208_at	CCDC112	1.57E-03	1.49
235230_at	---	2.33E-04	3.70
235299_at	---	8.17E-07	64.88
235306_at	GIMAP8	1.19E-04	0.19
235310_at	GCET2	5.46E-04	3.01
235346_at	FUNDC1	8.94E-03	2.08
235363_at	---	1.37E-03	1.68
235376_at	---	1.32E-03	0.36
235427_at	---	3.35E-03	0.55
235452_at	---	1.46E-04	4.50
235458_at	HAVCR2	1.38E-02	2.40
235568_at	C19orf59	5.65E-05	0.06
235658_at	---	1.34E-04	3.68
235670_at	---	1.68E-04	0.18
235735_at	---	1.38E-02	0.55
235766_x_at	---	2.20E-04	0.29
235798_at	RP11-679B17.1	1.37E-04	0.52
235847_at	---	1.90E-04	0.56
235875_at	---	1.15E-02	2.76
235902_at	---	9.52E-05	3.22
235956_at	KIAA1377	1.74E-04	2.06
235957_at	---	1.42E-04	6.67
236035_at	---	1.75E-03	2.60

236075_s_at	---	2.89E-02	4.68
236104_at	---	1.22E-03	1.85
236116_at	---	1.28E-02	2.40
236199_at	---	2.22E-03	0.61
236243_at	ZCCHC6	2.62E-03	0.53
236280_at	---	2.52E-04	6.35
236293_at	---	4.81E-04	5.91
236297_at	---	2.39E-02	0.66
236314_at	---	2.22E-04	1.84
236345_at	---	3.94E-04	0.39
236401_at	---	5.98E-04	0.28
236439_at	---	1.76E-03	0.48
236472_at	---	1.14E-03	0.69
236484_at	---	3.05E-02	2.06
236495_at	---	6.10E-02	0.20
236543_at	---	1.55E-05	78.36
236545_at	---	2.05E-02	0.62
236571_at	---	3.03E-03	0.26
236583_at	---	1.75E-04	0.20
236592_at	---	1.01E-03	0.43
236673_at	TIFAB	2.58E-04	11.34
236685_at	---	1.39E-03	3.79
236923_x_at	---	2.06E-03	0.44
236963_at	---	2.79E-03	4.68
237018_at	---	1.63E-03	0.55
237104_at	---	3.67E-03	0.35
237119_at	---	3.52E-03	0.41
237441_at	---	8.33E-05	3.17
237623_at	CST3	6.61E-02	2.34
237626_at	---	3.99E-03	0.43
237753_at	---	1.09E-04	2.06
237865_x_at	---	7.53E-02	3.36
237868_x_at	---	4.67E-02	0.39
237875_at	---	1.04E-02	0.53
238070_at	CHD1L	5.34E-02	1.57
238161_at	---	1.59E-02	2.02
238185_at	---	9.76E-03	0.67
238297_at	---	1.19E-05	11.56
238337_s_at	DNAJC21	4.32E-04	1.46
238360_s_at	---	9.53E-03	1.57
238429_at	TMEM71	1.84E-03	0.47
238462_at	UBASH3B	4.04E-02	1.55
238513_at	PRRG4	8.46E-04	0.24
238598_s_at	---	6.28E-04	0.63
238602_at	DIS3L2	1.02E-03	1.26
238604_at	---	2.93E-04	5.33
238642_at	ANKRD13D	1.71E-02	0.67
238684_at	---	2.61E-02	1.70
238725_at	---	3.19E-04	0.48
238769_at	---	9.52E-04	0.37

238787_at	---	1.29E-04	3.32
238890_at	---	3.40E-04	1.89
238893_at	LOC338758	1.88E-03	0.18
238988_at	---	1.35E-02	0.66
239082_at	---	2.58E-03	2.84
239102_s_at	---	5.52E-04	0.46
239135_at	FLJ11151	1.59E-04	0.41
239212_at	LTV1	7.76E-03	1.95
239227_at	---	4.92E-04	0.37
239274_at	---	3.83E-03	0.58
239294_at	---	7.15E-04	2.01
239296_at	---	8.42E-04	0.26
239300_at	---	7.69E-03	1.97
239311_at	---	1.88E-03	0.49
239313_at	LOC401320	1.43E-03	0.66
239331_at	---	5.48E-02	4.28
239400_at	FLJ45513	1.43E-02	0.76
239404_at	---	7.94E-03	0.73
239448_at	---	3.66E-02	0.76
239525_at	CTTNBP2NL	5.60E-04	2.38
239529_at	TIFAB	3.62E-06	10.55
239555_at	---	1.06E-02	0.38
239587_at	---	4.56E-06	5.53
239661_at	---	5.93E-03	1.55
239682_at	---	5.39E-03	0.65
239780_at	---	5.25E-06	0.48
239803_at	---	3.56E-04	2.46
239809_at	---	1.87E-02	0.18
239811_at	---	1.72E-02	0.59
239835_at	KBTBD8	1.47E-03	2.35
239848_at	---	1.10E-04	2.82
239862_at	---	1.21E-04	8.63
239863_at	---	7.57E-04	2.09
239886_at	---	2.51E-02	0.69
239960_x_at	LYRM7	9.49E-03	2.52
240094_at	---	3.94E-03	0.40
240139_at	---	1.35E-02	0.57
240156_at	---	3.36E-03	0.40
240165_at	---	2.95E-02	0.35
240173_at	---	1.15E-05	4.40
240262_at	---	4.72E-02	0.76
240271_at	---	4.27E-03	0.45
240344_x_at	LYRM7	6.52E-03	1.91
240432_x_at	---	2.21E-02	0.43
240539_at	---	4.66E-03	2.60
240572_s_at	LOC374443	9.07E-02	2.43
240652_at	---	2.20E-04	0.26
240655_at	---	2.41E-03	3.67
240709_at	SEZ6L	9.54E-06	6.19
240798_at	---	2.36E-02	0.70

240948_at	---	3.10E-05	0.33
241370_at	LOC286052	2.18E-03	1.56
241417_at	---	2.02E-03	2.07
241430_at	C2orf51	2.87E-03	1.36
241460_at	---	1.79E-02	1.48
241501_at	---	2.86E-02	0.25
241520_x_at	---	6.08E-06	2.88
241577_at	---	1.39E-04	14.18
241631_at	---	1.76E-03	0.39
241722_x_at	---	7.14E-04	0.25
241773_at	---	4.33E-03	0.26
241812_at	LOC26010	2.65E-02	1.62
241929_at	---	3.83E-03	0.36
241932_at	---	5.54E-04	0.61
241940_at	---	1.25E-02	0.42
242029_at	FNDC3B	6.87E-04	0.31
242092_at	---	1.25E-02	1.77
242110_at	---	1.32E-03	3.58
242117_at	---	2.37E-02	0.51
242156_at	---	2.69E-03	1.76
242239_at	---	7.81E-04	1.73
242320_at	---	7.13E-03	0.33
242405_at	---	6.10E-03	0.50
242476_at	---	8.45E-03	1.78
242521_at	---	2.26E-03	0.63
242616_at	---	2.73E-02	2.07
242648_at	KLHL8	1.51E-03	0.72
242652_at	---	4.83E-03	1.92
242672_at	---	9.15E-03	4.78
242695_at	---	2.60E-03	0.53
242865_at	---	6.81E-03	0.56
242866_x_at	---	4.35E-03	0.62
242904_x_at	---	3.50E-02	0.30
242920_at	---	1.08E-03	0.68
242932_at	---	9.12E-04	2.22
243030_at	---	8.24E-05	0.45
243089_at	---	3.38E-03	2.20
243154_at	---	1.34E-03	3.34
243178_at	---	8.95E-04	0.32
243201_at	HNRPH2	1.11E-02	0.44
243329_at	---	2.92E-03	0.67
243395_at	---	1.10E-02	0.43
243405_at	---	6.15E-03	2.67
243410_at	---	7.96E-03	0.66
243509_at	---	6.31E-03	0.35
243675_at	---	2.11E-03	1.55
243882_at	---	6.20E-01	1.53
244022_at	---	1.08E-02	0.50
244028_at	---	9.55E-04	0.49
244033_at	C14orf145	4.64E-06	6.78

244035_at	---	4.45E-06	22.81
244066_at	---	5.94E-05	10.35
244248_at	TTC27	2.50E-03	1.71
244347_at	---	2.37E-04	2.18
244356_at	---	2.38E-01	0.42
244357_at	---	1.54E-02	0.48
244358_at	---	1.45E-02	0.39
244368_x_at	---	5.93E-05	6.57
244383_at	---	1.11E-03	1.52
244413_at	CLECL1	1.21E-03	2.31
244414_at	---	1.99E-02	0.47
244461_at	SPECC1	4.18E-03	1.48
244485_at	---	3.64E-03	2.98
244535_at	---	1.15E-03	0.51
244548_at	---	3.58E-04	0.46
244677_at	---	3.78E-02	0.43
36030_at	HOM-TES-103	8.84E-04	0.38
41386_i_at	JMJD3	1.02E-02	0.45
41856_at	---	1.06E-02	0.67
64883_at	MOSPD2	8.31E-03	0.62
65493_at	HEATR6	3.76E-04	2.01

A.5. Common genes in blood mDC and SLE monocytes.

<i>Systematic</i>	<i>Blood mDC</i>		<i>SLE monocytes</i>	
	<i>P-value</i>	<i>Average normalized values</i>	<i>P-value</i>	<i>Average normalized values</i>
<i>Angiogenesis</i>				
218534_s_at	3.28E-03	1.34	3.47E-04	1.38
<i>Carbohydrate metabolism</i>				
203397_s_at	2.51E-05	2.91	6.99E-04	2.44
<i>Cell adhesion</i>				
217523_at	1.54E-03	0.51	1.22E-02	0.33
212014_x_at	2.04E-04	0.55	2.11E-02	0.55
201506_at	1.26E-03	0.74	1.06E-02	0.54
222108_at	4.08E-05	3.31	7.90E-03	2.86
205718_at	1.13E-04	9.26	3.51E-02	2.36
209835_x_at	7.78E-06	0.48	1.58E-02	0.63
204490_s_at	2.11E-03	0.55	1.23E-03	0.54
222838_at	1.45E-03	6.60	3.51E-04	5.32
<i>Cell cycle</i>				
211985_s_at	5.11E-03	2.40	1.20E-02	2.06
222163_s_at	9.93E-03	1.38	1.58E-03	1.58
224578_at	5.98E-04	1.58	1.57E-03	1.92
<i>Cell death</i>				
203232_s_at	1.94E-03	0.41	8.40E-05	0.65
<i>Cell proliferation</i>				
39817_s_at	3.86E-04	1.90	3.62E-03	1.24
<i>Chemotaxis</i>				
230422_at	1.08E-02	3.57	2.98E-03	2.74
206991_s_at	3.39E-05	6.04	1.85E-03	2.39
<i>Cytoskeleton</i>				
226694_at	5.83E-05	86.12	2.33E-04	14.86
202760_s_at	1.20E-05	240.21	1.82E-03	9.96
208623_s_at	1.16E-03	1.95	1.70E-02	1.46
<i>Immune response/Defense response</i>				
210660_at	1.23E-03	0.39	3.08E-02	0.59
210166_at	1.98E-03	0.55	1.17E-02	0.65
<i>Development</i>				
201324_at	8.75E-05	10.81	4.55E-04	7.29

Electron transport

209218_at	2.55E-03	2.67	1.78E-03	2.57
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Endocytosis

203509_at	6.08E-05	0.47	2.67E-04	0.37
226364_at	1.45E-05	3.47	1.15E-01	2.16
202191_s_at	8.06E-03	0.41	2.73E-03	0.49
230707_at	1.25E-03	0.47	1.29E-03	0.40

Metabolism

219033_at	2.69E-04	0.60	7.02E-03	0.52
211423_s_at	8.36E-04	1.53	2.29E-04	1.35
212175_s_at	1.25E-04	1.53	3.80E-03	1.33
226390_at	8.63E-02	1.78	1.09E-01	1.79
202562_s_at	6.18E-04	2.13	5.71E-03	1.49

mRNA processing

203181_x_at	1.25E-03	0.51	4.54E-03	0.51
212905_at	7.22E-05	1.46	1.17E-03	1.72
226093_at	1.84E-03	1.66	1.37E-01	1.32

Notch signaling pathway

202445_s_at	1.38E-02	0.37	1.13E-03	0.52
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Phagocytosis

202877_s_at	2.54E-03	0.32	8.18E-03	0.56
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Protein transport

218139_s_at	6.72E-06	1.72	4.49E-03	1.60
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Proteolysis

226038_at	3.64E-03	2.44	6.82E-03	2.24
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Regulation of translational initiation /// tRNA processing

233970_s_at	1.68E-03	2.09	3.36E-02	2.11
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RNA processing

222754_at	1.41E-02	1.37	2.53E-02	1.59
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Signal transduction

204122_at	1.36E-01	0.75	2.35E-03	0.84
218909_at	1.41E-03	1.77	2.42E-03	1.62
203593_at	6.78E-03	1.90	5.69E-03	2.50
202686_s_at	1.59E-04	14.45	1.22E-02	4.67
213222_at	2.33E-03	0.23	3.74E-02	0.47
209568_s_at	4.45E-02	1.92	1.61E-02	4.02
223358_s_at	4.48E-04	2.63	8.07E-03	2.42
210279_at	5.06E-05	20.03	1.59E-03	9.58

Signaling

231166_at	1.31E-03	0.45	1.13E-02	0.44
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Transcription

217986_s_at	3.56E-02	1.22	2.35E-02	1.53
201023_at	3.00E-04	1.86	2.49E-02	1.36
205497_at	2.73E-03	2.01	6.32E-03	1.82
212385_at	3.27E-04	2.77	3.77E-03	1.68
224833_at	7.69E-03	3.28	1.95E-03	2.93
212614_at	1.08E-03	3.54	2.26E-03	4.33
222636_at	2.19E-01	1.84	6.67E-02	2.00
218149_s_at	8.39E-05	0.32	2.10E-03	0.36
214651_s_at	9.68E-05	7.57	1.70E-02	2.22

Translation

211956_s_at	3.46E-04	0.80	3.89E-05	0.48
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Transport

209267_s_at	9.31E-03	2.12	3.16E-02	3.48
206600_s_at	7.08E-05	0.36	3.74E-02	0.51
228164_at	3.10E-03	1.31	3.32E-04	1.86
221504_s_at	1.61E-02	1.44	3.89E-04	1.57
220416_at	6.88E-05	3.19	9.16E-04	1.77

Unknown

218319_at	7.43E-04	0.21	1.29E-03	0.56
230466_s_at	2.94E-04	0.32	9.27E-04	0.33
230970_at	9.99E-04	0.34	8.56E-02	0.34
208700_s_at	4.10E-05	0.35	1.03E-03	0.61
235376_at	1.32E-03	0.36	3.68E-02	0.59
213508_at	9.44E-04	0.39	7.98E-04	0.80
209460_at	5.93E-03	0.40	5.04E-02	0.47
229699_at	1.12E-04	0.44	8.62E-03	0.46
212560_at	3.14E-05	0.47	1.53E-04	0.26
242117_at	2.37E-02	0.51	3.44E-02	0.45
244535_at	1.15E-03	0.51	8.69E-02	0.49
226671_at	1.88E-02	0.56	2.28E-02	0.65
235146_at	4.81E-03	0.59	6.04E-02	0.63
233824_at	1.36E-02	0.60	1.18E-02	0.55
210731_s_at	1.72E-03	0.65	6.22E-03	0.67
228314_at	2.69E-02	1.19	2.55E-06	1.57
235233_s_at	5.19E-04	1.33	7.50E-03	1.76
212543_at	1.22E-03	1.52	1.89E-02	1.41
219297_at	7.02E-03	1.53	6.24E-03	1.91
224820_at	2.24E-03	1.56	9.22E-03	1.32
228869_at	1.14E-03	1.57	2.08E-04	1.78
224850_at	4.01E-03	2.03	2.77E-02	1.64
226117_at	5.45E-03	2.04	2.79E-03	3.44
228955_at	1.12E-02	2.11	3.18E-02	2.18
201361_at	8.26E-03	2.13	1.54E-03	1.37

225922_at	9.26E-04	2.29	1.93E-05	1.68
226025_at	4.62E-04	3.18	7.96E-03	2.59
231925_at	3.87E-03	3.20	2.65E-03	3.85
226000_at	1.84E-04	3.29	3.17E-02	1.91
224759_s_at	1.78E-03	3.85	3.53E-03	3.31
222154_s_at	9.84E-05	6.21	1.15E-04	7.06

A.6. Differentially regulated genes in positive and negative MLR.

		Negative MLR		Positive MLR	
Systematic	Gene Symbol	p-value	Normalized value	p-value	Normalized value
<i>Anatomical structure morphogenesis</i>					
203184_at	FBN2	8.12E-01	1.10	1.57E-02	0.60
<i>Angiogenesis</i>					
205609_at	ANGPT1	6.84E-01	0.86	1.82E-02	0.27
<i>Apoptosis</i>					
201448_at	TIA1	6.92E-01	0.90	1.11E-03	0.45
204274_at	EBAG9	6.79E-01	0.85	6.52E-03	0.49
204352_at	TRAF5	4.27E-01	0.46	6.16E-03	0.28
204466_s_at	SNCA	6.49E-01	0.89	2.09E-02	0.46
217963_s_at	NGFRAP1	8.32E-01	0.91	9.02E-05	0.38
217997_at	PHLDA1	7.96E-01	0.95	9.14E-02	1.93
226364_at	HIP1	8.13E-01	0.95	1.60E-02	2.06
<i>Biosynthetic process</i>					
225195_at	DPH3	5.23E-01	0.87	2.00E-02	1.99
<i>Cell adhesion</i>					
213416_at	ITGA4	6.23E-01	0.80	4.21E-02	0.45
219737_s_at	PCDH9	5.40E-01	0.62	2.03E-02	0.40
<i>Cell cycle</i>					
212672_at	ATM	6.94E-01	0.90	1.01E-02	0.41
224851_at	CDK6	6.76E-01	0.77	5.75E-02	0.42
226436_at	RASSF4	9.40E-01	1.03	1.34E-01	0.28
242622_x_at	PTEN	8.66E-01	1.06	2.20E-03	0.41
<i>Cell death</i>					
242230_at	ATXN1	8.32E-01	0.96	6.42E-02	1.95
<i>Cell differentiation</i>					
201540_at	FHL1	6.18E-01	0.80	6.07E-04	0.31
206707_x_at	C6orf32	8.93E-01	1.05	2.22E-02	0.57
209829_at	C6orf32	6.86E-01	1.19	1.96E-02	0.61
<i>Cell motility</i>					
201670_s_at	MARCKS	9.53E-01	1.02	5.95E-03	2.73
<i>Cell proliferation</i>					
219049_at	ChGn	6.60E-01	0.96	4.95E-02	0.43
<i>Chemotaxis</i>					
204103_at	CCL4	6.63E-01	0.84	2.10E-01	1.95
204533_at	CXCL10	7.67E-01	1.07	6.30E-03	2.99

205114_s_at	CCL3	8.65E-01	1.04	1.36E-01	2.02
206390_x_at	PF4	4.90E-01	0.60	9.07E-03	0.18
207850_at	CXCL3	6.96E-01	0.87	1.76E-02	2.21
214146_s_at	PPBP	5.81E-01	0.73	4.64E-03	0.30
214974_x_at	CXCL5	7.14E-01	0.90	1.83E-03	2.10
230422_at	FPRL2	8.39E-01	1.07	2.22E-03	2.98

Cytolysis

203414_at	MMD	8.27E-01	0.92	8.63E-03	0.39
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Cytoskeleton

210305_at	PDE4DIP	5.99E-01	0.78	2.38E-01	2.35
216060_s_at	DAAM1	7.98E-01	0.94	9.72E-03	0.36
230690_at	TUBB1	6.16E-01	0.81	2.04E-03	0.20

DNA repair

202414_at	ERCC5	8.87E-01	0.97	7.35E-04	0.47
208859_s_at	ATRAX	9.85E-01	1.00	1.69E-03	0.51

DNA replication

208808_s_at	HMGB2	8.00E-01	1.03	1.43E-05	0.45
221999_at	VRK3	7.88E-01	0.95	5.34E-03	1.99

Glycosylation

239930_at	GALNT2	9.50E-01	1.02	8.38E-02	0.50
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Immune response/Defense response

202910_s_at	CD97	8.22E-01	1.04	2.50E-03	0.52
205067_at	IL1B	7.62E-01	0.86	9.84E-03	2.53
205789_at	CD1D	9.47E-01	0.98	2.40E-02	0.40
210982_s_at	HLA-DRA	9.85E-01	0.99	4.62E-03	2.22
214059_at	IFI44	8.68E-01	1.14	8.26E-02	0.44
227458_at	---	7.55E-01	0.94	4.36E-02	1.99
39402_at	IL1B	8.28E-01	0.90	4.30E-02	2.20

Inflammatory response

201109_s_at	THBS1	7.73E-01	0.88	1.86E-02	2.19
215775_at	THBS1	8.88E-01	0.92	1.30E-02	2.97
219403_s_at	HPSE	9.52E-01	1.02	1.03E-02	2.98
235086_at	THBS1	9.90E-01	0.99	4.81E-03	3.87
239336_at	THBS1	7.80E-01	1.19	9.81E-03	4.87

Lymphocyte differentiation

206674_at	FLT3	8.28E-01	0.92	1.24E-02	0.40
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Membrane fusion

203765_at	GCA	5.79E-01	1.19	3.44E-02	0.62
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Metabolic process

200708_at	GOT2	6.59E-01	0.86	6.93E-05	0.48
204385_at	KYNU	6.69E-01	0.87	4.26E-03	1.99
206214_at	PLA2G7	8.15E-01	1.07	9.23E-03	2.39

207761_s_at	METTL7A	9.84E-01	1.00	2.49E-03	0.45
208498_s_at	AMY1A	8.59E-01	0.95	1.28E-03	0.36
208956_x_at	DUT	8.41E-01	0.94	2.23E-02	0.50
209460_at	ABAT	9.73E-01	1.01	1.27E-02	0.41
212958_x_at	PAM	9.39E-01	0.97	3.68E-02	0.46
217167_x_at	GK	7.62E-01	0.91	1.08E-03	2.37
217848_s_at	PPA1	7.38E-01	0.96	4.86E-02	0.40
218096_at	AGPAT5	5.98E-01	0.86	2.89E-04	0.46
222592_s_at	ACSL5	9.64E-01	1.01	2.65E-02	2.22
228667_at	AGPAT4	9.30E-01	1.02	2.26E-03	0.52
236140_at	GCLM	8.20E-01	0.90	1.05E-01	2.35
239108_at	MLSTD1	8.78E-01	1.03	7.32E-04	0.52

Nucleosome assembly

210387_at	HIST1H2BG	5.92E-01	1.14	2.64E-02	0.48
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Phagocytosis

204232_at	FCER1G	9.01E-01	0.99	8.54E-03	2.18
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Protein amino acid dephosphorylation

214268_s_at	MTMR4	7.04E-01	0.91	4.78E-04	0.45
224823_at	MYLK	4.44E-01	0.79	7.72E-02	0.28

Protein folding

224840_at	FKBP5	5.24E-01	1.14	6.72E-03	0.42
224856_at	FKBP5	8.02E-01	1.04	1.84E-02	0.39

Protein repair

225782_at	MSRB3	6.28E-01	0.82	6.34E-03	0.47
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Proteolysis

222603_at	ERMP1	7.86E-01	0.89	9.02E-03	0.47
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Regulation of Rab GTPase activity

203020_at	RABGAP1L	8.62E-01	1.06	1.75E-02	0.49
213982_s_at	RABGAP1L	6.45E-01	0.77	9.27E-03	0.37

RNA processing

202157_s_at	CUGBP2	7.48E-01	1.10	5.35E-03	0.61
202158_s_at	CUGBP2	9.78E-01	1.01	2.68E-03	0.53
227178_at	CUGBP2	8.59E-01	1.04	3.50E-04	0.52
228370_at	SNRPN	7.58E-01	0.93	1.32E-02	0.47
242268_at	CUGBP2	9.07E-01	1.04	3.80E-03	0.57

Signal transduction

200665_s_at	SPARC	6.14E-01	0.79	6.61E-02	0.29
201805_at	PRKAG1	4.53E-01	0.86	4.91E-03	2.17
202020_s_at	LANCL1	4.66E-01	0.67	2.01E-03	0.32
202741_at	PRKACB	6.10E-01	0.78	6.92E-04	0.38
202973_x_at	FAM13A1	8.17E-01	1.08	5.29E-03	0.52
203680_at	PRKAR2B	6.47E-01	0.79	9.18E-04	0.22
204115_at	GNG11	4.89E-01	0.53	1.61E-02	0.07

205051_s_at	KIT	4.71E-01	0.70	2.37E-03	0.35
205819_at	MARCO	5.83E-01	0.64	5.26E-04	4.54
206726_at	PGDS	9.31E-01	1.04	2.42E-02	0.30
212873_at	HMHA1	6.06E-01	0.84	8.31E-04	0.46
217047_s_at	FAM13A1	6.44E-01	1.17	9.12E-03	0.46
218501_at	ARHGEF3	9.91E-01	1.00	1.27E-03	0.50
219654_at	PTPLA	7.35E-01	0.91	1.49E-02	0.48
223809_at	RGS18	7.13E-01	0.86	3.55E-03	0.40
225688_s_at	PHLDB2	5.05E-01	0.64	1.58E-03	0.34
229584_at	LRRK2	7.48E-01	1.10	2.63E-03	0.53
241742_at	PRAM1	8.34E-01	0.93	1.26E-02	0.35

Transcription

201416_at	SOX4	8.09E-01	0.94	8.50E-03	0.48
203787_at	SSBP2	5.48E-01	0.74	8.59E-03	0.42
203973_s_at	CEBPD	7.33E-01	0.91	6.35E-03	0.41
204689_at	HHEX	9.06E-01	1.04	4.82E-02	0.56
204900_x_at	SAP30	7.73E-01	1.06	9.13E-03	0.20
205039_s_at	IKZF1	8.03E-01	1.06	2.09E-02	0.48
205383_s_at	ZBTB20	6.65E-01	0.82	1.77E-02	0.41
206283_s_at	TAL1	4.77E-01	0.67	6.88E-03	0.26
208056_s_at	CBFA2T3	6.39E-01	0.84	1.19E-02	0.46
213294_at	---	6.92E-01	0.81	9.25E-03	0.42
213931_at	ID2	5.32E-01	1.17	3.62E-02	0.46
214093_s_at	FUBP1	7.68E-01	0.91	1.38E-03	0.39
214651_s_at	HOXA9	5.23E-01	0.65	1.69E-02	0.27
216109_at	THRAP2	8.09E-01	1.09	3.03E-02	0.53
225081_s_at	CDCA7L	8.17E-01	0.92	9.23E-04	0.33
225344_at	NCOA7	7.21E-01	0.84	7.12E-03	0.46
228904_at	HOXB3	6.98E-01	0.87	1.26E-02	0.45
229228_at	CREB5	7.58E-01	1.14	6.49E-02	0.66
242172_at	MEIS1	4.43E-01	0.60	2.57E-02	0.20

Translation

201310_s_at	C5orf13	5.34E-01	0.72	4.10E-03	0.35
217753_s_at	RPS26	8.12E-01	0.89	5.08E-04	0.46
222979_s_at	SURF4	7.68E-01	0.95	1.98E-03	2.01
224763_at	RPL37	9.72E-01	0.99	5.36E-03	0.51

Transport

201809_s_at	ENG	9.86E-01	1.00	2.12E-02	2.18
203196_at	ABCC4	5.23E-01	0.70	2.17E-03	0.31
203922_s_at	CYBB	4.55E-01	0.87	2.47E-04	1.86
204446_s_at	ALOX5	9.00E-01	0.97	9.49E-04	0.49
205241_at	SCO2	8.13E-01	0.87	1.01E-01	0.52
207528_s_at	SLC7A11	6.21E-01	0.89	7.06E-03	1.94
209116_x_at	HBB	9.77E-01	0.99	3.70E-02	0.09
209218_at	SQLE	5.62E-01	0.86	1.70E-02	1.93
210119_at	KCNJ15	9.09E-01	1.02	6.34E-02	2.85
210962_s_at	AKAP9	9.96E-01	1.00	4.29E-02	0.50
211600_at	---	7.11E-01	0.95	2.87E-03	0.47
211696_x_at	HBB	8.63E-01	1.05	5.52E-03	0.24

213926_s_at	HRB	9.59E-01	0.99	6.60E-03	0.36
214039_s_at	LAPTM4B	5.90E-01	0.73	2.32E-03	0.35
214414_x_at	HBA2	6.29E-01	1.10	3.72E-02	0.33
217232_x_at	HBB	7.14E-01	0.90	4.14E-02	0.14
219007_at	NUP43	6.25E-01	0.86	9.22E-03	0.37
219593_at	SLC15A3	6.49E-01	1.03	4.27E-03	2.32
219622_at	RAB20	9.51E-01	1.00	3.79E-03	2.26
219869_s_at	SLC39A8	8.14E-01	0.94	1.06E-02	2.15
223044_at	SLC40A1	5.61E-01	0.76	9.61E-05	0.34
223798_at	SLC41A2	6.14E-01	0.86	4.63E-02	2.13
225017_at	CCDC14	5.72E-01	0.84	5.22E-04	0.40
228164_at	AP4E1	8.41E-01	1.03	6.53E-02	2.23
232232_s_at	SLC22A16	7.46E-01	1.04	3.25E-03	0.53

Ubiquitin cycle

219574_at	MARCH1	4.78E-01	1.20	1.10E-01	0.36
219863_at	HERC5	5.90E-01	1.25	1.63E-01	0.68

Unknown

200644_at	MARCKSL1	6.16E-01	0.90	2.53E-04	2.25
202016_at	MEST	6.40E-01	0.77	2.85E-03	0.18
203148_s_at	TRIM14	7.26E-01	0.83	2.49E-02	0.47
204030_s_at	SCHIP1	7.15E-01	0.82	1.61E-02	0.33
204787_at	VSIG4	4.75E-01	1.50	4.27E-01	0.84
205583_s_at	CXorf45	6.28E-01	0.87	5.65E-03	0.44
206133_at	XAF1	9.47E-01	0.97	8.62E-03	0.52
206478_at	KIAA0125	6.27E-01	0.82	2.19E-03	0.36
207509_s_at	LAIR2	5.07E-01	0.50	3.47E-03	0.10
208661_s_at	TTC3	8.97E-01	0.96	1.17E-02	0.50
209274_s_at	ISCA1	8.29E-01	1.04	2.16E-03	0.51
209285_s_at	C3orf63	5.54E-01	0.79	7.11E-05	0.45
211038_s_at	CROCCL1	7.51E-01	0.89	4.08E-03	0.45
212653_s_at	EHBP1	5.72E-01	0.81	1.21E-02	0.34
212690_at	DDHD2	6.20E-01	0.81	1.74E-02	0.44
212692_s_at	LRBA	7.19E-01	0.88	2.12E-02	0.42
213156_at	---	8.21E-01	0.89	2.49E-02	0.19
213338_at	TMEM158	7.22E-01	0.87	2.40E-02	2.23
213605_s_at	LOC728411	7.69E-01	1.12	2.19E-03	0.54
213888_s_at	TRAF3IP3	5.43E-01	0.77	1.34E-02	0.35
214977_at	---	5.56E-01	1.38	2.49E-01	0.49
215322_at	---	5.44E-01	1.23	7.46E-04	0.61
217906_at	KLHDC2	6.45E-01	0.90	6.31E-03	0.44
218370_s_at	S100PBP	5.91E-01	0.84	4.49E-03	0.42
220494_s_at	---	6.42E-01	1.10	4.83E-02	0.47
220560_at	C11orf21	9.95E-01	1.00	1.97E-02	0.47
220940_at	KIAA1641	5.01E-01	0.70	2.97E-03	0.28
221235_s_at	LOC644617	9.99E-01	1.00	1.24E-02	0.48
221249_s_at	FAM117A	5.68E-01	0.80	8.14E-03	0.43
221804_s_at	FAM45A	8.73E-01	0.95	4.64E-04	0.48
222477_s_at	TM7SF3	7.30E-01	0.93	2.85E-02	0.38
222717_at	SDPR	6.90E-01	0.78	4.64E-02	0.22
222843_at	FIGNL1	4.50E-01	0.57	8.53E-03	0.35

224916_at	TMEM173	4.38E-01	0.68	9.68E-02	0.30
225240_s_at	MSI2	7.08E-01	0.89	5.42E-03	0.49
225469_at	LYRM5	6.84E-01	0.85	4.61E-03	0.36
225666_at	TMTC4	9.01E-01	0.99	1.24E-02	0.48
225864_at	FAM84B	7.38E-01	0.92	6.82E-02	0.43
226134_s_at	---	5.76E-01	0.76	2.81E-03	0.42
226223_at	---	6.62E-01	0.83	1.41E-02	0.43
226276_at	TMEM167	1.00E+00	1.00	7.46E-03	2.07
226365_at	---	5.80E-01	0.66	3.92E-02	0.34
226431_at	ALS2CR13	9.17E-01	1.03	1.39E-02	0.55
226561_at	LOC285086	4.16E-01	1.36	2.31E-02	0.71
226584_s_at	FAM110A	9.80E-01	1.01	2.08E-03	2.24
226676_at	ZNF521	6.17E-01	0.78	8.79E-03	0.30
226677_at	ZNF521	4.68E-01	0.56	3.43E-03	0.35
226682_at	LOC283666	4.23E-01	0.77	1.33E-02	0.40
226848_at	---	6.73E-01	1.12	2.19E-02	0.57
226975_at	RNPC3	4.54E-01	0.89	1.25E-03	0.45
227603_at	---	5.07E-01	0.81	4.34E-03	0.44
227654_at	C2orf175	4.38E-01	0.58	2.76E-02	0.31
227762_at	---	5.48E-01	1.22	1.19E-05	0.27
228174_at	---	8.38E-01	0.93	7.66E-03	0.42
228280_at	ZC3HAV1L	6.72E-01	0.71	5.50E-02	0.37
228341_at	---	9.00E-01	1.04	1.87E-02	0.54
228465_at	---	9.88E-01	1.00	1.19E-03	0.53
228617_at	XAF1	9.73E-01	1.02	9.76E-02	0.60
228854_at	---	6.39E-01	1.25	2.62E-04	0.28
228993_s_at	LOC92482	5.27E-01	0.81	2.11E-03	0.37
229041_s_at	---	7.44E-01	1.10	1.09E-02	0.57
229242_at	---	6.14E-01	1.21	2.57E-02	4.01
229383_at	---	6.86E-01	1.15	6.59E-02	0.60
229530_at	---	6.89E-01	0.82	2.30E-03	0.46
229572_at	---	4.07E-01	0.42	5.51E-02	0.25
229615_at	---	9.92E-01	1.00	6.12E-03	0.45
229949_at	---	7.53E-01	0.90	9.14E-03	0.48
230011_at	RP5-821D11.2	9.04E-01	1.02	7.20E-04	2.38
230379_x_at	C2orf56	9.37E-01	1.01	3.82E-04	0.43
230461_s_at	MUM1	6.79E-01	1.04	4.56E-02	0.34
231109_at	---	4.86E-01	1.32	1.58E-01	0.68
231262_at	---	4.71E-01	1.33	1.28E-01	0.70
231644_at	---	5.30E-01	1.27	1.86E-01	0.67
231925_at	---	4.01E-01	0.55	2.51E-02	2.02
232001_at	LOC439949	5.75E-01	0.78	1.91E-02	0.44
232138_at	MBNL2	6.50E-01	0.94	1.00E-02	0.46
232181_at	LOC153346	7.87E-01	0.92	4.02E-02	0.39
232489_at	CCDC76	6.39E-01	0.90	6.87E-03	0.46
232555_at	---	6.31E-01	1.23	1.49E-02	0.42
232681_at	---	9.45E-01	1.02	8.79E-04	0.41
232889_at	GUSBP1	5.26E-01	0.80	6.87E-03	0.39
233642_s_at	HEATR5B	7.88E-01	0.92	1.78E-03	0.49
234151_at	---	8.31E-01	0.93	1.53E-03	0.48
235048_at	KIAA0888	9.96E-01	1.00	5.57E-02	0.41
235146_at	---	9.68E-01	0.99	1.13E-02	2.33

235380_at	---	7.46E-01	1.05	1.22E-02	0.40
235385_at	---	6.13E-01	1.25	1.33E-01	0.73
235693_at	---	8.30E-01	0.92	1.27E-01	0.33
236422_at	---	8.74E-01	0.94	5.16E-03	0.38
236451_at	---	7.59E-01	0.98	2.76E-02	0.24
236472_at	---	6.03E-01	1.10	3.85E-02	0.52
236704_at	---	7.38E-01	0.93	1.40E-03	0.47
236752_at	---	5.56E-01	1.21	5.37E-02	0.53
237914_s_at	---	8.14E-01	0.97	2.09E-02	0.46
238043_at	LOC729446	7.32E-01	0.91	7.60E-03	0.46
238070_at	CHD1L	4.34E-01	1.19	7.54E-02	0.46
239648_at	DCUN1D3	6.51E-01	0.91	1.40E-02	2.14
239735_at	---	7.26E-01	0.87	1.73E-03	0.48
239979_at	---	9.58E-01	1.03	2.82E-01	0.68
240128_at	---	6.61E-01	1.15	1.10E-01	0.58
240287_at	LOC730249	6.40E-01	0.87	1.14E-02	2.20
240665_at	---	7.61E-01	1.12	1.07E-02	0.56
242868_at	---	6.01E-01	0.88	3.87E-02	2.25
243030_at	---	9.30E-01	1.03	1.36E-02	0.55
243375_at	---	4.63E-01	1.18	5.69E-02	0.54
244159_at	LOC440934	7.29E-01	1.15	2.21E-03	2.82
244322_at	LOC641798	8.69E-01	0.98	4.10E-05	2.13
244357_at	---	7.67E-01	1.07	2.51E-03	0.42
244461_at	SPECC1	9.33E-01	0.99	4.01E-02	0.36
244548_at	---	6.15E-01	1.19	9.98E-03	0.67
244599_at	---	6.90E-01	0.87	4.92E-02	0.44
244669_at	SNHG5 B213	5.97E-01	1.35	4.87E-01	0.84
244677_at	---	5.15E-01	1.04	1.06E-03	0.47
244845_at	---	5.15E-01	1.21	1.74E-01	0.47

A.7. Genes induced by SLE serum in normal monocytes.

<i>Systematic</i>	<i>Gene symbol</i>	<i>p-value</i>	<i>Average normalized values of SLE serum induced genes</i>
<i>Acute-phase response</i>			
210495_x_at	FN1	3.66E-02	0.06
211719_x_at	FN1	9.35E-03	0.08
212464_s_at	FN1	1.42E-02	0.14
216442_x_at	FN1	1.38E-02	0.16
<i>Angiogenesis</i>			
202509_s_at	TNFAIP2	9.07E-02	4.45
202510_s_at	TNFAIP2	7.12E-04	4.11
205767_at	EREG	6.23E-04	0.06
207180_s_at	HTATIP2	2.44E-03	0.40
209500_x_at	TNFSF13	2.72E-03	8.66
209788_s_at	ARTS-1	3.06E-02	3.35
210314_x_at	TNFSF13	2.11E-02	7.94
210512_s_at	VEGF	6.73E-02	3.67
210513_s_at	VEGF	3.99E-02	2.28
211506_s_at	IL8	1.37E-02	0.24
212298_at	NRP1	8.81E-03	0.04
219158_s_at	TBDN100	5.69E-02	0.29
220890_s_at	LOC51202	2.27E-02	0.24
221773_at	ELK3	8.64E-03	2.38
222661_at	FLJ10283	3.36E-02	0.50
223339_at	ATPIF1	5.63E-02	2.28
225036_at	C9ORF105	2.84E-03	0.16
226998_at	TBDN100	1.30E-01	0.19
230802_at	DKFZP564B1162	9.70E-03	6.13
<i>Apoptosis</i>			
1729_at	TRADD	7.81E-02	2.63
200798_x_at	MCL1	2.08E-02	0.26
201301_s_at	ANXA4	1.10E-03	2.15
201302_at	ANXA4	7.59E-03	3.40
201628_s_at	RAGA	3.89E-02	0.47
202014_at	PPP1R15A	2.77E-02	3.21
202687_s_at	TNFSF10	5.71E-02	41.62
202688_at	TNFSF10	4.54E-02	88.58
202693_s_at	STK17A	2.98E-03	0.35
203139_at	DAPK1	8.69E-03	2.75
203166_at	CFDP1	1.09E-02	4.58
203277_at	DFFA	3.31E-02	0.47
204285_s_at	PMAIP1	3.15E-02	3.60
204286_s_at	PMAIP1	4.46E-02	2.26

204614_at	SERPINB2	1.76E-02	0.45
204780_s_at	TNFRSF6	7.10E-02	2.25
204860_s_at	BIRC1	6.88E-02	2.95
205425_at	HIP1	5.34E-02	0.30
205681_at	BCL2A1	3.44E-03	3.37
207574_s_at	GADD45B	4.74E-04	17.80
208968_s_at	LOC57019	2.12E-02	0.44
209165_at	AATF	3.93E-02	0.39
209304_x_at	GADD45B	1.62E-02	7.73
209305_s_at	GADD45B	1.18E-02	8.53
209354_at	TNFRSF14	3.60E-02	4.16
209723_at	SERPINB9	2.73E-03	6.48
209803_s_at	TSSC3	1.52E-02	5.04
210538_s_at	BIRC3	3.46E-02	3.31
211509_s_at	RTN4	2.15E-02	0.47
211936_at	HSPA5	1.23E-02	3.30
212121_at	DKFZP564D116	1.48E-02	0.41
212123_at	DKFZP564D116	1.98E-02	0.46
212312_at	BCL2L1	8.03E-03	0.29
214329_x_at	TNFSF10	2.50E-02	16.39
214467_at	GPR65	8.96E-03	0.14
215096_s_at	ESD	5.58E-02	2.35
216996_s_at	KIAA0971	2.68E-02	0.34
217865_at	GP	1.00E-02	2.84
217996_at	PHLDA1	2.83E-03	0.12
217997_at	PHLDA1	3.98E-05	0.08
217999_s_at	PHLDA1	5.96E-05	0.13
218403_at	HSPC132	4.35E-03	0.34
218856_at	TNFRSF21	2.37E-03	0.02
219002_at	FLJ21901	6.55E-03	0.43
219043_s_at	VIAF1	9.80E-02	0.39
220578_at	FLJ13544	1.28E-02	0.25
221478_at	BNIP3L	2.74E-02	4.49
221479_s_at	BNIP3L	4.36E-03	7.47
221666_s_at	ASC	2.47E-03	2.98
222131_x_at	MIRO-2	1.89E-01	0.41
222148_s_at	MIRO-1	5.46E-03	2.14
223212_at	APH2	7.22E-02	0.45
224553_s_at	TNFRSF18	6.06E-02	0.19
225514_at	CIDEB	2.13E-02	0.32
225606_at	LOC150819	3.83E-03	2.22
225842_at	PHLDA1	1.90E-02	0.26
226116_at	---	2.63E-02	0.40
226364_at	HIP1	1.06E-01	0.26
226530_at	BMF	1.49E-02	9.94
228641_at	CARD8	6.96E-02	0.44
230031_at	HSPA5	6.07E-02	13.22
231699_at	NFKBIA	6.55E-02	2.97
232792_at	RNF36	2.23E-02	11.18
239944_at	BIRC1	4.51E-03	0.39

242814_at	SERPINB9	3.45E-03	13.99
37028_at	GADD34	8.85E-04	3.22
203827_at	FLJ10055	6.72E-02	3.13
213836_s_at	KIAA1001	4.77E-02	2.57

Biosynthetic process

200708_at	GOT2	2.61E-02	0.42
200790_at	ODC1	1.01E-02	0.22
201433_s_at	PTDSS1	1.14E-02	0.30
201577_at	NME1	8.03E-03	0.20
203066_at	GALNAC4S-6ST	6.04E-02	0.38
204209_at	PCYT1A	2.73E-02	0.48
208284_x_at	GGT1	7.99E-03	2.03
211417_x_at	GGT1	3.99E-02	2.18
213725_x_at	LOC283824	3.29E-02	2.90
218070_s_at	GMPPA	1.45E-02	3.18
219017_at	EKI1	2.27E-02	0.43
219066_at	MDS018	1.89E-02	3.14
219920_s_at	GMPPB	4.81E-02	2.16
222262_s_at	EKI1	4.17E-02	0.45
225733_at	B3GALT6	5.62E-02	0.34
226702_at	LOC129607	4.00E-03	46.56
226868_at	LOC283464	3.91E-02	0.27
227361_at	HS3ST3B1	1.55E-02	9.77
227556_at	ATP1B1	1.15E-01	0.20
229770_at	FLJ31978	4.69E-02	5.98
232021_at	LOC283464	9.05E-02	0.43
235675_at	DHFRL1	1.15E-01	0.09
238762_at	FLJ13105	2.47E-02	0.29
239562_at	MTHFD2L	3.88E-02	0.43

Blood coagulation

209277_at	TFPI2	8.29E-02	0.04
209278_s_at	TFPI2	1.18E-03	0.01
210664_s_at	TFPI	9.96E-03	0.13
213258_at	TFPI	8.27E-03	0.32
202030_at	BCKDK	2.98E-02	0.44

Catabolic process

210007_s_at	GPD2	3.23E-03	2.09
214183_s_at	TKTL1	2.20E-03	0.02

Cell adhesion

201005_at	CD9	7.97E-02	0.19
201015_s_at	JUP	2.47E-02	45.71
201125_s_at	ITGB5	2.21E-02	0.38
201389_at	ITGA5	3.35E-02	3.12
201647_s_at	SCARB2	4.77E-02	0.43
201951_at	ALCAM	2.88E-02	0.15
201952_at	ALCAM	2.73E-03	0.33

201953_at	CIB1	5.42E-03	2.35
203336_s_at	ICAP-1A	2.29E-03	0.34
204306_s_at	CD151	3.77E-02	0.41
204359_at	FLRT2	2.02E-02	0.11
204563_at	SELL	4.01E-05	4.98
204619_s_at	CSPG2	2.17E-02	0.20
204620_s_at	CSPG2	8.20E-02	0.34
206488_s_at	CD36	6.03E-02	0.30
208981_at	PECAM1	3.61E-02	2.02
209210_s_at	MIG2	1.45E-02	0.09
209555_s_at	CD36	1.06E-02	0.18
209875_s_at	SPP1	2.27E-03	0.02
209933_s_at	CMRF-35H	2.93E-02	5.07
211075_s_at	CD47	5.83E-02	2.54
211571_s_at	CSPG2	6.69E-03	0.22
211945_s_at	ITGB1	7.41E-02	0.49
213241_at	PLXNC1	3.48E-03	3.35
213857_s_at	CD47	5.29E-02	2.81
215646_s_at	CSPG2	1.63E-02	0.16
215836_s_at	PCDHGC3	9.48E-02	0.30
219159_s_at	CRACC	1.55E-02	5.16
221731_x_at	CSPG2	1.08E-02	0.24
222838_at	SLAMF7	1.52E-02	6.99
226016_at	CD47	9.72E-03	4.96
226534_at	KITLG	2.95E-02	0.05
227259_at	CD47	1.28E-01	3.04
228094_at	AMICA	2.25E-02	3.97
228766_at	CD36	1.08E-02	0.14
234306_s_at	CRACC	1.33E-02	7.68
240259_at	---	6.32E-02	0.06
242197_x_at	CD36	1.60E-01	0.11
243874_at	LPP	2.86E-02	0.26
244229_at	PARVG	1.03E-01	0.40
44673_at	SN	4.40E-02	13.94

Cell communication

220038_at	SGKL	2.64E-02	5.83
227627_at	SGKL	2.67E-02	4.15

Cell cycle

200043_at	ERH	1.96E-02	0.38
200731_s_at	PTP4A1	1.85E-02	2.25
200732_s_at	PTP4A1	3.98E-02	2.06
201198_s_at	PSMD1	6.23E-02	0.35
201307_at	FLJ10849	8.28E-02	0.11
201423_s_at	CUL4A	1.21E-02	0.39
201424_s_at	CUL4A	3.65E-02	0.39
201482_at	QSCN6	6.07E-02	0.39
201725_at	CDC123	4.21E-02	0.29
201912_s_at	GSPT1	9.16E-02	0.38

202149_at	NEDD9	6.76E-02	6.25
202191_s_at	GAS7	4.36E-02	3.73
202192_s_at	GAS7	7.38E-02	2.38
202214_s_at	CUL4B	8.53E-02	2.05
202281_at	GAK	1.70E-03	2.34
202457_s_at	PPP3CA	6.31E-02	0.41
202769_at	CCNG2	6.84E-03	8.99
202770_s_at	CCNG2	3.33E-02	3.17
202892_at	CDC23	7.70E-03	0.37
203033_x_at	FH	3.07E-02	0.36
203079_s_at	CUL2	1.06E-01	0.32
203531_at	CUL5	4.38E-02	0.39
203740_at	MPHOSPH6	2.50E-02	0.33
203935_at	ACVR1	6.38E-02	0.33
204170_s_at	CKS2	2.94E-02	3.13
204461_x_at	RAD1	2.50E-02	0.45
204817_at	ESPL1	5.83E-02	0.27
204828_at	RAD9	6.10E-02	4.17
204857_at	MAD1L1	4.59E-02	5.20
205022_s_at	CHES1	2.35E-02	3.57
205330_at	MN1	6.21E-02	4.49
208796_s_at	CCNG1	1.45E-02	2.23
209100_at	IFRD2	5.94E-04	0.33
209588_at	EPHB2	3.66E-03	7.03
209589_s_at	EPHB2	9.69E-02	12.22
210511_s_at	INHBA	2.18E-02	0.02
210574_s_at	NUDC	2.43E-02	0.47
211067_s_at	GAS7	4.04E-02	4.42
211165_x_at	EPHB2	2.98E-02	11.21
212138_at	KIAA0648	5.47E-02	0.45
212306_at	CLASP2	3.87E-02	0.49
212698_s_at	FLJ11619	5.75E-02	0.19
213005_s_at	KANK	6.21E-04	0.14
213236_at	KIAA0790	1.44E-02	3.62
213348_at	CDKN1C	2.78E-03	7.86
214427_at	NOL1	3.30E-02	0.39
215438_x_at	GSPT1	2.91E-02	0.38
218031_s_at	C14orf116	3.70E-02	3.33
218039_at	ANKT	3.20E-02	3.53
218599_at	REC8	4.90E-02	2.45
218723_s_at	RGC32	7.84E-02	0.26
219910_at	HYPE	6.91E-03	3.51
221559_s_at	MGC2488	9.39E-03	3.35
222494_at	C14orf116	5.68E-02	2.33
223195_s_at	SES2	6.22E-03	3.01
223196_s_at	SES2	6.50E-02	2.51
223569_at	HTPAP	9.97E-02	0.46
223887_at	GPR132	2.94E-02	6.20
225592_at	NRM	1.66E-03	2.16
225662_at	ZAK	7.97E-02	0.46

225814_at	XRN1	2.00E-02	5.52
226022_at	SASH1	6.86E-04	2.94
226384_at	HTPAP	2.20E-02	0.46
227322_s_at	DDX32	7.66E-03	0.25
227896_at	BCCIP	7.49E-02	0.09
230529_at	HECA	2.26E-02	3.89
233632_s_at	XRN1	4.53E-03	5.63
235045_at	RBM7	5.03E-02	2.60
236313_at	CDKN2B	2.41E-02	0.31
238613_at	ZAK	1.90E-02	0.47
238756_at	LOC283431	1.26E-02	2.53
239827_at	HBG1	7.41E-02	0.09
38158_at	KIAA0165	1.95E-02	0.22
41644_at	KIAA0790	6.27E-02	3.05
49306_at	AD037	5.23E-02	2.76
201965_s_at	KIAA0625	2.55E-02	2.03
242230_at	SCA1	1.89E-02	0.24

Cell differentiation

200632_s_at	NDRG1	3.33E-02	6.62
202146_at	IFRD1	1.34E-02	2.45
202147_s_at	IFRD1	3.27E-02	2.18
204270_at	SKI	1.67E-03	7.38
204675_at	SRD5A1	7.82E-03	9.20
204858_s_at	ECGF1	7.40E-02	3.30
206148_at	IL3RA	4.37E-02	0.36
206707_x_at	C6orf32	5.72E-03	2.10
210959_s_at	SRD5A1	2.49E-02	4.03
211056_s_at	SRD5A1	3.78E-03	4.18
212959_s_at	MGC4170	3.60E-02	2.05
217497_at	ECGF1	7.02E-04	5.40
220302_at	MAK	1.11E-01	9.79
220935_s_at	CDK5RAP2	2.52E-02	0.42
225406_at	TWSG1	2.32E-02	0.38
226620_x_at	DAZAP1	1.78E-02	0.35
226725_at	MGC19764	2.32E-03	6.14
229265_at	SKI	1.24E-01	3.06
229813_x_at	DAZAP1	2.53E-02	0.30
233540_s_at	CDK5RAP2	3.92E-03	0.13
237180_at	PSME4	1.32E-03	3.11
238430_x_at	MGC19764	3.17E-02	5.14

Cell growth

238327_at	ECGF1	4.92E-02	5.59
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Cell migration/Cell motility

204268_at	S100A2	8.63E-03	5.42
205566_at	ABHD2	3.43E-03	0.27
209129_at	TRIP6	4.71E-04	0.43
225337_at	ABHD2	2.23E-02	0.38

228490_at	ABHD2	1.85E-02	0.42
200972_at	TSPAN-3	1.09E-01	0.33
200973_s_at	TSPAN-3	3.45E-02	0.47
203037_s_at	MTSS1	5.20E-03	0.39
209344_at	TPM4	3.83E-02	0.42
213726_x_at	TUBB2	1.91E-02	2.09
223615_at	NESH	2.87E-02	3.26
225098_at	ABI-2	1.05E-01	0.18
225112_at	ABI-2	6.85E-03	0.11
225897_at	MARCKS	2.78E-03	2.25
234210_x_at	ACTR2	3.98E-02	0.40
238065_at	TPM3	2.54E-02	0.43

Cell proliferation

201141_at	GPNMB	6.36E-02	2.66
201324_at	EMP1	3.52E-02	0.30
201325_s_at	EMP1	3.99E-02	0.21
201368_at	ZFP36L2	6.06E-03	3.90
201369_s_at	ZFP36L2	2.87E-02	4.70
201666_at	TIMP1	4.19E-02	0.49
202212_at	PES1	5.48E-02	0.20
202241_at	C8FW	2.12E-02	0.29
202283_at	SERPINF1	6.40E-02	12.38
203392_s_at	CTBP1	7.89E-02	0.39
204070_at	RARRES3	5.54E-02	2.24
204698_at	ISG20	1.32E-02	61.16
205239_at	AREG	8.02E-03	0.11
205569_at	LAMP3	5.31E-02	11.61
208680_at	PRDX1	1.55E-02	0.38
209864_at	FRAT2	6.89E-02	0.36
212723_at	PTDSR	1.72E-02	2.04
212863_x_at	CTBP1	4.95E-03	0.47
33304_at	HEM45	3.88E-02	23.45

Cell wall catabolic process

226321_at	LOC116068	2.27E-02	2.11
226748_at	MGC35274	1.67E-02	3.07

Chemotaxis

204103_at	CCL4	3.31E-02	2.69
204470_at	CXCL1	3.67E-04	0.03
204533_at	CXCL10	3.11E-02	68.21
205119_s_at	FPR1	5.67E-02	2.61
206336_at	CXCL6	1.12E-02	0.04
206337_at	CCR7	6.00E-02	6.92
207850_at	CXCL3	5.50E-03	0.02
208075_s_at	CCL7	4.02E-02	0.23
209201_x_at	CXCR4	1.33E-03	9.01
209774_x_at	CXCL2	1.72E-02	0.23
210659_at	CMKLR1	7.72E-02	0.37

210845_s_at	PLAUR	6.30E-02	0.48
211434_s_at	CCRL2	1.17E-02	2.31
211919_s_at	CXCR4	8.41E-03	7.55
211924_s_at	PLAUR	9.85E-02	0.41
214866_at	PLAUR	4.89E-03	0.40
214974_x_at	CXCL5	1.00E+00	0.01
216598_s_at	CCL2	3.35E-02	0.15
217028_at	CXCR4	3.47E-02	6.51
223454_at	CXCL16	4.83E-02	0.44
225009_at	CKLF4	4.66E-02	0.36
230422_at	FPRL2	4.83E-02	2.48

Chromatin modification

224928_at	SET7	1.10E-02	0.34
231297_at	DOT1L	1.06E-02	0.34
235338_s_at	C13orf4	4.90E-02	6.02
235339_at	C13orf4	2.46E-02	6.41

Chromosome organization and biogenesis

212569_at	KIAA0650	2.84E-02	4.90
212577_at	KIAA0650	8.92E-03	3.78
212579_at	KIAA0650	1.47E-02	2.61
241620_at	KIAA0650	6.23E-02	2.10

Circulation

201798_s_at	FER1L3	1.93E-02	5.01
211864_s_at	FER1L3	4.47E-02	3.85

Cytokine production

203980_at	FABP4	1.00E+00	0.01
207315_at	CD226	1.20E-02	0.32
220066_at	NOD2	4.91E-02	5.78

Cytoskeleton

200696_s_at	GSN	6.24E-02	0.26
200703_at	DNCL1	5.93E-03	0.18
200950_at	ARPC1A	2.19E-02	0.27
200965_s_at	ABLIM1	4.58E-02	0.31
201237_at	CAPZA2	3.31E-02	0.43
201850_at	CAPG	7.44E-03	2.71
202762_at	ROCK2	9.86E-02	0.37
203943_at	KIF3B	5.13E-02	0.37
204789_at	FMNL	1.90E-02	3.10
205603_s_at	DIAPH2	6.25E-03	2.50
205726_at	DIAPH2	4.02E-03	3.75
206710_s_at	KIAA0987	2.52E-03	2.39
208622_s_at	VIL2	2.91E-03	2.56
210461_s_at	ABLIM1	3.07E-02	0.40
211063_s_at	NCK1	2.65E-03	2.21
211776_s_at	EPB41L3	7.17E-04	2.44

212071_s_at	SPTBN1	1.09E-02	5.51
212390_at	PDE4DIP	9.51E-03	2.94
212702_s_at	BICD2	6.98E-03	0.37
213154_s_at	BICD2	5.32E-02	0.37
217234_s_at	VIL2	9.35E-02	2.31
217817_at	ARPC4	6.85E-02	0.44
217892_s_at	EPLIN	5.11E-02	0.22
218251_at	STRAIT11499	8.28E-02	3.18
222457_s_at	EPLIN	1.42E-01	0.25
223085_at	RNF19	2.15E-03	0.39
225051_at	LOC149149	8.14E-03	8.93
225205_at	KIF3B	4.28E-02	0.36
225224_at	C20ORF112	3.50E-02	2.49
226914_at	ARPC5L	3.77E-02	0.28
226915_s_at	ARPC5L	5.26E-03	0.45
226968_at	KIF1B	3.65E-02	0.40
227249_at	NUDE1	2.71E-03	0.47
227330_x_at	LOC285458	1.50E-02	2.98
227948_at	FRABIN	4.53E-02	0.41
229748_x_at	LOC285458	2.85E-02	3.27
230690_at	TUBB1	1.54E-02	2.35
237097_at	SPTBN5	4.24E-02	2.34

Dephosphorylation

204837_at	MTMR9	1.75E-03	0.39
204852_s_at	PTPN7	4.03E-02	0.33
205076_s_at	CRA	1.92E-02	2.21
206452_x_at	PPP2R4	1.70E-02	3.78
208121_s_at	PTPRO	1.86E-02	0.18
208874_x_at	PPP2R4	2.06E-02	2.25
209457_at	DUSP5	5.01E-02	0.43
212277_at	MTMR4	8.59E-02	2.28
213278_at	MTMR9	1.62E-02	0.36
214268_s_at	MTMR4	3.16E-02	2.46
215227_x_at	ACP1	1.29E-02	0.41
215501_s_at	DUSP10	4.04E-02	3.05
216105_x_at	PPP2R4	3.93E-02	3.19
221563_at	DUSP10	3.66E-02	3.43
221840_at	PTPRE	1.92E-02	0.30
226074_at	FLJ32332	3.44E-02	0.30
226169_at	SBF2	1.12E-02	2.51
229211_at	FLJ20499	4.90E-02	2.28
235061_at	DKFZp761G058	2.87E-02	39.05

Development

203887_s_at	THBD	8.79E-03	0.04
203888_at	THBD	1.11E-02	0.02
204249_s_at	LMO2	4.67E-02	4.22
204700_x_at	DJ434O14.5	1.45E-02	0.26
207545_s_at	NUMB	8.58E-02	0.38

209565_at	ZNF183	6.11E-02	2.67
212082_s_at	MYL6	7.23E-03	0.45
217731_s_at	ITM2B	1.07E-01	2.32
218468_s_at	CKTSF1B1	1.97E-02	0.03
218469_at	CKTSF1B1	5.58E-03	0.02
225093_at	UTRN	1.99E-02	5.54
225170_at	WDR5	2.54E-02	0.32
229498_at	---	3.39E-02	2.73
237252_at	THBD	6.98E-02	0.06
57739_at	FLJ20195	2.59E-02	0.42

DNA integration

219467_at	FLJ20125	2.79E-02	0.34
222139_at	KIAA1466	1.47E-03	25.87

DNA metabolic process

203939_at	NT5E	5.64E-02	0.12
209831_x_at	DNASE2	2.14E-02	6.41
219259_at	SEMA4A	6.89E-04	7.86
234072_at	SEMA4A	9.81E-03	3.06

DNA recombination

205667_at	WRN	9.40E-02	0.36
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DNA repair

202239_at	ADPRTL1	9.79E-03	5.46
202905_x_at	NBS1	6.75E-03	3.56
202906_s_at	NBS1	3.91E-02	2.65
203241_at	UVRAG	3.08E-03	3.37
205875_s_at	TREX1	6.40E-02	4.92
208642_s_at	XRCC5	5.88E-02	0.50
210580_x_at	SULT1A3	4.11E-03	2.18
217299_s_at	NBS1	7.02E-02	2.59
217942_at	MRPS35	2.92E-02	0.32
219715_s_at	TDP1	4.48E-02	0.36

DNA replication

200631_s_at	SET	5.12E-02	0.47
200957_s_at	SSRP1	5.93E-03	0.47
201756_at	RPA2	4.12E-02	0.42
202107_s_at	MCM2	8.47E-02	3.19
202268_s_at	APPBP1	5.08E-02	0.17
203616_at	POLB	1.34E-02	3.45
208808_s_at	HMGB2	3.89E-03	6.67
213047_x_at	SET	1.63E-01	0.36
217815_at	SUPT16H	1.23E-01	0.38
218590_at	C10orf2	6.10E-02	0.17
219387_at	LOC55580	5.78E-03	0.41
223342_at	RRM2B	3.74E-03	2.72
225045_at	FLJ10392	1.19E-01	0.30

225802_at	TOP1MT	3.08E-02	7.75
40189_at	set	2.67E-02	0.36

Glycolysis

200737_at	PGK1	1.15E-01	0.35
200825_s_at	HYOU1	1.50E-02	3.32
200885_at	MGC19531	3.32E-02	0.20
201030_x_at	LDHB	6.70E-02	2.72
213564_x_at	LDHB	2.31E-02	2.56

Glycosylation

201847_at	LIPA	2.02E-03	0.28
203090_at	SDF2	2.49E-02	0.49
203545_at	MGC2840	2.90E-02	0.32
204192_at	CD37	9.25E-03	11.26
217788_s_at	GALNT2	4.28E-02	0.27
221760_at	MAN1A1	5.32E-02	0.49
223991_s_at	GALNT2	1.52E-02	0.27
235749_at	UGCGL2	4.52E-02	0.30

Golgi organization and biogenesis

201057_s_at	GOLGB1	5.69E-03	2.41
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G-protein coupled receptor protein signaling pathway

207243_s_at	CALM2	4.46E-02	0.45
209379_s_at	KIAA1128	3.24E-02	2.16
221725_at	WASF2	2.91E-02	0.45
222581_at	XPR1	3.57E-03	0.32

Homeostasis

208658_at	ERP70	1.00E-02	3.42
211048_s_at	ERP70	9.42E-03	4.12
221932_s_at	C14orf87	5.91E-02	0.18
223325_at	LOC51061	1.94E-02	2.03
227146_at	QSOX2	2.32E-02	0.43

Immune response/Defense response

200675_at	CD81	5.86E-03	2.21
200814_at	PSME1	3.50E-02	2.61
200904_at	HLA-E	2.58E-02	2.47
200983_x_at	CD59	3.59E-03	0.18
200984_s_at	CD59	2.56E-02	0.21
200985_s_at	CD59	2.83E-02	0.13
201315_x_at	IFITM2	4.05E-02	7.28
201601_x_at	IFITM1	4.19E-02	21.16
201641_at	BST2	3.39E-02	6.58
201762_s_at	PSME2	1.87E-02	3.87
201925_s_at	DAF	5.32E-05	2.05
202086_at	MX1	3.26E-03	76.31
202145_at	LY6E	2.49E-02	36.63

202269_x_at	GBP1	9.99E-02	4.88
202270_at	GBP1	1.08E-01	5.64
202441_at	KEO4	5.35E-03	0.41
202748_at	GBP2	1.28E-01	2.46
202869_at	OAS1	1.77E-02	17.48
202948_at	IL1R1	1.17E-02	0.16
203085_s_at	TGFB1	9.28E-03	2.81
203153_at	IFIT1	7.17E-02	57.91
203233_at	IL4R	2.70E-02	2.69
203561_at	FCGR2A	6.31E-02	2.24
203591_s_at	CSF3R	1.24E-02	2.03
203595_s_at	RI58	4.63E-02	12.77
203596_s_at	RI58	6.69E-03	13.06
203789_s_at	SEMA3C	6.07E-02	0.27
204007_at	FCGR3A	5.65E-02	2.23
204118_at	CD48	1.77E-03	8.02
204203_at	CEBPG	3.00E-02	2.06
204205_at	APOBEC3G	2.49E-02	5.92
204415_at	G1P3	9.32E-03	7.08
204639_at	ADA	6.20E-02	8.65
204747_at	IFIT4	3.04E-02	11.13
204897_at	PTGER4	1.56E-02	2.83
204924_at	TLR2	8.56E-03	0.48
204972_at	OAS2	9.08E-03	10.04
204994_at	MX2	8.78E-03	17.78
205207_at	IL6	1.81E-02	5.77
205269_at	LCP2	1.14E-02	4.88
205270_s_at	LCP2	1.10E-02	6.29
205285_s_at	FYB	4.32E-03	5.34
205403_at	IL1R2	7.72E-03	0.02
205552_s_at	OAS1	7.81E-03	11.96
205588_s_at	FOP	1.02E-01	0.49
205660_at	OASL	3.24E-02	8.09
205988_at	CD84	2.41E-03	0.41
205992_s_at	IL15	2.37E-02	11.51
206247_at	MICB	6.78E-02	3.29
206380_s_at	PFC	4.78E-02	3.65
206420_at	IGSF6	1.38E-02	3.27
206553_at	OAS2	2.56E-02	17.84
206682_at	HML2	1.09E-02	6.94
207104_x_at	LILRB1	5.74E-02	2.92
207238_s_at	PTPRC	2.90E-03	3.04
207565_s_at	MR1	6.47E-02	3.83
207697_x_at	LILRB2	1.09E-01	2.65
207857_at	LILRA2	5.05E-02	2.34
208653_s_at	CD164	6.46E-02	0.32
208910_s_at	C1QBP	2.84E-02	0.27
209124_at	MYD88	2.29E-02	3.77
209417_s_at	IFI35	2.11E-02	20.67
209795_at	CD69	1.05E-02	24.54

210223_s_at	HLALS	4.08E-02	2.45
210233_at	IL1RAP	6.80E-02	2.04
210387_at	H2BFA	2.91E-03	43.30
210629_x_at	LST1	1.97E-03	2.68
210644_s_at	LAIR1	5.71E-03	3.00
210784_x_at	LILRB3	9.15E-02	3.38
210797_s_at	OASL	1.18E-02	4.87
211135_x_at	LILRB3	9.82E-02	2.86
211192_s_at	CD84	4.77E-02	0.44
211336_x_at	LILRB1	7.10E-02	2.36
211372_s_at	IL1R2	9.51E-03	0.05
211581_x_at	LST1	3.36E-03	3.07
211582_x_at	LST1	2.54E-02	2.46
211794_at	FYB	7.22E-02	7.48
211795_s_at	FYB	4.55E-02	12.89
212203_x_at	IFITM3	8.66E-02	10.59
212463_at	CD59	3.25E-03	0.15
212587_s_at	PTPRC	6.43E-02	2.43
212657_s_at	IL1RN	6.73E-02	0.18
212659_s_at	IL1RN	1.30E-02	0.11
213716_s_at	SECTM1	3.44E-02	6.71
214022_s_at	MGC27165	8.38E-02	19.08
214059_at	IFI44	4.70E-05	29.54
214146_s_at	PPBP	9.28E-03	0.02
214181_x_at	LST1	4.80E-03	2.91
214214_s_at	MGC4189	1.10E-02	0.20
214453_s_at	IFI44	8.04E-03	13.08
214511_x_at	FCGR1A	8.21E-02	4.83
214574_x_at	LST1	7.69E-03	2.38
215561_s_at	IL1R1	8.65E-03	0.18
215633_x_at	LST1	6.00E-04	2.80
216243_s_at	IL1RN	2.63E-02	0.13
216705_s_at	ada	3.25E-02	12.65
217502_at	IFIT2	1.40E-02	36.96
217767_at	C3	4.71E-02	3.34
218380_at	PP1044	3.42E-02	4.24
218400_at	OAS3	1.21E-02	23.57
218943_s_at	RIG-I	1.62E-02	21.68
219209_at	MDA5	2.64E-02	16.95
219357_at	HSPC018	2.33E-02	3.44
219364_at	LGP2	1.53E-02	64.62
219434_at	TREM1	1.96E-02	0.49
219859_at	CLECSF9	3.22E-02	2.20
219890_at	CLECSF5	3.97E-02	0.13
220088_at	C5R1	4.26E-02	0.30
220146_at	TLR7	1.11E-02	33.03
220307_at	CD244	1.82E-03	8.59
221060_s_at	TLR4	2.38E-02	0.23
222062_at	WSX1	3.71E-02	0.22
222067_x_at	H2BFB	2.91E-03	4.28

222430_s_at	HGRG8	3.80E-02	0.45
222793_at	RIG-I	5.94E-03	16.86
222934_s_at	CLECSF9	4.18E-02	4.24
223434_at	FLJ10961	1.23E-02	31.70
223501_at	TNFSF13B	1.06E-02	11.40
223502_s_at	TNFSF13B	5.50E-02	14.76
224341_x_at	TLR4	5.83E-02	0.40
224859_at	B7-H3	2.39E-03	0.23
225622_at	PAG	5.02E-02	2.63
225626_at	PAG	1.79E-02	3.29
226474_at	FLJ21709	8.33E-02	6.77
226757_at	IFIT2	2.37E-02	31.70
228234_at	TICAM2	7.63E-04	2.88
228607_at	OAS2	1.28E-02	10.42
229450_at	IFIT4	1.80E-02	37.63
229560_at	TLR8	3.30E-02	8.42
229625_at	GBP5	8.77E-02	7.54
230391_at	CD84	2.91E-02	0.22
231577_s_at	GBP1	1.06E-01	6.23
232068_s_at	TLR4	2.74E-02	0.34
232311_at	B2M	4.10E-02	2.09
235574_at	GBP4	1.65E-01	9.22
237759_at	CD48	8.54E-02	4.54
238581_at	GBP5	3.89E-02	57.93
242907_at	GBP2	3.28E-02	3.94
244251_at	LCP2	8.22E-03	2.27
244313_at	---	4.00E-02	6.67
244352_at	CD84	2.17E-02	0.25
244578_at	LCP2	2.46E-02	8.74

Inflammatory response

201109_s_at	THBS1	3.17E-02	0.37
203645_s_at	CD163	7.92E-02	0.31
204140_at	TPST1	5.88E-02	0.34
205639_at	AOAH	1.22E-02	2.94
206214_at	PLA2G7	4.60E-02	0.21
215049_x_at	CD163	7.79E-02	0.23
215775_at	THBS1	5.15E-02	0.32
216233_at	CD163	4.19E-02	0.06
223000_s_at	JAM1	8.54E-02	2.13
235086_at	THBS1	5.95E-03	0.22
239336_at	THBS1	9.93E-02	0.18

Keratinization

225073_at	PPHLN1	3.64E-04	0.42
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Kinase activity

201348_at	GPX3	5.72E-03	0.20
202951_at	STK38	1.81E-02	2.03
224657_at	MIG-6	2.62E-02	0.34

Metabolic process

201127_s_at	ACLY	1.07E-01	0.42
201128_s_at	ACLY	4.39E-02	0.40
201135_at	ECHS1	1.94E-02	0.43
201193_at	IDH1	6.10E-02	0.47
201425_at	ALDH2	9.91E-04	6.93
201818_at	AYTL2	3.25E-03	4.35
202032_s_at	MAN2A2	2.68E-03	2.68
202043_s_at	SMS	3.09E-02	0.29
202053_s_at	ALDH3A2	9.56E-03	0.26
202054_s_at	ALDH3A2	1.88E-02	0.23
202069_s_at	IDH3A	9.15E-03	0.18
202070_s_at	IDH3A	3.68E-02	0.40
202169_s_at	AASDHPPT	8.03E-02	0.27
202170_s_at	AASDHPPT	2.37E-02	0.33
202382_s_at	GNPI	1.12E-02	2.28
202419_at	FVT1	3.19E-02	2.17
202422_s_at	FACL4	3.67E-02	0.22
202481_at	SDR1	6.03E-03	3.85
202838_at	FUCA1	3.68E-01	2.38
203043_at	ALTE	1.14E-01	3.43
203060_s_at	PAPSS2	8.82E-02	0.43
203159_at	GLS	3.54E-03	0.39
203282_at	GBE1	6.23E-03	0.21
203548_s_at	LPL	1.00E+00	0.01
203549_s_at	LPL	1.54E-02	0.02
203718_at	NTE	5.47E-02	0.36
203778_at	MANBA	6.52E-03	3.95
204058_at	MGC13523	2.38E-03	0.18
204059_s_at	ME1	5.33E-03	0.15
204224_s_at	GCH1	4.70E-03	4.57
205006_s_at	NMT2	3.47E-03	0.27
205047_s_at	ASNS	3.50E-02	0.35
205695_at	SDS	1.60E-02	8.95
206522_at	MGAM	8.10E-02	0.22
206756_at	CHST7	1.22E-01	2.67
207016_s_at	ALDH1A2	7.23E-03	0.03
207431_s_at	DEGS	2.00E-02	0.26
207628_s_at	WBSCR22	4.16E-02	0.43
208911_s_at	PDHB	8.46E-03	0.40
208918_s_at	FLJ13052	9.99E-02	4.06
208919_s_at	FLJ13052	4.00E-02	3.53
208963_x_at	FADS1	2.86E-03	0.38
209185_s_at	IRS2	3.74E-02	2.60
209397_at	ME2	4.82E-03	0.32
209696_at	FBP1	8.85E-02	0.46
210046_s_at	IDH2	5.63E-02	5.47
210153_s_at	ME2	1.17E-02	0.30
210154_at	ME2	2.02E-02	0.20

210337_s_at	ACLY	3.89E-02	0.44
210544_s_at	ALDH3A2	3.77E-02	0.19
210662_at	KYNU	3.56E-04	0.30
210980_s_at	ASAH1	3.60E-02	2.78
211423_s_at	SC5DL	4.23E-02	2.01
212226_s_at	RPS20	6.01E-03	2.98
212230_at	RPS20	5.17E-02	2.84
212541_at	PP591	5.80E-02	0.34
212737_at	GM2A	1.73E-02	2.78
212829_at	PIP4K2A	3.04E-04	0.38
212995_x_at	FAM128B	7.22E-02	2.98
213320_at	PRMT3	5.40E-02	0.49
213607_x_at	FLJ13052	9.17E-02	2.82
213702_x_at	ASAH1	1.82E-03	2.39
213902_at	ASAH1	2.17E-02	4.52
214274_s_at	ACAA1	4.52E-04	3.04
214430_at	GLA	9.50E-03	0.47
215159_s_at	FLJ13052	5.53E-02	2.71
215165_x_at	UMPS	1.73E-04	0.35
217202_s_at	GLUL	1.57E-02	0.45
217745_s_at	MAK3P	3.55E-02	0.40
217775_s_at	RDH11	4.20E-02	0.47
217776_at	RDH11	2.52E-02	0.50
217848_s_at	PP	1.81E-02	2.54
217884_at	FLJ10774	4.43E-02	0.26
217922_at	MAN1A2	1.09E-02	0.41
218017_s_at	FLJ22242	2.26E-02	0.39
218170_at	CGI-111	3.47E-02	0.30
218231_at	NAGK	1.96E-02	7.86
218322_s_at	FACL5	2.46E-02	0.44
218473_s_at	FLJ22329	3.44E-02	0.34
218592_s_at	CECR5	3.59E-02	0.32
218855_at	TPRA40	6.06E-03	3.71
218869_at	MLYCD	2.75E-02	0.37
219099_at	C12orf5	2.25E-02	0.37
219799_s_at	RDHL	3.45E-02	0.14
219974_x_at	LOC55862	6.96E-03	0.37
220528_at	VNN3	3.56E-02	5.73
220753_s_at	CRYL1	1.58E-02	2.53
221210_s_at	C1orf13	1.85E-02	0.26
221218_s_at	TPK1	9.44E-04	4.22
221510_s_at	GLS	4.50E-02	0.33
222393_s_at	MAK3P	4.35E-02	0.27
222592_s_at	FACL5	1.68E-02	0.28
223040_at	NAT5	6.10E-02	0.18
223062_s_at	PSA	1.05E-01	0.17
223079_s_at	GLS	3.01E-02	0.36
223088_x_at	LOC55862	1.48E-01	0.43
223120_at	MGC1314	2.97E-02	0.47
223223_at	ARV1	1.42E-02	0.40

223306_at	EBRP	5.73E-03	2.25
223310_x_at	IPLA2(GAMMA)	2.45E-03	2.12
223405_at	C1orf13	3.96E-02	0.48
223738_s_at	FLJ10983	3.03E-02	0.34
223918_at	FACL6	3.41E-02	0.05
223921_s_at	GBA2	6.41E-02	0.42
223952_x_at	RDHL	1.27E-02	0.17
223982_s_at	IPLA2(GAMMA)	2.68E-03	2.31
224009_x_at	RDHL	1.98E-03	0.14
224327_s_at	DGAT2	4.31E-03	0.07
224480_s_at	MGC11324	1.55E-02	0.13
224724_at	SULF2.	3.02E-02	4.48
224776_at	DKFZp586M1819	7.08E-03	0.46
224835_at	KIAA1434	2.80E-02	2.01
224865_at	MLSTD2	2.09E-02	0.47
224915_x_at	C20ORF199	4.78E-03	3.03
224918_x_at	MGST1	3.38E-02	0.47
225040_s_at	RPE	2.96E-03	0.48
225272_at	SSAT2	2.12E-02	2.11
225366_at	FLJ10983	3.59E-02	0.26
225367_at	FLJ10983	3.52E-03	0.09
225679_at	C14orf35	3.03E-02	0.30
225847_at	KIAA1363	2.04E-02	0.22
225853_at	GNPNAT1	7.68E-02	0.28
225970_at	DDHD1	7.55E-03	3.44
225971_at	DDHD1	8.77E-03	6.16
226064_s_at	DGAT2	7.03E-03	0.22
226227_x_at	C20ORF199	8.55E-03	2.66
226368_at	CHST11	5.53E-02	0.45
226671_at	---	5.02E-04	2.74
226835_s_at	C20ORF199	1.33E-02	3.39
226929_at	MTHFR	4.81E-03	2.93
227038_at	MGC26963	8.20E-02	0.37
227199_at	DIP2	7.43E-02	0.45
227960_s_at	DKFZP566J2046	5.81E-02	0.35
228543_at	CSRP2BP	2.30E-02	0.38
228824_s_at	LTB4DH	4.11E-03	0.50
228825_at	LTB4DH	3.58E-02	0.44
230492_s_at	KIAA1434	3.95E-02	2.04
231736_x_at	MGST1	1.66E-02	0.39
231832_at	GALNT4	6.50E-03	0.12
231897_at	LTB4DH	3.29E-02	0.31
233124_s_at	LOC55862	9.37E-02	0.41
233555_s_at	SULF2.	6.50E-03	3.17
235103_at	MAN2A1	1.09E-02	0.40
235678_at	GM2A	5.11E-02	2.14
236077_at	CAPN3	2.43E-02	3.94
236514_at	PTE1	2.54E-01	0.28
239001_at	MGST1	3.31E-03	0.30
239035_at	MTHFR	2.97E-04	2.69

242281_at	KIAA1337	7.18E-03	0.30
242963_at	MGC26963	2.69E-02	0.32
35820_at	GM2A	2.72E-02	3.77
45288_at	LOC57406	8.02E-03	0.33

Methylation

221570_s_at	HSPC133	3.20E-02	0.46
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Nucleic acid metabolism

202613_at	CTPS	8.83E-03	0.12
208758_at	ATIC	6.05E-02	0.39

Nucleosome assembly

203428_s_at	DKFZP547E2110	3.53E-02	0.37
205967_at	HIST1H4C	2.97E-02	2.81
208046_at	HIST1H4A	6.33E-03	22.46
208180_s_at	HIST1H4H	1.12E-02	5.01
211998_at	H3F3B	8.64E-03	3.53
214290_s_at	HIST2H2AA	2.33E-02	2.36
214472_at	H3FB	1.61E-02	4.29
214481_at	H2AFN	8.30E-02	4.63
214500_at	H2AFY	1.96E-03	2.90
228063_s_at	DRLM	1.53E-02	0.29

Nucleotide metabolic process

201013_s_at	PAICS	8.72E-02	0.40
201014_s_at	PAICS	3.36E-02	0.20
201572_x_at	DCTD	4.90E-02	0.42
202854_at	HPRT1	5.90E-04	0.36
212378_at	GART	3.17E-02	0.41
223298_s_at	NT5C3	7.59E-02	7.15
225547_at	SNHG6	2.55E-02	2.44
226707_at	PP3856	1.26E-01	2.75

Organelle organization and biogenesis

223445_at	DTNBP1	4.12E-02	3.32
223763_at	DTNBP1	1.50E-02	2.51

Osteoclast differentiation

221266_s_at	DCSTAMP	1.52E-02	0.21
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Pentose-phosphate shunt

201118_at	PGD	4.75E-02	0.39
212973_at	RPIA	1.43E-01	0.34

Peptidyl-amino acid modification

209135_at	ASPH	6.02E-03	0.14
210896_s_at	ASPH	1.93E-02	0.16
242037_at	ASPH	7.29E-02	0.33

Peroxisome organization

201707_at	PXF	7.66E-02	0.14
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Phagocytosis

202877_s_at	C1QR1	1.86E-02	0.27
202878_s_at	C1QR1	6.25E-02	0.32
216950_s_at	FCGR1A	6.05E-02	2.50
222409_at	CORO1C	1.07E-01	0.42

Platelet activation

202430_s_at	PLSCR1	1.05E-02	5.77
202446_s_at	PLSCR1	2.78E-03	7.12
221488_s_at	LOC51596	8.97E-03	2.20

Protein amino acid acetylation

203138_at	HAT1	2.75E-02	0.24
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Protein amino acid ADP-ribosylation

212665_at	DKFZP434J214	2.89E-02	2.92
213051_at	ZAP	4.98E-02	4.75
218543_s_at	FLJ22693	5.57E-03	9.24
219033_at	FLJ21308	3.23E-02	2.32
223220_s_at	BAL	2.26E-03	13.76
225634_at	ZAP	6.08E-02	3.83
227807_at	BAL	4.96E-03	7.71
229138_at	C12orf6	2.78E-02	2.50
229350_x_at	PARP10	9.26E-03	5.32
225997_at	MOBK1A	5.68E-02	0.34
201745_at	TWF1	1.83E-02	0.34
202193_at	LIMK2	3.87E-02	2.78
204604_at	PFTK1	2.63E-02	0.26
211502_s_at	PFTK1	1.45E-02	0.48
225649_s_at	STK35	8.08E-03	0.37
226382_at	LOC283070	1.06E-02	3.97
228468_at	FLJ14813	3.10E-02	4.52
235085_at	DKFZp761P0423	3.86E-02	0.32
59644_at	BIKE	3.99E-02	2.30
205139_s_at	UST	8.04E-03	0.23

Protein catabolism

201267_s_at	PSMC3	2.92E-02	0.47
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Protein folding

200064_at	HSPCB	7.97E-02	0.28
200709_at	FKBP1A	8.47E-02	0.33
200806_s_at	HSPD1	8.92E-02	0.22
200807_s_at	HSPD1	3.19E-03	0.20
200812_at	CCT7	1.38E-02	0.15
200873_s_at	CCT8	3.87E-02	0.41
200877_at	CCT4	4.46E-02	0.44

200895_s_at	FKBP4	6.38E-02	0.15
200910_at	CCT3	1.01E-01	0.34
201216_at	C12orf8	5.55E-03	4.17
201326_at	CCT6A	4.70E-02	0.38
201327_s_at	CCT6A	1.96E-03	0.29
201946_s_at	CCT2	8.46E-03	0.24
201947_s_at	CCT2	2.08E-02	0.21
202842_s_at	DNAJB9	2.08E-04	3.52
202843_at	DNAJB9	2.23E-02	7.52
204571_x_at	PIN4	2.94E-02	0.46
204720_s_at	DNAJC6	1.25E-02	2.64
205133_s_at	HSPE1	6.41E-02	0.42
206976_s_at	HSPH1	4.95E-02	0.36
208666_s_at	ST13	2.56E-02	0.45
208667_s_at	ST13	5.91E-02	0.49
208687_x_at	HSPA8	8.81E-03	0.29
208696_at	CCT5	4.82E-02	0.36
209593_s_at	TOR1B	6.13E-02	2.14
210338_s_at	HSPA8	4.13E-02	0.27
211015_s_at	HSPA4	6.50E-02	0.45
211759_x_at	CKAP1	5.80E-02	2.11
212432_at	HMGE	6.18E-02	0.32
212693_at	MDN1	4.54E-02	0.14
212817_at	DNAJB5	2.69E-04	0.43
213111_at	KIAA0981	2.76E-02	0.47
214119_s_at	FKBP1A	1.66E-02	0.43
214224_s_at	PIN4	6.57E-02	0.39
214359_s_at	HSPCB	6.23E-02	0.13
217346_at	PPIA	6.94E-04	0.39
217911_s_at	BAG3	3.84E-02	2.06
218357_s_at	TIMM8B	3.67E-02	0.37
218459_at	TOR3A	3.18E-02	8.46
221891_x_at	HSPA8	1.69E-02	0.42
222530_s_at	MKKS	9.31E-03	0.21
223337_at	SDCCAG10	1.21E-03	0.36
224187_x_at	HSPA8	1.16E-03	0.36
228189_at	BAG4	7.64E-02	0.38
228622_s_at	DNAJC4	8.35E-02	2.96
229720_at	BAG1	4.36E-02	3.11
229969_at	---	4.13E-02	2.21
230659_at	KIAA0212	1.44E-01	2.60

Protein homooligomerization

201061_s_at	STOM	1.17E-01	2.27
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Protein metabolism

225106_s_at	OGFOD1	1.27E-01	0.37
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Protein modification

203703_s_at	KIAA0173	1.36E-02	0.44
208322_s_at	SIAT4A	3.68E-02	2.01
208939_at	SPS	4.32E-02	0.42
208941_s_at	SPS	2.53E-02	0.41
226119_at	LOC115294	7.98E-02	2.05

Protein repair

217977_at	SEPX1	2.03E-04	2.77
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Proteolysis

201212_at	LGMN	1.12E-02	2.62
202087_s_at	CTSL	3.36E-02	0.25
202276_at	DSS1	3.20E-02	0.42
202295_s_at	CTSH	6.32E-03	3.79
202381_at	ADAM9	3.86E-02	0.27
202659_at	PSMB10	3.96E-02	4.43
202902_s_at	CTSS	1.29E-02	2.64
202939_at	ZMPSTE24	4.60E-02	0.38
203936_s_at	MMP9	8.84E-03	0.20
204279_at	PSMB9	3.81E-02	7.37
204500_s_at	AGTPBP1	1.24E-02	2.50
204575_s_at	MMP19	8.17E-02	0.12
205180_s_at	ADAM8	2.75E-02	2.24
205559_s_at	PCSK5	6.18E-03	0.21
205560_at	PCSK5	1.34E-02	0.29
205997_at	ADAM28	4.10E-02	12.95
206134_at	ADAMDEC1	2.91E-02	5.67
208268_at	ADAM28	6.42E-02	4.63
208683_at	CAPN2	2.36E-02	3.07
208771_s_at	LTA4H	2.55E-02	3.58
209861_s_at	METAP2	5.87E-02	0.31
212779_at	KIAA1109	1.53E-01	4.87
213652_at	PCSK5	6.06E-03	0.24
214888_at	CAPN2	3.00E-02	2.64
217752_s_at	CN2	7.92E-02	3.70
217933_s_at	LAP3	6.79E-03	10.62
217949_s_at	IMAGE3455200	3.35E-02	0.29
218217_at	RISC	1.09E-02	3.05
225176_at	LNPEP	3.50E-02	3.75
225421_at	LOC135293	2.85E-03	5.65
225431_x_at	LOC135293	6.92E-03	2.38
226038_at	FLJ23749	9.24E-02	0.35
226760_at	LOC203411	3.64E-02	0.19
227018_at	DPP8	3.14E-02	0.47
228055_at	NAP1L	2.19E-02	5.39
229422_at	NRD1	7.13E-02	0.33
229644_at	PREP	8.07E-02	0.28
231769_at	FBXO6	4.24E-02	4.37
231866_at	LNPEP	3.23E-02	2.88

232617_at	CTSS	7.53E-03	2.59
236728_at	LNPEP	7.71E-02	2.58

Regulation of growth

208699_x_at	TKT	2.07E-02	2.81
208700_s_at	TKT	9.52E-03	2.66

Regulation of GTPase activity

203020_at	KIAA0471	3.73E-02	15.66
209403_at	PRC17	3.20E-02	2.67
212956_at	KIAA0882	1.03E-02	4.37
213982_s_at	KIAA0471	2.21E-02	21.29
218137_s_at	SMAP1	1.52E-02	2.32
221039_s_at	DDEF1	1.73E-01	0.41
222173_s_at	TBC1D2	4.78E-02	5.59
223461_at	LOC51256	4.14E-02	2.36
224622_at	KIAA1322	1.02E-01	0.40
224791_at	DDEF1	1.28E-01	0.42
224796_at	DDEF1	8.47E-02	0.47
33778_at	C22orf4	1.06E-02	2.71

Regulation of mRNA stability

209669_s_at	PAI-RBP1	8.50E-03	0.38
217724_at	PAI-RBP1	4.81E-02	0.28
217725_x_at	PAI-RBP1	8.83E-02	0.28
227369_at	PAI-RBP1	5.03E-02	0.28

Riboflavin biosynthetic process

203225_s_at	FLJ11149	4.05E-03	0.45
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Ribosome biogenesis and assembly

201323_at	EBNA1BP2	6.49E-03	0.16
219031_s_at	HSPC031	3.11E-02	0.23
220688_s_at	C1orf33	7.19E-03	0.04
223397_s_at	HSPC031	9.90E-03	0.38

RNA interference, production of siRNA

206061_s_at	DICER1	3.08E-03	0.30
212888_at	DICER1	5.73E-02	0.44
213229_at	DICER1	9.41E-03	0.33

RNA processing

200044_at	SFRS9	1.11E-02	0.49
200687_s_at	SF3B3	4.41E-02	0.33
200775_s_at	HNRPK	1.26E-01	0.47
200875_s_at	NOL5A	4.60E-02	0.42
201478_s_at	DKC1	8.39E-02	0.27
201479_at	DKC1	5.63E-02	0.31
201531_at	ZFP36	3.20E-02	3.28
201586_s_at	SFPQ	2.40E-02	0.35

201698_s_at	SFRS9	4.79E-02	0.47
201786_s_at	ADAR	1.14E-04	3.25
202127_at	PRPF4B	9.05E-03	0.41
202462_s_at	DDX46	2.57E-02	0.46
202469_s_at	CPSF6	1.59E-03	0.46
202567_at	SNRPD3	3.76E-02	0.26
203594_at	RTCD1	5.85E-02	0.38
203721_s_at	CGI-48	7.67E-02	0.41
203832_at	SNRPF	3.49E-02	0.44
203947_at	CSTF3	1.30E-02	0.34
204027_s_at	METTL1	1.19E-01	0.25
204031_s_at	PCBP2	2.59E-02	2.19
204245_s_at	RPP14	7.23E-02	0.41
204405_x_at	HSA9761	4.28E-02	0.29
204839_at	POP5	4.87E-03	0.37
205036_at	LSM6	9.26E-03	0.34
205292_s_at	HNRPA2B1	6.79E-03	0.44
205324_s_at	FTSJ1	4.58E-03	4.59
206095_s_at	FUSIP1	6.61E-03	0.37
206688_s_at	CPSF4	3.91E-02	0.45
207127_s_at	HNRPH3	5.02E-02	0.30
208765_s_at	HNRPR	3.50E-03	0.49
208863_s_at	SFRS1	7.57E-02	0.30
208990_s_at	HNRPH3	3.58E-02	0.40
209024_s_at	NSAP1	6.92E-02	0.33
209104_s_at	NOLA2	2.91E-02	0.27
209233_at	C2F	5.05E-03	0.21
209265_s_at	M6A	3.43E-02	0.39
209486_at	SAS10	2.00E-02	0.42
210110_x_at	HNRPH3	7.92E-03	0.18
210180_s_at	SFRS10	8.50E-03	2.07
210588_x_at	HNRPH3	3.35E-03	0.24
211090_s_at	PRPF4B	7.01E-02	0.33
211270_x_at	PTBP1	3.30E-02	0.49
211784_s_at	SFRS1	2.86E-02	0.50
211931_s_at	hnRNPA3	4.82E-02	0.45
211932_at	hnRNPA3	3.05E-02	0.42
211951_at	NOLC1	6.07E-02	0.25
212015_x_at	PTBP1	3.99E-02	0.47
212031_at	S164	4.90E-02	0.39
212266_s_at	SFRS5	2.05E-03	0.45
212422_at	PDCD11	2.62E-02	0.39
212438_at	RY1	1.03E-01	0.41
212499_s_at	FCF1	9.92E-03	0.46
212563_at	BOP1	7.86E-03	0.12
212627_s_at	KIAA0116	5.57E-02	0.23
213593_s_at	HSU53209	1.00E-02	2.01
213649_at	SFRS7	4.04E-02	2.32
213653_at	METTL3	5.56E-02	0.08
213687_s_at	RPL35A	2.50E-02	2.43

213876_x_at	U2AF1RS2	4.60E-02	2.04
213937_s_at	FTSJ1	8.38E-03	3.13
214661_s_at	C4orf9	2.04E-02	0.29
215905_s_at	HPRP8BP	5.31E-02	0.20
216212_s_at	DKC1	3.18E-02	0.15
216306_x_at	PTBP1	2.09E-02	0.48
217106_x_at	HSA9761	1.91E-02	0.18
217834_s_at	NSAP1	9.01E-03	0.35
217983_s_at	RNASE6PL	7.21E-03	2.41
217984_at	RNASE6PL	8.94E-03	2.27
218497_s_at	RNASEH1	9.52E-03	0.45
218605_at	TFB2M	5.72E-02	0.36
218617_at	IPT	9.22E-02	0.50
218708_at	NXT1	2.80E-02	2.67
218882_s_at	WDR3	3.08E-03	0.26
218984_at	FLJ20485	3.47E-03	0.17
219110_at	NOLA1	1.75E-02	0.45
219299_at	FLJ20772	2.85E-03	0.48
222398_s_at	U5-116KD	6.78E-02	0.48
222443_s_at	RBM8A	4.88E-02	0.48
223096_at	NOP5/NOP58	1.23E-01	0.40
223267_at	FLJ20432	1.78E-02	0.43
223490_s_at	RRP40	7.75E-02	0.24
224364_s_at	PPIL3	1.81E-02	2.31
224780_at	MGC14439	5.38E-02	0.41
225082_at	CPSF3	2.93E-02	0.44
225194_at	PLRG1	7.42E-02	0.38
225291_at	OLD35	1.79E-03	6.12
225348_at	FUSIP1	1.59E-01	0.29
226180_at	TA-WDRP	5.19E-02	0.28
227447_at	PPAP2A	4.87E-02	0.31
227622_at	PCF11	2.01E-02	2.35
227916_x_at	RRP40	3.30E-03	0.37
228050_at	FLJ12787	5.99E-02	0.32
229220_x_at	NOM1	5.05E-02	0.26
229632_s_at	INTS10	7.14E-02	0.31
229666_s_at	CSTF3	2.77E-02	0.48
234295_at	DBR1	1.48E-02	0.39
234799_at	ADARB1	7.23E-02	0.14
236613_at	S164	1.24E-02	0.27
237813_at	PCBP2	6.49E-03	2.47
241937_s_at	WDR4	6.99E-02	0.08
32723_at	CSTF1	1.43E-02	0.48
34868_at	KIAA1089	2.53E-03	0.48

Signal transduction

200604_s_at	PRKAR1A	8.51E-03	0.35
200605_s_at	PRKAR1A	1.26E-01	0.39
200658_s_at	PHB	1.06E-02	0.23
200678_x_at	GRN	7.51E-03	3.02

200762_at	DPYSL2	4.18E-03	9.78
201401_s_at	ADRBK1	5.11E-02	3.80
201430_s_at	DPYSL3	1.28E-02	0.17
201431_s_at	DPYSL3	2.22E-02	0.25
201642_at	IFNGR2	9.48E-03	2.08
201760_s_at	WSB2	3.38E-02	0.49
201923_at	PRDX4	4.01E-02	0.19
201995_at	EXT1	1.99E-01	3.94
202096_s_at	TSPO	5.77E-03	4.44
202174_s_at	PCM1	2.71E-03	0.36
202255_s_at	SIPA1L1	7.49E-03	2.92
202543_s_at	GMFB	1.28E-02	0.34
202544_at	GMFB	1.04E-03	0.41
202573_at	CSNK1G2	6.66E-03	2.22
202604_x_at	ADAM10	3.12E-02	0.30
202609_at	EPS8	1.30E-01	0.30
202625_at	LYN	5.36E-02	2.61
202626_s_at	LYN	1.67E-02	2.52
202677_at	RASA1	7.16E-03	0.14
202686_s_at	AXL	9.51E-03	20.72
202794_at	INPP1	3.28E-02	0.37
202853_s_at	RYK	7.44E-02	0.43
202973_x_at	FAM13A1	1.12E-02	0.21
202974_at	MPP1	3.24E-03	0.43
203011_at	IMPA1	2.72E-02	0.32
203110_at	PTK2B	2.33E-02	3.09
203126_at	IMPA2	7.16E-02	3.25
203236_s_at	LGALS9	6.35E-03	3.86
203332_s_at	INPP5D	9.01E-03	2.73
203355_s_at	EFA6R	3.82E-02	0.11
203379_at	RPS6KA1	6.70E-03	0.22
203510_at	MET	8.26E-02	0.41
203593_at	CD2AP	1.31E-01	3.54
203708_at	PDE4B	4.81E-02	3.43
203761_at	SLA	4.25E-02	0.34
203821_at	DTR	3.56E-02	0.29
203843_at	RPS6KA3	6.45E-02	0.24
203907_s_at	KIAA0763	4.66E-05	0.45
204011_at	SPRY2	8.31E-03	0.02
204036_at	EDG2	4.41E-03	0.23
204037_at	EDG2	3.57E-02	0.27
204038_s_at	EDG2	9.22E-04	0.20
204115_at	GNG11	5.65E-02	0.05
204271_s_at	EDNRB	1.02E-02	0.16
204392_at	CAMK1	3.78E-02	0.37
204834_at	FGL2	3.74E-01	2.16
204882_at	KIAA0053	3.31E-02	2.18
204982_at	GIT2	9.71E-03	2.04
205220_at	HM74	4.91E-02	2.87
205294_at	BAIAP2	5.71E-04	0.47

205327_s_at	ACVR2	2.47E-02	0.48
205627_at	CDA	2.82E-02	31.52
205823_at	RGS12	6.78E-04	6.23
205842_s_at	JAK2	1.36E-02	7.64
205891_at	ADORA2B	2.57E-02	0.17
206025_s_at	TNFAIP6	8.62E-03	3.78
206026_s_at	TNFAIP6	2.20E-02	4.14
206138_s_at	PIK4CB	6.15E-02	0.44
206139_at	PIK4CB	1.10E-02	0.48
206267_s_at	MATK	4.98E-02	0.05
206571_s_at	MAP4K4	4.06E-02	0.46
207121_s_at	MAPK6	1.36E-02	0.47
207216_at	TNFSF8	1.05E-01	0.25
207419_s_at	RAC2	6.57E-02	0.35
207563_s_at	OGT	1.07E-02	0.42
207564_x_at	OGT	5.33E-02	0.47
207610_s_at	EMR2	3.82E-03	0.36
208018_s_at	HCK	5.54E-04	2.95
208370_s_at	DSCR1	3.06E-02	0.20
208373_s_at	P2RY6	4.81E-02	5.03
208854_s_at	STK24	2.04E-03	3.23
208876_s_at	PAK2	2.04E-02	0.42
208891_at	DUSP6	1.65E-02	0.12
208892_s_at	DUSP6	2.52E-02	0.13
208893_s_at	DUSP6	9.10E-03	0.09
208944_at	TGFBR2	4.17E-02	0.29
209050_s_at	RALGDS	8.83E-04	11.44
209286_at	CDC42EP3	1.26E-01	6.09
209287_s_at	CDC42EP3	3.84E-02	2.47
209288_s_at	CDC42EP3	1.84E-02	3.52
209323_at	PRKRIR	4.38E-02	0.30
209333_at	ULK1	4.72E-03	2.67
209409_at	GRB10	7.45E-02	0.45
209471_s_at	FNTA	7.77E-02	0.50
209545_s_at	RIPK2	2.55E-02	2.61
209684_at	RIN2	1.25E-02	7.89
209896_s_at	MGC14433	3.44E-04	0.36
210220_at	FZD2	7.02E-03	10.62
210621_s_at	RASA1	3.99E-04	0.22
210754_s_at	LYN	1.26E-02	2.07
211284_s_at	GRN	1.88E-02	2.49
211543_s_at	GPRK6	6.91E-02	0.43
211858_x_at	GNAS	1.85E-02	2.36
212075_s_at	CSNK2A1	5.39E-02	0.34
212252_at	CAMKK2	3.58E-03	4.33
212273_x_at	GNAS	1.70E-02	2.10
212307_s_at	OGT	7.48E-03	0.34
212458_at	LOC200734	6.72E-02	0.27
212610_at	MGC14433	7.93E-02	0.32
212873_at	HA-1	4.88E-02	2.18

213135_at	TIAM1	1.63E-02	0.37
213222_at	PLCB1	5.17E-02	0.25
213305_s_at	PPP2R5C	8.17E-02	2.70
213603_s_at	RAC2	9.49E-03	0.41
213812_s_at	CAMKK2	6.82E-03	2.97
214054_at	DOK2	9.21E-02	0.16
214075_at	SPUF	2.70E-02	0.24
214172_x_at	RYK	5.59E-02	0.44
214435_x_at	RALA	5.57E-02	2.38
214937_x_at	PCM1	6.37E-02	0.38
215188_at	STK24	1.19E-02	2.77
216041_x_at	GRN	1.87E-02	3.04
217168_s_at	HERPUD1	2.44E-03	3.88
217297_s_at	MYO9B	2.34E-02	2.25
218238_at	CRFG	9.04E-03	0.25
218239_s_at	CRFG	7.71E-03	0.23
218311_at	MAP4K3	7.38E-02	0.34
218501_at	ARHGEF3	1.04E-01	3.34
218589_at	P2RY5	9.96E-02	0.45
218806_s_at	VAV3	1.03E-02	0.17
218807_at	VAV3	1.52E-02	0.22
219112_at	RA-GEF-2	2.20E-02	0.30
219257_s_at	SPHK1	1.71E-03	2.15
219290_x_at	DAPP1	1.57E-02	2.91
219471_at	C13orf18	3.73E-02	0.08
219500_at	CLC	1.19E-03	0.39
219607_s_at	MS4A4A	1.12E-01	3.43
219631_at	ST7	5.68E-02	0.11
219666_at	MS4A6A	2.06E-02	5.55
219677_at	SSB1	6.30E-02	0.34
219752_at	RASAL1	4.64E-02	0.49
220034_at	IRAK3	1.94E-02	2.74
220253_s_at	ST7	1.32E-01	0.17
221656_s_at	FLJ10521	6.51E-02	2.38
221748_s_at	TNS	2.91E-02	2.75
221755_at	DKFZp762C186	7.48E-03	2.22
222449_at	TMEPAI	3.58E-02	7.09
222858_s_at	DAPP1	7.85E-02	5.60
222859_s_at	DAPP1	1.11E-02	2.14
223280_x_at	MS4A6A	3.55E-03	6.65
223343_at	MS4A7	2.32E-04	2.88
223553_s_at	FLJ22570	5.49E-02	2.45
223767_at	GPR84	6.74E-02	2.63
223922_x_at	MS4A6A	1.37E-02	5.64
224356_x_at	MS4A6A	1.83E-02	5.59
224358_s_at	MS4A7	8.62E-02	2.56
224880_at	RALA	1.17E-02	3.49
224909_s_at	PRex1	8.10E-02	2.55
224964_s_at	GNG2	1.23E-02	3.82
225056_at	SIPA1L2	6.03E-03	0.37

225144_at	BMPR2	2.51E-02	2.32
225171_at	MacGAP	6.00E-02	0.48
225188_at	ALS2CR9	6.97E-02	0.26
225189_s_at	ALS2CR9	3.11E-02	0.23
225564_at	FLJ31208	8.79E-04	2.81
225618_at	ARHGAP27	4.27E-02	2.02
225637_at	FLJ20186	7.71E-03	0.26
225710_at	GNB4	5.67E-04	2.63
225756_at	CSNK1E	9.20E-03	0.42
226056_at	CDGAP	7.04E-02	3.31
226075_at	SSB1	4.93E-02	0.28
226178_at	SOCS7	7.87E-02	0.34
226335_at	RPS6KA3	1.09E-01	0.32
226837_at	SPRED1	8.27E-02	0.06
226979_at	MAP3K2	3.93E-03	3.65
227033_at	GRP58	3.38E-03	2.52
227073_at	MAP3K2	9.75E-03	4.03
227232_at	EVL	3.95E-02	0.20
227265_at	---	9.91E-02	5.09
227266_s_at	FYB	4.58E-02	12.99
227425_at	REPS2	3.12E-02	2.50
227697_at	SOCS3	2.08E-02	5.38
227897_at	RAP2B	3.25E-02	2.21
229453_at	PDIA3	4.51E-04	3.32
229497_at	ANKHD1	2.34E-02	5.01
229510_at	NYD-SP21	5.03E-03	7.82
229686_at	P2RY8	8.62E-02	4.22
229723_at	TAGAP	3.34E-03	22.43
230147_at	F2RL2	5.99E-02	0.13
231747_at	CYSLTR1	2.77E-02	2.92
232148_at	NSMAF	1.22E-02	2.09
233079_at	MERTK	4.67E-02	0.41
233587_s_at	SIPA1L2	4.13E-02	0.44
234050_at	TAGAP	9.00E-04	24.55
235067_at	MKLN1	1.09E-01	0.20
236561_at	TGBR1	1.12E-01	3.41
238622_at	RAP2B	4.34E-02	2.29
238909_at	S100A10	4.85E-02	2.22
241742_at	PRAM-1	1.30E-03	2.51
241819_at	TNFSF8	6.48E-03	0.27
242079_at	RGS12	9.59E-03	4.83
242388_x_at	TAGAP	6.60E-03	19.26
242778_at	LPXN	1.90E-02	3.32
243099_at	NFAM1	1.79E-02	2.09
38037_at	DTR	1.98E-02	0.21
44790_s_at	C13orf18	2.01E-02	0.18
90265_at	CENTA1	1.26E-02	2.27
220610_s_at	LRRFIP2	4.09E-02	2.06
91703_at	DKFZp762C186	8.35E-03	2.93

Small GTPase mediated signal transduction

200749_at	RAN	7.86E-02	0.34
200750_s_at	RAN	6.00E-03	0.35
202206_at	ARL7	1.03E-01	4.75
202207_at	ARL7	5.97E-02	3.64
203581_at	RAB4A	1.50E-03	0.42
204214_s_at	RAB32	1.71E-02	2.50
212426_s_at	YWHAQ	3.31E-02	0.43
217763_s_at	RAB31	3.73E-02	3.31
223168_at	ARHU	1.03E-02	0.10
223169_s_at	ARHU	7.09E-02	0.21
226345_at	ARL8	9.08E-03	2.20
242727_at	ARL8	5.14E-02	3.99

Spermatogenesis

218224_at	PNMA1	3.94E-02	0.46
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Spermidine biosynthetic process

201516_at	SRM	7.67E-03	0.22
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Spliceosome assembly

201241_at	DDX1	1.37E-02	0.41
202690_s_at	SNRPD1	2.75E-02	0.24
202691_at	SNRPD1	8.82E-02	0.25
205644_s_at	SNRPG	5.75E-03	0.47

Steroid biosynthesis

202323_s_at	GOCAP1	1.39E-04	2.79
202735_at	EBP	1.15E-01	4.04
210950_s_at	FDFT1	4.39E-03	2.47
213787_s_at	EBP	2.05E-02	2.41
217989_at	RetSDR2	6.25E-03	3.27
220081_x_at	HSD17B7	1.27E-02	2.04
227629_at	PRLR	1.02E-01	2.82

Synaptic transmission

208912_s_at	CNP	9.38E-02	7.08
226651_at	HOMER1	7.19E-02	0.34

Transcription

200020_at	TARDBP	3.75E-02	0.31
200050_at	ZNF146	2.28E-02	0.45
200670_at	XBP1	5.53E-03	3.33
200768_s_at	MAT2A	3.83E-03	0.39
200769_s_at	MAT2A	2.44E-03	0.11
200776_s_at	BZW1	3.79E-02	0.30
200777_s_at	BZW1	5.02E-02	0.39
200870_at	UNRIP	6.77E-02	0.49
200887_s_at	STAT1	4.88E-03	7.41
200941_at	HSBP1	1.14E-03	0.46

200959_at	FUS	1.22E-02	0.38
201065_s_at	GTF2I	8.19E-03	2.61
201074_at	SMARCC1	4.45E-03	0.46
201170_s_at	BHLHB2	6.11E-02	4.30
201175_at	CGI-31	3.46E-02	0.28
201182_s_at	CHD4	4.83E-02	0.41
201183_s_at	CHD4	1.89E-02	0.20
201184_s_at	CHD4	1.92E-02	0.41
201277_s_at	HNRPAB	4.11E-02	0.30
201328_at	ETS2	1.30E-02	0.21
201329_s_at	ETS2	3.74E-02	0.28
201416_at	SOX4	5.08E-02	14.04
201464_x_at	JUN	9.95E-03	0.27
201466_s_at	JUN	3.07E-02	0.44
201473_at	JUNB	8.49E-02	2.10
201483_s_at	SUPT4H1	2.80E-02	0.50
201606_s_at	PWP1	3.39E-02	0.50
201619_at	PRDX3	2.71E-02	0.45
201694_s_at	EGR1	1.18E-02	2.24
201697_s_at	DNMT1	3.52E-02	2.22
201702_s_at	PPP1R10	3.81E-03	2.68
201783_s_at	RELA	7.29E-04	3.79
201803_at	POLR2B	1.68E-02	0.45
201833_at	HDAC2	3.05E-02	0.35
201846_s_at	RYBP	1.19E-02	2.73
202033_s_at	RB1CC1	2.77E-03	2.16
202136_at	ZMYND11	4.40E-02	0.44
202168_at	TAF9	2.62E-02	0.41
202265_at	BMI1	3.34E-02	0.21
202347_s_at	HIP2	6.63E-03	0.50
202396_at	TCERG1	3.73E-02	0.26
202417_at	KEAP1	3.03E-03	0.44
202426_s_at	RXRA	4.02E-02	2.03
202455_at	HDAC5	4.97E-02	3.60
202531_at	IRF1	2.04E-03	3.79
202602_s_at	HTATSF1	7.37E-02	0.32
202642_s_at	TRRAP	5.65E-02	0.49
202666_s_at	BAF53A	1.18E-02	0.24
202672_s_at	ATF3	7.78E-02	2.69
202768_at	FOSB	8.77E-02	5.50
202810_at	DRG1	3.52E-02	0.42
202863_at	SP100	3.90E-02	3.73
202864_s_at	SP100	2.05E-02	6.58
202957_at	HCLS1	2.60E-02	0.28
203140_at	BCL6	1.09E-02	0.29
203177_x_at	TCF6L1	6.98E-02	0.33
203275_at	IRF2	3.34E-02	2.68
203297_s_at	JMJ	2.55E-02	0.32
203298_s_at	JMJ	6.80E-03	0.23
203313_s_at	TGIF	5.50E-03	2.58

203321_s_at	KIAA0863	3.16E-02	2.27
203394_s_at	HES1	5.73E-03	53.08
203395_s_at	HES1	1.73E-02	5.10
203521_s_at	ZNF318	3.55E-02	0.30
203556_at	KIAA0854	2.11E-02	2.49
203574_at	NFIL3	1.92E-02	6.17
203624_at	DXYS155E	7.68E-02	2.05
203753_at	TCF4	6.98E-02	3.66
203882_at	ISGF3G	4.31E-03	3.42
203893_at	TAF9	1.87E-02	0.50
203964_at	NMI	2.90E-02	4.70
204072_s_at	13CDNA73	4.10E-02	2.62
204099_at	SMARCD3	3.57E-02	5.54
204108_at	NFYA	1.91E-02	0.34
204197_s_at	RUNX3	3.98E-04	20.17
204198_s_at	RUNX3	5.28E-03	12.16
204211_x_at	PRKR	2.14E-02	6.85
204512_at	HIVEP1	1.42E-02	2.93
204618_s_at	GABPB1	1.32E-02	0.41
204650_s_at	APBB3	7.70E-02	2.94
204652_s_at	NRF1	2.64E-02	0.43
204702_s_at	NFE2L3	4.79E-02	2.84
204790_at	MADH7	1.33E-02	3.22
204900_x_at	SAP30	2.96E-02	5.58
204908_s_at	BCL3	1.81E-02	2.73
204959_at	MNDA	1.48E-01	3.70
205004_at	NRF	9.00E-02	0.34
205205_at	RELB	2.02E-02	3.34
205323_s_at	MTF1	1.04E-01	0.47
206332_s_at	IFI16	1.89E-02	10.14
206503_x_at	PML	9.15E-03	92.74
206715_at	TFEC	2.51E-02	2.36
207069_s_at	MADH6	4.76E-02	20.63
207233_s_at	MITF	1.59E-03	0.10
207515_s_at	POLR1C	2.65E-02	0.35
207630_s_at	CREM	2.09E-02	0.11
208012_x_at	SP110	2.75E-02	22.69
208328_s_at	MEF2A	4.72E-02	3.41
208392_x_at	SP110	1.13E-02	28.88
208436_s_at	IRF7	4.72E-02	7.71
208510_s_at	PPARG	1.11E-02	0.30
208763_s_at	DSIPI	6.26E-03	5.29
208839_s_at	TIP120A	1.29E-01	0.42
208961_s_at	COPEB	2.42E-03	2.58
208965_s_at	IFI16	6.97E-03	19.41
208966_x_at	IFI16	3.99E-03	10.55
209034_at	PROL2	1.17E-03	3.36
209102_s_at	HBP1	1.09E-03	2.09
209199_s_at	MEF2C	3.76E-02	0.31
209200_at	MEF2C	6.89E-02	0.29

209302_at	POLR2H	2.67E-02	0.43
209317_at	RPA40	8.49E-03	0.34
209330_s_at	HNRPD	4.28E-03	0.48
209383_at	DDIT3	3.71E-03	9.02
209503_s_at	PSMC5	5.80E-02	0.47
209511_at	POLR2F	5.45E-02	0.44
209571_at	CIR	4.51E-02	2.03
209636_at	NFKB2	3.10E-02	4.81
209640_at	PML	8.50E-02	2.81
209761_s_at	SP110	2.58E-02	27.09
209762_x_at	SP110	6.95E-03	15.18
209928_s_at	MSC	9.75E-02	0.48
209967_s_at	CREM	3.16E-02	0.06
209969_s_at	STAT1	9.95E-03	11.36
210044_s_at	LYL1	1.98E-02	8.44
210053_at	TAF5	3.39E-02	0.39
210218_s_at	SP100	1.85E-02	3.89
210555_s_at	NFATC3	7.12E-02	0.13
210891_s_at	GTF2I	2.08E-02	2.66
211009_s_at	ZNF271	2.95E-02	0.42
211012_s_at	PML	6.68E-02	23.25
211013_x_at	PML	1.71E-04	71.11
211014_s_at	PML	6.00E-02	4.44
211375_s_at	ILF3	1.77E-02	0.42
211615_s_at	LRPPRC	1.03E-01	0.24
211730_s_at	PCNP	5.14E-02	0.42
211971_s_at	LRPPRC	8.11E-02	0.46
212124_at	RAI17	7.28E-03	3.12
212382_at	---	8.35E-02	5.22
212535_at	MEF2A	1.88E-03	3.97
212614_at	MRF2	3.81E-04	0.08
212641_at	HIVEP2	2.33E-02	3.58
212642_s_at	HIVEP2	3.10E-03	3.37
212689_s_at	TSGA	1.66E-04	3.36
212720_at	PAPOLA	4.47E-02	0.43
212758_s_at	TCF8	1.63E-01	0.20
212893_at	DKFZP564I052	7.05E-03	0.31
213138_at	MRF-1	1.34E-02	2.63
213293_s_at	TRIM22	2.43E-03	13.86
213294_at	FLJ38348	1.14E-02	12.89
213311_s_at	KIAA1049	1.23E-02	2.77
213370_s_at	SFMBT	2.05E-02	0.44
213720_s_at	SMARCA4	4.94E-02	0.49
213763_at	HIPK2	2.26E-02	0.38
213825_at	OLIG2	1.96E-02	3.67
213931_at	ID2	4.29E-04	11.97
214009_at	MSL3L1	4.04E-02	2.10
214173_x_at	C19orf2	1.01E-02	0.41
214188_at	HIS1	6.46E-02	3.35
214508_x_at	CREM	2.72E-02	0.18

214746_s_at	EZI	1.42E-02	2.59
214924_s_at	KIAA1042	5.21E-02	0.41
215078_at	SOD2	2.10E-02	4.95
215889_at	SKIL	1.76E-02	3.51
216262_s_at	TGIF2	4.30E-02	2.58
217294_s_at	ENO1	6.42E-02	0.46
217529_at	POLR2J2	1.03E-02	3.29
217952_x_at	PHF3	5.40E-02	2.11
217985_s_at	BAZ1A	3.20E-03	2.19
218016_s_at	RPC5	1.41E-02	0.22
218088_s_at	GTR2	7.23E-03	2.32
218145_at	C20orf97	4.87E-02	5.75
218188_s_at	TIMM13	2.23E-02	0.37
218250_s_at	CNOT7	2.87E-02	0.49
218486_at	TIEG2	3.20E-02	3.25
218502_s_at	TRPS1	2.54E-02	0.28
218517_at	Jade-1	7.48E-02	0.31
218559_s_at	MAFB	5.14E-02	0.38
218645_at	ZNF277	7.77E-03	2.69
218724_s_at	TGIF2	5.33E-02	2.90
218859_s_at	C20orf6	2.93E-02	0.24
218883_s_at	FLJ23468	3.04E-02	4.19
218902_at	NOTCH1	6.66E-02	3.02
218926_at	MYNN	2.35E-03	0.38
218947_s_at	FLJ10486	1.85E-02	0.34
219433_at	BCoR	2.48E-02	2.86
219603_s_at	ZNF226	4.79E-03	0.45
219657_s_at	KLF3	3.40E-02	0.41
219801_at	MGC10520	3.61E-02	3.74
219870_at	ATF7IP2	5.41E-02	2.80
219904_at	MGC4161	7.02E-04	3.48
220367_s_at	SAP130	2.65E-02	2.48
220607_x_at	TH1L	8.32E-02	0.32
221434_s_at	DC50	1.52E-05	0.41
221540_x_at	GTF2H2	1.28E-02	0.34
221841_s_at	KLF4	9.63E-03	6.12
221924_at	DKFZp761I2123	3.40E-02	2.31
222204_s_at	RRN3	5.87E-02	0.39
222266_at	C19orf2	2.69E-03	0.37
222490_at	RPC5	1.12E-01	0.16
222514_at	GTR2	6.86E-03	2.07
222624_s_at	LOC51193	1.16E-01	0.11
222651_s_at	TRPS1	2.49E-03	0.12
222670_s_at	MAFB	9.54E-02	0.28
222759_at	CGI-85	1.21E-02	0.40
222765_x_at	C20orf6	9.21E-02	0.22
222794_x_at	FLJ10486	4.85E-02	0.34
222867_s_at	CGI-125	1.49E-03	0.25
223135_s_at	BBX	4.58E-02	2.02
223214_s_at	ZHX1	1.15E-01	0.41

223282_at	SDCCAG33	7.39E-02	5.94
223286_at	HSPC002	4.63E-03	0.33
223287_s_at	FOXP1	1.51E-02	3.54
223389_s_at	HSPC189	4.65E-02	2.83
223392_s_at	KIAA1474	3.65E-03	0.43
223393_s_at	KIAA1474	5.36E-02	0.32
223403_s_at	Rpo1-2	1.77E-01	0.16
223728_at	MGC13198	6.40E-02	0.30
223907_s_at	PINX1	5.89E-02	0.50
223909_s_at	HDAC8	2.36E-02	0.46
223980_s_at	SP110	1.94E-02	25.82
224016_at	HIPK2	5.31E-02	0.37
224130_s_at	SRA1	3.20E-02	2.92
224218_s_at	TRPS1	6.01E-02	0.28
224326_s_at	MBLR	1.45E-02	0.38
224377_s_at	RAB18	1.57E-02	0.48
224518_s_at	MGC13105	3.94E-02	0.12
224654_at	DDX21	4.93E-02	0.34
224701_at	KIAA1268	1.00E-02	16.08
224714_at	MKI67IP	4.01E-02	0.31
224837_at	FOXP1	1.37E-02	2.89
224838_at	FOXP1	4.04E-02	2.83
224864_at	SRA1	4.37E-02	2.86
224951_at	LOC91012	3.40E-04	0.34
225006_x_at	TH1L	1.44E-02	0.29
225053_at	CNOT7	4.63E-02	0.45
225076_s_at	KIAA1404	1.05E-02	2.34
225097_at	HIPK2	5.88E-03	0.36
225115_at	HIPK2	5.74E-03	0.39
225140_at	KLF3	4.73E-02	0.24
225145_at	NCOA5	3.02E-02	0.42
225251_at	RAB24	1.56E-02	4.25
225261_x_at	TH1L	7.77E-02	0.12
225344_at	ERAP140	4.79E-02	9.82
225368_at	HIPK2	2.36E-02	0.30
225501_at	MGC14797	1.56E-01	0.26
225629_s_at	KIAA1538	1.03E-04	2.76
225636_at	STAT2	3.23E-02	6.92
225768_at	NR1D2	5.40E-02	4.38
225798_at	JAZF1	1.60E-02	3.64
225800_at	JAZF1	1.18E-01	2.42
225865_x_at	TH1L	5.74E-02	0.25
225884_s_at	ZNF336	6.36E-06	2.95
225980_at	C14orf117	6.41E-03	2.23
226037_s_at	TAF9L	1.20E-02	0.46
226066_at	MITF	1.63E-03	0.06
226089_at	MGC23920	8.74E-02	0.40
226090_x_at	MGC23920	3.43E-02	0.29
226099_at	ELL2	2.84E-02	0.43
226111_s_at	ZFP385	3.21E-03	4.52

226137_at	ATBF1	1.24E-02	2.95
226352_at	JMY	8.40E-02	2.74
226562_at	FLJ35867	1.14E-02	0.46
226646_at	KLF2	1.01E-01	2.26
226648_at	HIF1AN	9.76E-04	0.27
226715_at	FOXK1	5.08E-02	0.42
227111_at	ZBTB34	6.42E-03	0.47
227150_at	KIAA1337	3.63E-02	0.43
227254_at	---	2.72E-02	0.48
227278_at	TAF13	4.21E-02	0.49
227347_x_at	Hes4	3.89E-02	72.97
227404_s_at	EGR1	4.95E-02	3.47
227558_at	CBX4	2.14E-02	4.86
227680_at	LOC284695	3.85E-02	0.48
228092_at	CREM	3.45E-02	0.39
228099_at	MGC41917	3.92E-02	2.08
228170_at	OLIG1	2.28E-03	15.53
228177_at	CREBBP	6.02E-02	3.39
228230_at	PRIC285	5.67E-02	3.78
228758_at	BCL6	4.61E-02	0.17
228813_at	HDAC4	9.22E-05	2.43
228904_at	HOXB3	1.25E-01	4.22
228927_at	ZNF397	1.76E-02	0.50
228988_at	ZNF6	1.10E-01	0.12
229215_at	ASCL2	8.82E-03	2.81
229435_at	GLIS3	1.92E-01	0.11
229540_at	RBPSUH	2.90E-02	2.23
229586_at	BC022889	2.69E-02	2.18
230108_at	ERCC6	1.40E-02	2.21
230258_at	MGC33662	6.94E-02	0.18
230511_at	CREM	3.29E-02	0.17
230777_s_at	PRDM15	8.64E-02	0.43
231108_at	FUS	8.53E-03	3.37
232008_s_at	BBX	5.49E-02	2.89
232231_at	RUNX2	4.55E-02	6.58
232787_at	PRIC285	9.36E-02	5.05
233575_s_at	TLE4	8.48E-02	0.46
234351_x_at	TRPS1	6.56E-03	0.26
235121_at	LOC147947	1.22E-01	0.21
235122_at	---	4.58E-01	0.39
235231_at	ZNF789	1.61E-01	0.23
235508_at	PML	2.78E-02	4.22
235593_at	ZFHX1B	4.00E-02	0.42
235760_at	NSD1	9.42E-02	0.39
236471_at	NFE2L3	3.94E-02	4.08
236645_at	HBP1	1.35E-02	3.69
237426_at	SP100	9.38E-03	3.20
238346_s_at	NCOA6IP	4.92E-03	0.49
238725_at	---	5.46E-03	3.92
239412_at	IRF5	1.82E-02	2.16

239428_at	RAB1A	1.56E-03	2.09
242176_at	MEF2A	6.66E-02	2.41
242218_at	PPARD	1.29E-02	0.13
242738_s_at	---	1.56E-02	3.70
242761_s_at	FLJ32191	1.33E-01	0.18
242790_at	EAP30	6.99E-02	4.06
242911_at	KIAA1025	7.19E-02	2.03
243683_at	MORF4L2	2.90E-02	2.16
243985_at	GTF2A2	4.06E-02	0.50
244470_at	RNF12	2.28E-02	2.03
31845_at	MEF	3.15E-02	2.11
50221_at	TFEB	2.10E-02	4.21
M97935_3_at	STAT1	4.25E-03	9.86
M97935_5_at	STAT1	7.16E-03	4.81
M97935_MA_at	STAT1	5.62E-04	10.34
M97935_MB_at	STAT1	1.27E-03	5.61

Translation

200023_s_at	EIF3S5	2.85E-03	2.11
200674_s_at	RPL32	4.74E-02	2.06
200716_x_at	RPL13A	7.70E-03	2.41
200823_x_at	RPL29	4.88E-02	2.39
200842_s_at	EPRS	7.33E-02	0.49
200843_s_at	EPRS	7.33E-02	0.42
201016_at	EIF1A	9.12E-03	0.29
201019_s_at	EIF1A	1.10E-02	0.36
201024_x_at	IF2	7.75E-02	0.43
201025_at	IF2	6.23E-04	0.25
201027_s_at	IF2	9.70E-02	0.30
201144_s_at	EIF2S1	1.70E-02	0.26
201206_s_at	RRBP1	6.15E-02	3.29
201330_at	RARS	4.07E-02	0.44
201435_s_at	EIF4E	8.58E-02	0.32
201436_at	EIF4E	4.87E-02	0.41
202042_at	HARS	3.02E-02	0.31
202138_x_at	JTV1	5.55E-02	0.41
202159_at	FARSL	1.84E-02	0.47
202387_at	BAG1	2.97E-02	2.60
203012_x_at	RPL23A	2.11E-02	2.13
203095_at	MTIF2	2.42E-02	0.44
203113_s_at	EEF1D	4.30E-03	2.69
203462_x_at	EIF3S9	6.88E-02	0.34
205329_s_at	SNX4	9.84E-03	0.26
208645_s_at	RPS14	2.88E-02	2.94
208646_at	RPS14	8.52E-02	2.38
208688_x_at	EIF3S9	4.00E-02	0.34
208787_at	MRPL3	1.96E-02	0.14
208929_x_at	RPL13	7.81E-02	2.95
209203_s_at	BICD2	6.37E-02	0.50
209393_s_at	EIF4EL3	1.97E-02	0.49

209467_s_at	MKNK1	1.74E-02	0.28
209971_x_at	HRI	9.87E-03	0.43
210213_s_at	ITGB4BP	1.30E-02	0.50
211475_s_at	BAG1	4.06E-02	2.54
211501_s_at	EIF3S9	4.57E-02	0.28
211937_at	EIF4B	2.77E-02	2.11
211962_s_at	ZFP36L1	4.13E-04	0.35
212191_x_at	RPL13	7.43E-02	3.34
212225_at	SUI1	1.22E-02	2.16
212351_at	EIF2B5	8.56E-05	0.38
212456_at	KIAA0664	6.86E-03	0.29
212944_at	---	6.97E-03	0.17
213459_at	RPL37A	6.04E-02	0.30
213969_x_at	RPL29	1.78E-02	2.03
214271_x_at	RPL12	3.17E-02	2.86
217747_s_at	RPS9	4.55E-02	2.25
217809_at	BZW2	1.13E-02	0.21
217845_x_at	HIG1	5.97E-02	0.41
217846_at	QARS	1.20E-02	2.03
218488_at	EIF2B3	8.90E-03	0.35
218696_at	EIF2AK3	5.00E-02	3.54
218890_x_at	MRPL35	2.59E-03	0.46
220526_s_at	MRPL20	7.48E-03	0.42
221896_s_at	HIG1	2.88E-02	0.34
222427_s_at	LARS	9.87E-02	0.21
222466_s_at	MRPL42	9.25E-02	0.38
222768_s_at	CGI-09	1.74E-02	3.68
223035_s_at	FRSB	3.76E-02	0.13
223086_x_at	MRPL51	3.72E-02	0.24
223154_at	MRPL1	4.83E-02	0.22
223209_s_at	LOC55829	5.93E-03	3.37
224330_s_at	MRPL27	2.41E-03	0.29
224333_s_at	MRPS5	2.04E-02	0.45
224738_x_at	RPL7L1	1.63E-02	0.30
224783_at	FAM100B	8.92E-03	2.61
224919_at	MRPS6	3.86E-02	0.45
225153_at	EFG1	2.59E-02	0.32
225158_at	EFG1	8.65E-02	0.18
225161_at	EFG1	3.74E-02	0.35
225190_x_at	RPL35A	4.57E-02	2.32
225260_s_at	MRPL32	2.33E-02	0.36
225580_at	MRPL50	3.44E-02	0.32
225940_at	EIF4E3	3.29E-03	3.19
225941_at	EIF4E3	1.21E-02	2.85
226734_at	EIF4EL3	9.25E-02	0.39
226749_at	MRPS9	2.18E-02	0.33
226939_at	CPEB2	6.70E-02	2.20
227708_at	EEF1A1	3.68E-02	2.42
229457_at	ANKHD1	1.11E-02	2.16
236700_at	EIF3C	5.09E-02	0.24

237718_at	EIF4E	5.26E-02	6.71
240602_at	HBS1L	7.09E-04	2.15
243256_at	MKNK1	2.58E-02	0.20
243423_at	---	1.54E-02	4.06
34764_at	KIAA0028	4.72E-03	0.43

Transport

200030_s_at	SLC25A3	1.90E-02	0.47
200598_s_at	TRA1	5.13E-02	2.43
200618_at	LASP1	5.25E-03	0.35
200710_at	ACADVL	8.18E-03	0.40
200760_s_at	JWA	3.13E-02	2.85
200945_s_at	KIAA0905	2.41E-03	2.39
200991_s_at	SNX17	3.58E-02	0.41
201111_at	CSE1L	1.20E-02	0.41
201112_s_at	CSE1L	7.80E-02	0.34
201242_s_at	ATP1B1	8.89E-02	0.17
201243_s_at	ATP1B1	3.37E-03	0.10
201259_s_at	SYPL	3.24E-02	0.30
201260_s_at	SYPL	1.76E-03	0.31
201276_at	RAB5B	5.81E-03	2.08
201399_s_at	TRAM1	1.71E-02	2.29
201468_s_at	NQO1	9.76E-04	0.49
201514_s_at	G3BP	8.80E-02	0.38
201517_at	NCBP2	4.52E-02	0.26
201521_s_at	NCBP2	7.21E-03	0.20
201567_s_at	GOLGA4	6.95E-03	2.22
201799_s_at	OSBP	2.30E-02	2.05
201872_s_at	ABCE1	4.07E-02	0.19
201873_s_at	ABCE1	4.52E-02	0.19
202068_s_at	LDLR	1.64E-03	3.51
202077_at	NDUFAB1	2.47E-02	0.40
202119_s_at	CPNE3	1.38E-02	2.11
202188_at	NUP93	1.36E-01	0.16
202195_s_at	TMED5	1.51E-02	0.43
202236_s_at	SLC16A1	7.33E-02	0.33
202260_s_at	STXBP1	4.06E-02	0.07
202264_s_at	TOMM40	4.37E-03	0.43
202297_s_at	RER1	4.43E-02	0.45
202307_s_at	TAP1	6.05E-02	5.45
202345_s_at	FABP5	1.65E-03	0.02
202375_at	SEC24D	3.68E-02	2.58
202395_at	NSF	4.72E-02	0.45
202399_s_at	AP3S2	5.83E-03	2.41
202418_at	YIF1P	4.46E-03	0.37
202498_s_at	SLC2A3	9.52E-02	0.10
202499_s_at	SLC2A3	2.76E-02	0.31
202537_s_at	CHMP2B	2.22E-02	3.02
202546_at	VAMP8	4.02E-02	0.46
202800_at	SLC1A3	2.55E-03	0.35

202850_at	ABCD3	6.83E-03	0.36
202856_s_at	SLC16A3	4.52E-02	0.32
202900_s_at	NUP88	4.54E-02	0.34
202919_at	PREI3	2.60E-02	0.42
202958_at	PTPN9	5.91E-02	0.44
202961_s_at	ATP5J2	4.17E-02	0.36
203045_at	NINJ1	2.93E-02	2.72
203073_at	COG2	4.90E-02	0.49
203123_s_at	SLC11A2	6.18E-04	3.72
203124_s_at	SLC11A2	1.43E-02	2.48
203165_s_at	SLC33A1	1.28E-01	2.49
203402_at	KCNAB2	2.88E-03	2.47
203478_at	NDUFC1	5.69E-02	0.36
203504_s_at	ABCA1	3.44E-02	2.45
203509_at	SORL1	6.93E-03	4.52
203530_s_at	STX4A	4.08E-02	0.42
203544_s_at	STAM	2.63E-02	0.44
203580_s_at	SLC7A6	1.58E-01	0.45
203606_at	NDUFS6	1.42E-02	0.36
203646_at	FDX1	4.44E-02	0.48
203679_at	IL1RL1LG	1.46E-02	0.41
203689_s_at	FMR1	6.46E-03	2.01
203773_x_at	BLVRA	2.82E-02	4.46
203889_at	SGNE1	6.69E-03	0.01
203971_at	SLC31A1	9.43E-02	0.39
204151_x_at	AKR1C1	2.57E-04	0.13
204158_s_at	TCIRG1	2.76E-02	2.33
204233_s_at	CHK	2.17E-01	5.72
204264_at	CPT2	2.96E-02	0.46
204445_s_at	ALOX5	4.61E-02	2.08
204446_s_at	ALOX5	1.78E-02	4.33
204567_s_at	ABCG1	1.68E-02	4.62
204588_s_at	SLC7A7	5.74E-03	9.36
204646_at	DPYD	1.87E-02	4.52
204769_s_at	TAP2	7.68E-02	2.35
204961_s_at	NCF1	2.82E-02	19.33
204981_at	SLC22A1L	2.65E-02	3.78
205084_at	BAP29	9.45E-02	0.30
205147_x_at	NCF4	3.06E-02	3.78
205230_at	RPH3A	6.07E-02	2.28
205241_at	SCO2	9.13E-03	6.30
205401_at	AGPS	1.11E-01	0.43
205704_s_at	ATP6V0A2	2.89E-02	0.27
205749_at	CYP1A1	1.94E-02	5.01
205770_at	GSR	2.57E-02	0.22
206383_s_at	G3BP2	3.67E-02	0.38
206491_s_at	NAPA	1.19E-02	3.67
206550_s_at	NUP155	7.67E-02	0.36
206600_s_at	SLC16A5	3.34E-02	4.86
206765_at	KCNJ2	5.49E-02	2.73

207038_at	SLC16A6	5.66E-02	0.44
207091_at	P2RX7	1.51E-02	3.47
207528_s_at	SLC7A11	3.23E-04	0.17
207604_s_at	SLC4A7	7.80E-02	0.36
207608_x_at	CYP1A2	1.10E-01	2.66
207622_s_at	ABCF2	1.22E-01	0.21
207677_s_at	NCF4	1.75E-02	4.56
208130_s_at	TBXAS1	3.12E-02	2.90
208732_at	RAB2	2.79E-03	2.04
208751_at	NAPA	3.48E-02	3.49
208764_s_at	ATP5G2	3.93E-02	3.24
208829_at	TAPBP	4.70E-02	2.39
208836_at	ATP1B3	1.55E-02	0.48
208840_s_at	G3BP2	1.05E-02	0.34
208845_at	VDAC3	3.49E-02	0.49
208864_s_at	TXN	4.11E-02	0.47
209095_at	DLD	3.34E-02	0.42
209160_at	AKR1C3	6.35E-02	0.29
209206_at	SEC22L1	2.41E-02	2.17
209247_s_at	ABCF2	3.81E-02	0.36
209267_s_at	BIGM103	1.43E-03	0.17
209281_s_at	ATP2B1	5.25E-02	0.35
209326_at	SLC35A2	8.94E-03	0.50
209884_s_at	SLC4A7	9.87E-03	0.27
209948_at	KCNMB1	2.39E-02	2.80
210069_at	CPT1B	1.66E-03	2.45
210119_at	KCNJ15	8.06E-02	0.07
210201_x_at	BIN1	1.18E-02	3.53
210202_s_at	BIN1	8.00E-03	4.74
210357_s_at	C20orf16	5.44E-02	0.19
210386_s_at	MTX1	1.68E-02	3.14
210519_s_at	NQO1	2.23E-02	0.34
210542_s_at	SLC21A11	4.44E-02	2.54
210616_s_at	KIAA0905	1.88E-02	2.12
210766_s_at	CSE1L	3.41E-03	0.34
211600_at	---	6.27E-02	2.90
211653_x_at	AKR1C-pseudo	6.48E-03	0.21
211729_x_at	BLVRA	5.26E-02	4.06
211749_s_at	VAMP3	7.04E-02	0.47
211752_s_at	NDUFS7	5.28E-02	2.47
211806_s_at	KCNJ15	7.45E-02	0.50
212038_s_at	VDAC1	3.36E-02	0.33
212085_at	SLC25A6	2.21E-03	2.06
212168_at	RBM12	1.29E-02	0.22
212295_s_at	SLC7A1	5.32E-02	0.41
212297_at	FLJ20986	3.05E-02	0.19
212473_s_at	MICAL2	1.51E-01	0.37
212635_at	KPNB2	3.16E-03	0.43
212826_s_at	SLC25A6	9.39E-03	2.27
212861_at	MGC11308	1.85E-02	0.27

212902_at	SEC24A	1.57E-02	2.69
212907_at	SLC30A1	8.97E-03	0.22
212930_at	ATP2B1	8.55E-02	0.18
212943_at	KIAA0528	1.41E-02	0.44
213119_at	LOC91974	4.92E-02	0.22
213160_at	DOCK2	1.76E-02	3.09
213545_x_at	SNX3	4.63E-02	2.44
213590_at	SLC16A5	9.21E-02	2.12
213843_x_at	SLC6A8	5.81E-03	0.36
214084_x_at	NCF1	1.12E-02	24.59
214149_s_at	ATP6V0E	5.57E-02	0.45
214210_at	SLC25A17	7.23E-02	0.40
214255_at	ATP10A	3.49E-02	7.41
214366_s_at	ALOX5	2.07E-02	2.86
214439_x_at	BIN1	8.88E-03	2.61
214934_at	ATP9B	1.23E-02	0.34
215009_s_at	SEC31A	6.87E-03	6.97
215716_s_at	ATP2B1	2.10E-03	0.32
216236_s_at	SLC2A3	1.36E-01	0.21
216449_x_at	HSP90B1	3.93E-02	2.65
216594_x_at	AKR1C1	3.72E-04	0.25
217140_s_at	VDAC1	3.65E-02	0.33
217678_at	SLC7A11	7.36E-02	0.45
217781_s_at	ZFP106	1.23E-01	0.43
217792_at	SNX5	6.00E-02	0.27
217897_at	FXVD6	1.75E-02	3.53
217913_at	VPS4A	3.18E-02	0.50
218103_at	FTSJ3	7.79E-03	0.37
218118_s_at	TIMM23	5.56E-02	0.39
218160_at	NDUFA8	6.23E-03	0.41
218201_at	NDUFB2	4.29E-03	0.48
218204_s_at	FYCO1	5.18E-03	0.49
218404_at	SNX10	3.97E-03	12.89
218647_s_at	FLJ23476	3.76E-02	0.26
218989_x_at	SLC30A5	4.68E-02	0.35
219341_at	CLN8	9.65E-02	15.36
219344_at	ENT3	3.67E-02	0.23
219356_s_at	HSPC177	1.24E-02	2.76
219558_at	FLJ20986	1.66E-02	0.34
219681_s_at	RCP	9.32E-03	4.53
219869_s_at	BIGM103	1.16E-03	0.09
219915_s_at	SLC16A10	2.80E-02	0.08
219933_at	GLRX2	7.57E-03	0.41
219952_s_at	MCOLN1	3.30E-02	0.44
220012_at	ERO1LB	1.16E-01	4.62
220091_at	SLC2A6	1.03E-02	3.77
220740_s_at	SLC12A6	3.86E-02	0.42
221087_s_at	APOL3	4.36E-02	9.23
221504_s_at	ATP6V1H	8.77E-03	2.82
221568_s_at	LIN7C	1.27E-02	0.36

221653_x_at	APOL2	7.43E-02	4.83
221808_at	RAB9A	3.50E-02	3.34
221920_s_at	MSCP	5.08E-03	5.42
221931_s_at	SEC13L	4.23E-04	0.26
222088_s_at	SLC2A14,	6.53E-02	0.20
222407_s_at	ZFP106	8.55E-02	0.42
222412_s_at	SSR3	8.79E-03	2.49
222417_s_at	SNX5	4.95E-02	0.31
222516_at	AP3M1	2.19E-02	0.41
222528_s_at	MSCP	1.03E-02	6.75
222529_at	MSCP	3.61E-03	6.05
222627_at	HCC8	2.83E-02	0.45
222708_s_at	FLJ20651	3.51E-03	3.67
222939_s_at	SLC16A10	2.54E-05	0.01
223093_at	ANKH	1.55E-03	0.34
223176_at	KCTD20	9.71E-02	0.35
223180_s_at	HSPC154	2.61E-02	0.11
223181_at	HSPC154	1.47E-01	0.13
223208_at	MSTP028	3.00E-02	0.39
223221_at	SCO1	6.69E-02	0.23
223225_s_at	SEC13L	6.56E-03	0.25
223241_at	SNX8	4.65E-02	0.44
223723_at	MFI2	4.22E-02	0.36
223798_at	DKFZP434K0427	4.66E-03	0.15
224461_s_at	AMID	2.86E-02	0.35
224684_at	SNX12	2.44E-02	0.36
224735_at	MGC20446	1.65E-02	4.56
224846_at	LOC92799	3.82E-03	2.36
224913_s_at	TIM50L	9.51E-02	0.15
224953_at	SMAP-5	8.75E-02	2.51
224959_at	SLC26A2	5.89E-02	0.46
224963_at	SLC26A2	1.16E-01	0.44
224996_at	RLPBL1	8.45E-02	0.38
225113_at	AGPS	1.10E-01	0.29
225143_at	EIF3S10	2.40E-04	0.32
225212_at	KIAA1896	1.50E-02	0.29
225306_s_at	C14orf69	3.67E-02	2.33
225352_at	TLOC1	2.05E-02	0.41
225470_at	LOC129401	5.07E-02	0.31
225535_s_at	TIMM23	1.98E-02	0.44
225573_at	FLJ12592	4.81E-02	0.40
225609_at	GSR	2.75E-03	0.31
225638_at	C1ORF31	3.83E-03	0.43
225765_at	KPNB2	8.93E-03	0.31
225766_s_at	KPNB2	1.33E-02	0.32
225789_at	CENTG3	4.43E-03	6.49
225870_s_at	MGC52424	2.51E-02	2.07
225881_at	YEA	7.75E-02	0.29
225973_at	TAP2	2.11E-02	6.72
226026_at	DIRC2	2.61E-02	0.43

226179_at	MSCP	7.11E-03	7.89
226741_at	LOC51234	4.70E-02	0.43
226794_at	STXBP5	3.12E-03	0.45
227109_at	CYP2R1	5.58E-02	0.38
227981_at	FLJ39035	1.66E-02	0.43
228181_at	SLC30A1	4.92E-02	0.29
228299_at	MGC14254	4.37E-02	0.45
228355_s_at	LOC91942	1.97E-02	0.28
228497_at	FLIPT1	9.64E-03	2.78
229958_at	CLN8	6.16E-05	6.09
229980_s_at	SNX5	3.47E-02	0.39
229981_at	SNX5	1.42E-01	0.21
230077_at	SDHAL1	8.00E-03	0.49
230110_at	MCOLN2	3.80E-02	12.63
230179_at	LOC285812	1.17E-01	2.26
230266_at	MGC16212	6.26E-03	0.11
230707_at	SORL1	7.21E-04	3.71
230748_at	SLC16A6	1.10E-02	0.30
230966_at	IL4I1	1.05E-01	2.93
231274_s_at	MSCP	1.82E-04	6.84
231944_at	ERO1LB	1.78E-02	4.21
232432_s_at	SLC30A5	2.69E-02	0.37
233656_s_at	HCC8	4.46E-02	0.29
234672_s_at	TMEM48	1.66E-02	0.29
235204_at	COX15	6.18E-04	0.28
236232_at	STX4	1.22E-02	0.29
237106_at	SLC11A2	6.02E-02	2.90
238066_at	CRBPIV	4.05E-02	5.75
238077_at	KCTD6	1.77E-03	0.11
238423_at	SYTL3	3.00E-03	7.65
238638_at	LOC219855	6.45E-03	0.48
239022_at	SDHAL1	2.96E-04	0.37
242263_at	CGI-100	1.90E-02	0.37
242335_at	MSCP	4.90E-03	2.36
243894_at	SLC41A2	8.07E-03	0.16
243899_at	ARL17P1	1.88E-01	4.08
244227_at	SYT6	2.09E-02	0.38
244377_at	SLC1A4	5.84E-03	2.81
244700_at	SEC61B	9.18E-03	3.11
244841_at	SEC24A	1.86E-02	3.41
38069_at	CLCN7	3.08E-03	2.06
39248_at	AQP3	1.25E-02	0.12
44111_at	VPS33B	3.53E-02	0.50

Ubiquitin cycle

1294_at	UBE1L	1.14E-01	3.32
201177_s_at	UBA2	2.68E-02	0.41
201222_s_at	RAD23B	5.31E-03	0.48
201381_x_at	SIP	5.35E-02	0.49
201649_at	UBE2L6	1.30E-02	14.82

201817_at	UBE3C	4.97E-03	0.31
202334_s_at	UBE2B	3.52E-04	3.07
202717_s_at	CDC16	3.05E-02	0.38
203909_at	SLC9A6	4.24E-03	0.37
205178_s_at	RBBP6	7.92E-02	2.76
205483_s_at	G1P2	1.98E-02	34.58
207713_s_at	C20orf18	1.15E-01	4.06
208799_at	PSMB5	3.31E-02	0.29
208980_s_at	UBC	5.04E-02	2.07
209004_s_at	FBXL5	8.35E-02	0.47
209041_s_at	UBE2G2	9.23E-02	0.47
209042_s_at	UBE2G2	3.84E-02	0.32
209096_at	UBE2V2	5.43E-02	0.35
209455_at	FBXW1B	2.25E-02	0.33
209658_at	CDC16	1.94E-02	0.42
210705_s_at	TRIM5	2.97E-02	13.14
210759_s_at	PSMA1	5.63E-02	0.41
212229_s_at	FBXO21	4.10E-02	0.46
212296_at	POH1	4.12E-02	0.42
212783_at	RBBP6	7.05E-02	3.06
212987_at	FBXO9	4.76E-02	0.45
213291_s_at	UBE3A	1.68E-02	0.45
213327_s_at	USP12	1.18E-01	0.31
218011_at	UBL5	3.12E-02	0.36
218097_s_at	MGC2491	2.68E-02	2.74
218673_s_at	GSA7	4.33E-02	0.44
219016_at	FLJ13149	1.71E-02	0.34
219211_at	USP18	9.50E-03	74.56
219352_at	FLJ20637	1.44E-02	28.86
219863_at	CEB1	1.19E-02	71.37
221824_s_at	MGC26766	4.92E-03	2.30
221827_at	C20orf18	8.94E-02	3.48
222480_at	HSA243666	1.14E-02	0.46
222657_s_at	FLJ11011	1.21E-02	0.48
222751_at	FLJ22313	1.46E-02	2.12
223186_at	UBE2V1	6.53E-02	3.86
223254_s_at	FLJ20333	2.39E-02	0.50
223330_s_at	SUGT1	5.21E-02	0.32
223802_s_at	MY038	2.74E-02	3.35
224369_s_at	SP329	2.47E-02	0.47
224395_s_at	RNF7	1.17E-02	0.49
224720_at	KIAA1323	1.35E-02	0.49
225090_at	HRD1	1.84E-02	3.22
225099_at	FBXO45	1.99E-02	0.23
225100_at	FBXO45	7.53E-02	0.27
225231_at	LOC283153	1.31E-02	0.49
225234_at	LOC283153	2.55E-02	0.43
225235_at	MGC14859	1.09E-02	0.28
225422_at	CDC26	3.32E-02	0.45
225554_s_at	ANAPC7	1.82E-03	0.44

226176_s_at	FLJ12697	4.22E-02	2.89
226668_at	FLJ36175	3.29E-02	2.23
227309_at	DKFZp451J1719	1.61E-02	0.49
228980_at	LOC117584	1.76E-02	2.55
229010_at	CBL	5.16E-02	0.35
231973_s_at	ANAPC1	5.95E-03	3.21
239143_x_at	STRIN	2.41E-02	2.09
239163_at	UBE2B	5.67E-02	2.93
244804_at	SQSTM1	2.86E-04	7.66

Viral reproduction

235076_at	NDP52	6.57E-02	3.54
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Unknown

200028_s_at	STARD7	2.46E-04	0.28
200042_at	HSPC117	3.08E-02	3.26
200651_at	GNB2L1	2.73E-03	2.38
200810_s_at	CIRBP	1.30E-02	0.45
200811_at	CIRBP	3.03E-03	0.38
200847_s_at	MGC8721	1.12E-01	2.98
200943_at	HMGN1	3.60E-02	0.43
200944_s_at	HMGN1	4.82E-02	0.39
200988_s_at	PSME3	1.10E-01	0.35
201063_at	RCN1	2.41E-03	0.25
201211_s_at	DDX3	1.29E-02	0.43
201421_s_at	WDR77	2.34E-03	0.20
201512_s_at	TOMM70A	1.56E-02	0.35
201570_at	SAMM50	4.54E-02	0.42
201704_at	ENTPD6	7.81E-03	0.43
201785_at	RNASE1	1.78E-02	0.24
201795_at	LBR	8.01E-02	0.34
201889_at	FAM3C	2.55E-02	0.47
202071_at	SDC4	5.25E-03	0.29
202085_at	TJP2	2.42E-02	2.53
202124_s_at	TRAK2	4.79E-02	0.46
202257_s_at	CD2BP2	1.23E-02	0.46
202301_s_at	RSRC2	3.09E-02	2.67
202352_s_at	PSMD12	1.23E-02	0.49
202365_at	MGC5139	4.66E-02	0.47
202391_at	BASP1	2.69E-03	4.06
202557_at	STCH	1.51E-02	3.79
202594_at	LEPROTL1	3.62E-02	2.08
202595_s_at	LEPROTL1	1.44E-01	2.53
202655_at	ARMET	3.97E-03	7.03
202702_at	TRIM26	5.83E-02	2.85
202719_s_at	TES	6.09E-04	6.91
202720_at	TES	1.72E-02	5.26
202840_at	TAF15	6.09E-02	0.42
202883_s_at	PPP2R1B	2.56E-02	0.26
202886_s_at	PPP2R1B	1.00E-02	0.25

202887_s_at	RTP801	1.63E-02	3.72
202937_x_at	CGI-96	3.50E-02	0.35
202946_s_at	BTBD3	3.69E-03	0.30
202969_at	DYRK2	7.83E-02	0.16
203051_at	KIAA0945	4.14E-02	0.26
203068_at	KIAA0469	2.40E-03	10.02
203136_at	RABAC1	1.44E-02	2.35
203147_s_at	TRIM14	9.75E-03	3.94
203148_s_at	TRIM14	2.40E-02	5.82
203252_at	DOC-1R	4.21E-03	13.81
203259_s_at	CGI-130	2.41E-02	0.47
203276_at	LMNB1	7.92E-02	2.40
203284_s_at	HS2ST1	8.41E-02	0.35
203285_s_at	HS2ST1	4.18E-02	0.36
203364_s_at	KIAA0652	1.04E-02	2.15
203420_at	FAM8A1	6.52E-02	6.38
203486_s_at	DKFZP434A043	3.96E-03	0.38
203487_s_at	DKFZP434A043	4.71E-02	0.46
203622_s_at	LOC56902	3.65E-02	0.30
203640_at	MBNL2	5.92E-02	11.39
203654_s_at	COIL	2.57E-02	0.26
203675_at	NUCB2	1.41E-02	3.79
203691_at	PI3	1.80E-02	15.86
203712_at	KIAA0020	5.25E-03	0.17
203791_at	DMXL1	3.69E-02	2.61
203799_at	BIMLEC	1.85E-02	5.64
203833_s_at	TGOLN2	3.71E-03	0.30
203834_s_at	TGOLN2	6.73E-04	0.41
203990_s_at	UTX	1.88E-02	2.38
204034_at	YF13H12	3.76E-02	2.20
204048_s_at	KIAA0680	5.96E-02	0.39
204119_s_at	ADK	4.27E-03	3.63
204221_x_at	GLIPR1	7.53E-02	0.45
204384_at	GOLGA2	3.02E-03	2.24
204439_at	C1orf29	4.83E-03	75.34
204480_s_at	C9orf16	4.32E-03	2.12
204514_at	DPH2L2	2.86E-02	0.20
204546_at	KIAA0513	3.90E-02	2.91
204601_at	N4BP1	4.34E-02	2.66
204638_at	ACP5	6.13E-02	5.82
204668_at	RNF24	1.11E-01	2.14
204669_s_at	RNF24	1.71E-02	2.97
204820_s_at	BTN3A3	6.85E-02	3.52
204912_at	IL10RA	2.82E-02	2.49
204977_at	DDX10	6.01E-03	0.26
205088_at	CXorf6	2.64E-02	0.08
205115_s_at	KIAA0682	9.65E-03	0.36
205298_s_at	BTN2A2	2.72E-02	2.26
205763_s_at	DDX18	9.09E-02	0.27
205955_at	FLJ11136	4.62E-02	6.71

206133_at	HSXIAPAF1	7.16E-03	25.49
206512_at	U2AF1RS1	2.70E-02	11.39
207467_x_at	CAST	4.53E-02	2.43
207996_s_at	C18orf1	9.38E-02	6.20
208092_s_at	DKFZP566A1524	4.35E-02	7.79
208152_s_at	DDX21	5.70E-02	0.41
208303_s_at	CRLF2	1.04E-02	0.25
208450_at	LGALS2	4.66E-02	10.07
208777_s_at	PSMD11	1.35E-02	0.30
208897_s_at	DDX18	6.99E-02	0.36
208908_s_at	CAST	1.36E-02	4.10
209020_at	C20orf111	1.77E-02	2.92
209029_at	COPS7A	2.06E-02	0.41
209049_s_at	PRKCBP1	7.33E-03	0.04
209155_s_at	NT5C2	5.98E-03	3.56
209196_at	C6orf11	5.74E-02	0.31
209231_s_at	MGC3248	3.00E-02	0.40
209377_s_at	HMGN3	3.12E-02	3.08
209446_s_at	FLJ10803	3.22E-02	0.41
209479_at	CCRL1AP	2.80E-02	2.24
209683_at	DKFZP566A1524	5.83E-02	3.51
209704_at	--	5.45E-03	0.42
209721_s_at	DKFZP586I2223	1.11E-02	3.07
209732_at	CLECSF2	7.77E-02	3.19
209760_at	KIAA0922	1.75E-02	3.61
209780_at	DKFZP564F013	3.03E-02	0.27
209836_x_at	MGC5178	3.70E-02	0.19
209846_s_at	BTN3A2	5.68E-02	2.36
209853_s_at	PSME3	2.95E-02	0.50
209912_s_at	KIAA0415	7.93E-02	2.08
210142_x_at	FLOT1	1.04E-02	2.16
210230_at	RNU2	1.10E-01	3.48
210285_x_at	WTAP	2.69E-02	2.20
210340_s_at	CSF2RA	1.56E-03	0.49
210873_x_at	APOBEC3A	4.23E-02	9.68
211038_s_at	MGC12760	2.52E-03	0.48
211068_x_at	FLJ10824	7.55E-02	3.64
211383_s_at	WDR37	8.87E-03	0.47
211686_s_at	LOC84549	4.53E-02	0.33
211742_s_at	EVI2B	3.72E-02	2.88
211977_at	GPR107	1.49E-02	0.49
211996_s_at	KIAA0220	6.14E-02	2.38
212040_at	TGOLN2	2.26E-02	0.37
212043_at	TGOLN2	1.13E-03	0.36
212074_at	UNC84A	4.70E-02	0.31
212098_at	LOC151162	1.98E-04	0.21
212107_s_at	DDX9	4.51E-02	0.41
212115_at	HN1L	1.29E-02	0.31
212139_at	GCN1L1	4.72E-02	0.36
212154_at	SDC2	1.20E-02	0.03

212157_at	SDC2	9.82E-03	0.12
212158_at	SDC2	1.61E-03	0.02
212199_at	MGC9651	2.82E-02	0.28
212268_at	SERPINB1	9.94E-04	4.54
212305_s_at	KIAA0268	2.52E-02	2.65
212311_at	KIAA0746	1.36E-03	0.22
212314_at	KIAA0746	1.82E-02	0.16
212333_at	DKFZP564F0522	5.13E-03	0.18
212370_x_at	KIAA0592	1.53E-02	3.63
212380_at	KIAA0082	4.93E-02	2.35
212395_s_at	KIAA0090	3.52E-02	0.18
212441_at	KIAA0232	7.81E-03	0.25
212502_at	FLJ14547	4.00E-02	0.37
212514_x_at	DDX3	4.71E-02	0.43
212515_s_at	DDX3	8.56E-02	0.36
212532_s_at	FLJ30656	1.67E-02	0.50
212539_at	CHD1L	2.91E-02	0.23
212560_at	SORL1	1.43E-02	6.96
212561_at	RAB6IP1	3.97E-02	3.52
212586_at	CAST	1.47E-03	2.32
212623_at	KIAA0033	4.09E-02	2.67
212660_at	KIAA0239	1.92E-02	3.47
212685_s_at	TBL2	6.35E-02	0.43
212690_at	KIAA0725	4.70E-02	0.34
212708_at	LOC339287	6.67E-02	0.34
212714_at	LOC113251	5.13E-02	0.45
212733_at	KIAA0226	1.86E-01	3.62
212735_at	KIAA0226	1.01E-01	3.68
212766_s_at	FLJ12671	1.19E-02	0.30
212767_at	LOC92170	8.27E-03	0.39
212794_s_at	KIAA1033	5.27E-03	2.27
212795_at	KIAA1033	1.16E-02	2.82
212851_at	KIAA0276	4.83E-03	0.24
212855_at	KIAA0276	2.80E-02	0.23
212860_at	DKFZp667O2416	8.19E-02	0.46
212877_at	KNS2	3.39E-02	0.39
212929_s_at	KIAA0592	2.79E-02	2.43
212946_at	KIAA0564	1.91E-02	0.21
212978_at	TA-LRRP	2.09E-02	0.34
213015_at	BBX	9.74E-03	3.87
213031_s_at	FLJ14888	7.24E-02	0.34
213035_at	KIAA0379	5.35E-03	0.45
213073_at	KIAA0321	8.29E-02	4.93
213123_at	---	4.63E-03	0.46
213282_at	LOC340562	8.20E-02	0.46
213338_at	RIS1	1.81E-03	0.02
213361_at	PCTAIRE2BP	1.61E-02	5.52
213375_s_at	CG018	3.59E-02	2.88
213546_at	DKFZp586I1420	9.44E-02	2.96
213572_s_at	SERPINB1	6.80E-03	5.30

213573_at	KPNB1	2.20E-02	0.47
213638_at	KIAA1733	8.55E-03	6.73
213797_at	cig5	1.84E-02	73.75
213839_at	KIAA0500	2.99E-03	3.26
213848_at	DUSP7	8.41E-02	0.33
214011_s_at	HSPC111	8.26E-04	0.19
214218_s_at	XIST	2.32E-02	0.38
214316_x_at	CALR	1.05E-01	2.53
214693_x_at	DJ328E19.C1.1	1.08E-02	2.75
214765_s_at	ASAH1	5.73E-02	2.42
214791_at	LOC93349	3.20E-02	15.30
214946_x_at	FLJ10824	6.59E-03	4.19
215011_at	RNU17D	2.52E-03	0.25
215087_at	C15ORF39	1.08E-02	2.67
215137_at	KIAA0508	2.40E-02	2.98
215416_s_at	STOML2	5.08E-02	0.37
215434_x_at	FLJ20719	4.57E-02	2.12
215936_s_at	KIAA1033	5.31E-02	2.99
216336_x_at	MT1M	7.98E-02	2.77
216563_at	KIAA0874	4.95E-02	2.80
216565_x_at	---	3.96E-02	13.89
217221_x_at	RBM10	2.24E-02	2.00
217656_at	SMARCA4	2.55E-02	0.25
217751_at	LOC51064	1.19E-02	3.71
217807_s_at	GLTSCR2	2.28E-02	3.60
217814_at	GK001	9.84E-02	0.27
217828_at	FLJ13213	8.97E-02	0.35
217836_s_at	YAP	8.67E-03	2.13
217855_x_at	Cab45	5.01E-02	0.37
217868_s_at	DREV1	3.85E-02	2.84
217873_at	MO25	1.94E-02	0.43
217893_s_at	FLJ12666	7.99E-02	0.42
217906_at	KLHDC2	6.45E-04	3.00
217931_at	TNRC5	2.09E-02	5.14
217940_s_at	FLJ10769	5.54E-02	0.43
217969_at	C11orf2	5.82E-03	2.93
218024_at	BRP44L	6.96E-03	4.13
218064_s_at	NAKAP95	7.98E-02	2.59
218095_s_at	TPARL	1.74E-03	0.38
218113_at	TMEM2	7.77E-02	0.39
218140_x_at	APMCF1	7.43E-02	0.34
218156_s_at	FLJ10534	8.29E-02	0.13
218165_at	FLJ11730	3.74E-02	0.40
218187_s_at	FLJ20989	9.27E-03	0.29
218220_at	C12orf10	1.81E-02	0.39
218247_s_at	LOC51320	4.92E-02	0.49
218248_at	FLJ22794	1.46E-02	2.40
218249_at	ZDHHC6	3.40E-02	0.32
218263_s_at	LOC58486	7.25E-03	0.41
218341_at	FLJ11838	8.14E-03	0.36

218358_at	MGC11256	2.50E-03	6.29
218383_at	C14orf94	4.77E-02	3.18
218429_s_at	FLJ11286	1.30E-02	5.02
218442_at	TTC4	1.07E-02	0.22
218454_at	FLJ22662	9.34E-03	6.99
218461_at	MGC14560	2.10E-02	0.42
218512_at	WDR12	2.40E-02	0.24
218516_s_at	FLJ20421	1.39E-02	0.42
218558_s_at	MRPL39	3.01E-02	0.42
218565_at	HSPC109	2.10E-02	0.42
218593_at	FLJ10377	5.77E-02	0.33
218594_at	FLJ10359	1.44E-02	0.23
218595_s_at	FLJ10359	2.13E-02	0.27
218643_s_at	CRIP1	1.55E-02	0.44
218649_x_at	SDCCAG1	8.47E-02	0.47
218680_x_at	HYPK	1.09E-02	0.48
218681_s_at	SDF2L1	1.64E-04	10.21
218815_s_at	FLJ10199	6.14E-03	3.38
218888_s_at	NETO2	3.47E-02	0.15
218889_at	AD24	1.28E-01	0.28
218962_s_at	FLJ13576	6.37E-02	0.30
218970_s_at	CGI-32	9.47E-03	0.40
218972_at	FLJ10890	9.55E-03	0.42
218986_s_at	FLJ20035	2.40E-02	14.88
219014_at	PLAC8	4.64E-02	13.16
219022_at	FLJ12448	4.55E-02	0.38
219053_s_at	FLJ20847	7.44E-02	0.35
219065_s_at	CGI-27	1.30E-02	0.49
219093_at	FLJ20701	5.23E-02	0.23
219146_at	FLJ22729	6.92E-03	0.23
219202_at	FLJ22341	3.51E-02	2.39
219203_at	CGI-112	2.19E-02	39.73
219242_at	FLJ13386	5.39E-02	3.21
219253_at	FAM11B	3.28E-02	0.31
219284_at	HSPBAP1	9.84E-02	2.78
219293_s_at	PTD004	5.41E-02	0.46
219295_s_at	PCOLCE2	8.08E-03	0.15
219334_s_at	FLJ22833	4.11E-02	0.17
219386_s_at	BLAME	2.70E-03	0.09
219420_s_at	FLJ12439	7.06E-02	0.39
219437_s_at	LZ16	6.66E-03	2.64
219496_at	FLJ21870	4.36E-02	0.11
219600_s_at	C21orf4	8.30E-04	3.96
219648_at	FLJ10116	4.40E-02	0.37
219691_at	FLJ20073	1.58E-02	10.52
219697_at	HS3ST2	3.06E-02	2.17
219736_at	TRIM36	3.89E-02	4.77
219806_s_at	FN5	4.13E-02	2.28
219819_s_at	MRPS28	1.25E-01	0.25
219885_at	FLJ10260	1.29E-02	4.41

219895_at	FLJ20716	1.05E-01	2.92
219938_s_at	PSTPIP2	2.21E-03	3.49
219966_x_at	BANP	3.03E-02	2.06
220153_at	LALP1	2.62E-02	0.12
220265_at	GPR107	9.61E-02	0.20
220467_at	FLJ21272	7.51E-02	2.65
220647_s_at	E2IG2	2.23E-02	0.44
220702_at	PRO2037	4.40E-02	0.30
220755_s_at	C6orf48	1.85E-02	2.56
220998_s_at	UNC93B1	9.05E-02	6.29
221042_s_at	CLMN	6.23E-02	4.21
221044_s_at	TRIM34	9.52E-04	3.61
221194_s_at	LOC51136	4.22E-02	0.48
221211_s_at	C21orf7	8.00E-02	0.27
221229_s_at	FLJ20628	1.59E-02	0.34
221247_s_at	WBSCR16	3.53E-03	0.25
221452_s_at	MGC1223	5.93E-02	0.43
221516_s_at	FLJ20232	5.22E-02	0.37
221536_s_at	FLJ11301	6.28E-03	0.41
221541_at	DKFZP434B044	1.05E-01	3.11
221565_s_at	LOC51063	1.93E-02	0.30
221766_s_at	C6orf37	6.00E-02	7.85
221786_at	XAP135	1.53E-02	0.46
221816_s_at	NY-REN-34	4.98E-02	4.35
221865_at	DKFZp547P234	3.17E-02	2.93
221867_at	FLJ31821	3.54E-03	3.76
221877_at	---	2.33E-02	0.15
221904_at	MGC21688	2.91E-02	0.37
221963_x_at	---	1.40E-02	0.41
221970_s_at	DKFZP586L0724	5.86E-03	0.26
221972_s_at	Cab45	2.09E-02	0.47
221985_at	FLJ20059	5.48E-04	3.63
221986_s_at	FLJ20059	3.40E-02	4.71
221987_s_at	FLJ10534	6.14E-02	0.19
222034_at	GNB2L1	5.16E-02	0.45
222154_s_at	DKFZP564A2416	1.93E-02	6.81
222155_s_at	FLJ11856	8.37E-03	0.31
222303_at	ETS2	3.83E-03	0.21
222391_at	TMEM30A	4.46E-02	0.50
222432_s_at	GK001	3.52E-02	0.41
222496_s_at	FLJ20273	1.77E-02	0.37
222512_at	NYREN18	7.25E-02	5.30
222532_at	APMCF1	7.59E-02	0.29
222631_at	PI4K2B	8.47E-02	2.74
222654_at	FLJ20421	9.73E-02	0.36
222700_at	ARL6IP2	4.67E-03	0.40
222702_x_at	CRIP1	3.28E-03	0.47
222714_s_at	CGI-83	2.10E-02	2.06
222735_at	FLJ10493	9.38E-03	3.14
222745_s_at	FLJ22557	1.86E-03	0.37

222750_s_at	FLJ13352	2.38E-02	0.30
222752_s_at	FLJ10874	9.57E-03	0.22
222774_s_at	NETO2	1.77E-01	0.17
222796_at	KIAA0632	2.11E-02	2.20
222825_at	CGI-77	2.00E-02	0.45
222872_x_at	FLJ22833	1.98E-02	0.13
222875_at	DDX33	5.09E-02	0.40
222907_x_at	C21orf4	1.71E-02	2.57
222995_s_at	NPD007	5.60E-02	0.25
223019_at	DKFZP434H0820	3.55E-02	0.30
223042_s_at	HCBP6	1.90E-03	0.47
223070_at	SELK	2.03E-02	3.09
223090_x_at	VEZATIN	1.88E-03	0.45
223106_at	HSPC194	1.19E-03	2.42
223125_s_at	C1orf21	3.97E-02	0.26
223126_s_at	C1orf21	1.29E-01	0.14
223133_at	MGC1223	3.56E-02	0.32
223151_at	MGC2714	3.84E-02	0.42
223156_at	MRPS23	1.89E-01	0.16
223203_at	PRO0659	2.02E-02	0.44
223204_at	DKFZp434L142	6.64E-02	0.40
223215_s_at	C14orf100	1.20E-02	0.32
223217_s_at	MAIL	1.69E-03	6.44
223218_s_at	MAIL	1.19E-02	3.51
223264_at	MESDC1	9.01E-03	0.21
223294_at	LOC51260	8.96E-04	0.34
223334_at	DKFZp586C1924	9.28E-03	0.43
223376_s_at	BRI3	1.79E-02	3.14
223547_at	C14orf100	6.43E-02	0.43
223576_at	HSPC230	4.96E-02	0.43
223584_s_at	DKFZP566C134	6.13E-02	2.89
223741_s_at	TTYH2	5.74E-02	6.88
223846_at	FLJ21939	4.50E-02	2.29
223934_at	LOC93349	4.93E-03	2.71
223983_s_at	DKFZP762D096	6.16E-03	0.27
224177_s_at	LOC51260	6.48E-03	0.36
224413_s_at	BLP1	9.83E-03	0.35
224437_s_at	HSPC228	1.72E-02	0.39
224446_at	MGC14817	2.10E-02	0.35
224448_s_at	MGC14833	6.18E-02	0.38
224452_s_at	MGC12966	5.33E-02	3.03
224472_x_at	Cab45	1.46E-02	0.45
224523_s_at	MGC4308	1.11E-01	0.22
224565_at	---	8.14E-02	0.39
224566_at	---	1.44E-02	0.23
224569_s_at	IRF2BP2	1.17E-02	2.08
224572_s_at	IRF2BP2	5.18E-02	2.70
224574_at	MGC71993	2.89E-02	2.65
224632_at	FLJ20249	1.60E-02	0.15
224634_at	FLJ20249	2.99E-02	0.10

224674_at	KIAA1691	8.53E-03	0.37
224686_x_at	KIAA0563	6.26E-02	2.04
224702_at	LOC153339	2.54E-02	0.39
224719_s_at	LOC113246	8.94E-04	2.15
224740_at	---	1.13E-01	0.30
224742_at	DKFZP434P106	5.63E-02	3.18
224782_at	FLJ31121	4.20E-02	0.48
224807_at	KIAA1533	1.64E-02	3.08
224820_at	FAM36A	2.79E-03	0.38
224828_at	KIAA1673	4.26E-02	0.29
224829_at	KIAA1673	5.77E-02	0.28
224831_at	KIAA1673	9.20E-03	0.42
224903_at	CIRH1A	2.24E-02	0.13
224912_at	TTC7	1.30E-02	6.13
224916_at	LOC340061	3.61E-02	2.83
224917_at	VMP1	4.34E-02	0.41
224923_at	TTC7	6.57E-02	3.49
224973_at	C6orf37	6.77E-02	3.39
224981_at	LOC124446	1.77E-02	11.94
224990_at	LOC201895	7.29E-02	2.97
225059_at	AGTRAP	8.09E-03	2.84
225083_at	LOC112495	1.85E-02	0.32
225086_at	FLJ38426	5.66E-02	0.38
225087_at	FLJ31153	1.41E-02	0.33
225096_at	HSA272196	2.43E-02	0.47
225125_at	LOC93380	5.91E-03	0.43
225136_at	PLEKHA2	2.60E-02	2.01
225139_at	NFATC3	3.12E-03	0.30
225182_at	TMEM50B	5.46E-03	4.89
225202_at	RHOBTB3	6.21E-02	0.21
225208_s_at	MGC2560	4.19E-03	0.47
225210_s_at	MGC2560	2.94E-02	0.30
225227_at	SKIL	1.22E-02	2.04
225239_at	---	9.54E-04	2.12
225253_s_at	METTL2	6.06E-02	0.26
225273_at	KIAA1280	3.75E-02	2.16
225283_at	LOC91947	7.05E-02	0.31
225317_at	MGC2404	3.33E-02	2.45
225325_at	FLJ20160	6.00E-03	0.18
225327_at	FLJ10980	1.29E-02	2.23
225340_s_at	M11S1	1.30E-01	0.32
225373_at	PP2135	1.32E-02	3.78
225376_at	LOC284734	6.29E-02	0.39
225415_at	LOC151636	2.20E-02	5.00
225439_at	CML66	1.19E-02	0.41
225464_at	C14orf31	9.64E-02	0.33
225466_at	FLJ36874	6.21E-02	2.38
225468_at	FLJ36874	7.06E-02	2.47
225480_at	FLJ45459	5.53E-02	0.49
225492_at	---	2.18E-02	0.46

225502_at	FLJ00026	8.68E-03	4.06
225538_at	DKFZp761J139	4.04E-02	0.46
225582_at	KIAA1754	6.43E-02	0.45
225597_at	SLC45A4	1.93E-02	4.11
225598_at	SLC45A4	3.42E-02	3.09
225603_s_at	LOC286144	5.97E-02	3.03
225604_s_at	C9orf19	2.25E-02	0.33
225642_at	LOC112970	4.75E-02	0.36
225685_at	---	2.62E-02	5.28
225698_at	TIGA1	1.41E-02	2.72
225739_at	RAB11-FIP4	4.45E-02	0.35
225748_at	FLJ14909	4.50E-02	0.28
225762_x_at	DKFZp434C0328	3.96E-02	5.01
225767_at	DKFZp434C0328	2.01E-02	16.09
225785_at	REEP3	8.37E-03	0.35
225831_at	LUZP1	5.53E-02	0.45
225844_at	POLE4	4.44E-02	0.46
225860_at	MMP24	1.22E-02	0.44
225866_at	FLJ21087	6.33E-02	0.39
225872_at	FLJ22004	2.29E-02	0.31
225883_at	FLJ00012	3.24E-02	3.45
225888_at	FLJ13089	2.00E-02	0.19
225899_x_at	FLJ45445	5.87E-02	2.34
225922_at	KIAA1450	8.62E-02	4.51
225924_at	KIAA1450	1.32E-01	3.11
225929_s_at	RNF213	7.40E-03	16.27
225931_s_at	RNF213	3.27E-02	38.71
225933_at	CCDC137	2.78E-02	0.40
225956_at	LOC153222	1.66E-02	3.25
225957_at	LOC153222	1.52E-02	3.87
225967_s_at	C17ORF89	1.02E-01	0.47
225974_at	DKFZp762C1112	1.84E-01	0.24
226002_at	GAB1	1.06E-01	2.20
226025_at	KIAA0379	1.58E-01	0.35
226040_at	---	4.13E-04	2.23
226055_at	CLONE24945	3.54E-03	2.67
226109_at	C21orf91	6.41E-02	2.57
226117_at	T2BP	5.92E-03	9.97
226140_s_at	LOC220213	7.41E-02	3.00
226142_at	HRB2	4.63E-02	0.39
226152_at	TTC7L1	1.52E-01	7.56
226158_at	KLHL24	4.31E-03	6.33
226201_at	DOT1L	3.65E-02	0.15
226203_at	---	1.41E-01	0.23
226226_at	TMEM45B	1.06E-01	0.15
226229_s_at	HSPC182	1.90E-02	0.39
226230_at	KIAA1387	5.19E-02	0.49
226235_at	MGC17515	4.31E-02	0.44
226242_at	DKFZp547B1713	1.32E-02	0.46
226254_s_at	KIAA1430	2.77E-02	0.10

226276_at	LOC153339	4.95E-03	0.27
226312_at	KIAA1999	1.86E-02	3.04
226316_at	C13orf10	2.52E-01	0.25
226375_at	KPI2	4.25E-02	0.42
226381_at	---	6.93E-03	0.36
226385_s_at	LOC115416	5.66E-03	0.37
226386_at	LOC115416	6.07E-03	0.45
226392_at	RASA2	5.84E-03	0.26
226397_s_at	TBC1D7	1.46E-02	2.75
226405_s_at	MGC40555	2.25E-01	3.68
226421_at	LOC286505	3.85E-02	0.26
226425_at	CLIP4	4.37E-02	0.44
226438_at	MTBP	2.34E-03	2.71
226441_at	MAP3K2	1.09E-03	3.69
226448_at	MGC15887	6.79E-03	0.27
226460_at	KIAA1450	6.15E-02	4.30
226550_at	---	8.19E-02	0.22
226558_at	---	2.75E-02	0.42
226560_at	SGPP2	7.38E-02	0.36
226561_at	LOC285086	9.08E-03	0.38
226579_at	KNS2	4.58E-02	0.36
226603_at	FLJ39885	1.08E-02	27.30
226604_at	FLJ90492	3.22E-02	0.43
226613_at	EPI64	2.17E-01	4.18
226624_at	---	6.36E-02	0.48
226641_at	LOC91526	9.71E-03	2.51
226656_at	CRTAP	9.55E-02	6.53
226659_at	DEF6; IBP	5.58E-02	2.30
226662_at	STX17	1.57E-02	3.42
226722_at	DKFZp547D065	1.03E-02	0.44
226738_at	FLJ33817	5.00E-03	3.77
226744_at	MGC3329	2.97E-02	0.37
226747_at	KIAA1344	4.62E-02	2.09
226752_at	UNQ1912	1.14E-02	0.37
226756_at	FLJ36031	2.28E-03	0.43
226773_at	---	6.54E-03	8.14
226823_at	FLJ13171	4.28E-02	2.31
226839_at	RFXANK	2.45E-03	0.25
226874_at	KLHL8	1.42E-02	0.39
226876_at	MGC45871	4.20E-03	0.24
226896_at	CHCHD1	1.24E-02	0.41
226901_at	C17ORF58	5.81E-03	0.27
226905_at	FAM101B	2.17E-02	0.19
226910_at	LOC51122	6.30E-02	0.41
227031_at	SNX13	1.15E-02	0.40
227034_at	FLJ21870	8.23E-02	0.16
227044_at	---	2.45E-02	3.68
227052_at	---	3.87E-02	2.73
227066_at	LOC148932	2.13E-03	0.35
227080_at	MGC45731	1.03E-01	0.28

227099_s_at	LOC387763	1.97E-03	13.72
227101_at	ZNF800	2.19E-02	0.44
227119_at	CNOT6L	4.34E-02	2.14
227124_at	LOC221710	4.35E-02	0.44
227129_x_at	LOC402483	7.58E-02	2.34
227135_at	ASAH1	1.11E-02	2.46
227140_at	---	1.13E-01	0.07
227180_at	FLJ23563	4.22E-03	0.08
227227_at	KIAA0563	5.60E-03	2.61
227239_at	DRCTNNB1A	4.14E-02	0.25
227245_at	FLJ13089	6.59E-02	0.41
227288_at	---	7.17E-02	0.39
227368_at	C6orf166	2.94E-03	2.01
227384_s_at	LOC727820	8.00E-03	3.13
227402_s_at	MGC14595	8.15E-02	0.48
227420_at	MGC17791	1.06E-03	4.91
227435_at	KIAA2018	7.51E-03	2.14
227501_at	WSB1	3.84E-03	2.64
227517_s_at	CENPL	2.71E-02	0.17
227520_at	RBBP7	3.54E-02	0.47
227548_at	LOC51240	2.82E-02	0.45
227559_at	---	1.19E-01	0.34
227571_at	---	4.74E-02	0.38
227609_at	EPSTI1	5.12E-03	17.42
227618_at	---	5.05E-02	4.79
227650_at	HSP70-4	3.73E-02	0.36
227665_at	MCART1	1.62E-02	0.29
227765_at	---	3.10E-02	0.40
227799_at	MYO1G	2.23E-03	7.53
227818_at	DKFZP434L0117	1.43E-02	0.33
227894_at	KIAA1924	5.94E-03	0.22
227917_at	---	1.71E-03	2.48
227942_s_at	CRIP1	2.32E-03	0.49
227947_at	C6orf56	1.38E-02	0.44
228053_s_at	FBXO10	1.90E-02	0.22
228069_at	FAM54A	1.67E-01	3.12
228123_s_at	DKFZP434P106	2.35E-04	3.74
228124_at	DKFZP434P106	2.73E-03	13.66
228149_at	FLJ31818	2.55E-02	3.21
228167_at	KLHL6	2.27E-02	5.18
228231_at	NUDT1	9.39E-02	0.16
228238_at	GAS5	1.13E-03	0.17
228242_at	---	1.13E-01	2.10
228243_at	---	4.68E-02	2.86
228248_at	KIAA1999	4.04E-04	2.71
228273_at	FLJ11029	4.35E-02	2.49
228292_at	GBA2	2.66E-02	2.21
228330_at	LOC221302	5.55E-02	0.30
228353_x_at	KIAA1959	1.47E-01	0.17
228373_at	PRO0149	5.09E-02	0.43

228466_at	---	5.66E-02	0.35
228531_at	FLJ20073	4.00E-03	21.06
228573_at	CMG2	8.06E-03	2.45
228603_at	---	5.69E-03	0.47
228612_at	---	1.64E-02	0.39
228617_at	HSXIAPAF1	3.63E-03	51.86
228726_at	SERPINB1	7.83E-02	3.25
228839_s_at	---	4.64E-02	2.69
228869_at	---	1.25E-02	3.37
228891_at	C9ORF164	5.24E-02	10.76
228928_x_at	BANP	1.18E-02	2.34
228949_at	FLJ23091	4.83E-02	2.92
228971_at	SLC25A3	4.28E-02	2.14
228990_at	LOC85028	9.89E-03	0.18
229001_at	LOC90673	1.04E-03	4.44
229027_at	PPM1A	7.56E-04	2.05
229067_at	---	1.28E-01	3.06
229119_s_at	ZSWIM7	4.92E-02	2.02
229121_at	---	6.14E-02	0.25
229242_at	---	7.17E-02	0.12
229287_at	PCNX	3.44E-02	0.44
229307_at	ANKRD28	7.36E-02	0.31
229371_at	---	7.34E-02	0.31
229390_at	C6orf187	8.37E-02	11.80
229391_s_at	C6orf187	8.30E-02	10.28
229417_at	STAU2	3.67E-02	0.28
229429_x_at	FAM91A2	1.91E-02	4.24
229521_at	FLJ36031	5.18E-02	0.29
229549_at	OPN1SW	3.28E-02	2.11
229629_at	---	1.24E-01	0.44
229713_at	---	4.18E-02	0.27
229795_at	---	5.93E-02	2.93
229845_at	MAPKAP1	1.27E-03	0.32
229865_at	FAD104	1.19E-02	0.30
229870_at	---	4.99E-02	5.18
229872_s_at	FLJ21308	2.18E-02	5.64
229905_at	---	9.82E-03	0.48
229908_s_at	CAB56184	5.68E-03	2.28
229940_at	FLJ23027	1.91E-02	0.46
230000_at	KIAA1554	1.31E-02	19.86
230036_at	SAMD9L	1.63E-02	31.13
230233_at	GPIG4	2.93E-02	3.23
230241_at	KIAA1337	1.68E-02	0.16
230314_at	---	8.95E-02	5.74
230323_s_at	TMEM45B	1.82E-02	0.08
230383_x_at	GRP58	2.45E-02	16.73
230387_at	---	4.56E-02	2.24
230532_at	MGC39350	3.53E-02	0.36
230535_s_at	TUBB1	7.54E-03	0.39
230656_s_at	CIRH1A	7.77E-03	0.11

230741_at	---	1.78E-02	3.06
230795_at	H4F2	1.23E-02	3.51
230952_at	BANP	8.18E-02	4.01
230987_at	---	1.60E-02	3.19
231035_s_at	LOC220213	5.71E-02	2.53
231205_at	PVRL3	4.04E-02	0.34
231312_at	---	2.07E-03	0.18
231484_at	ATP8A1	6.44E-03	2.25
231513_at	KCNJ2	1.12E-01	3.81
231528_at	---	2.79E-02	4.15
231644_at	---	8.13E-02	0.30
231658_x_at	RPL36	6.87E-02	2.08
231735_s_at	HDAC3	3.37E-01	2.19
231784_s_at	DKFZP564O0463	7.94E-02	0.23
231839_at	DKFZp667B1218	3.99E-02	0.47
231890_at	---	3.47E-02	3.12
231899_at	KIAA1726	6.45E-02	3.69
231956_at	KIAA1618	2.11E-02	6.41
231972_at	---	2.01E-01	8.64
232024_at	HIMAP2	2.21E-02	9.88
232045_at	KIAA1733	2.29E-02	22.45
232138_at	MBNL2	3.93E-02	4.47
232150_at	---	6.37E-02	3.50
232155_at	KIAA1618	9.14E-03	31.13
232330_at	C7ORF44	2.83E-02	0.29
232331_at	---	3.52E-02	0.47
232369_at	---	1.06E-01	2.65
232375_at	---	1.10E-02	6.00
232441_at	KRR1	4.68E-02	0.46
232489_at	FLJ10287	5.46E-02	0.35
232504_at	---	2.81E-02	3.76
232511_at	---	5.04E-02	0.42
232591_s_at	FLJ10856	1.56E-02	0.45
232607_at	---	3.06E-02	3.52
232653_at	---	3.77E-02	0.05
232682_at	FLJ10116	2.20E-02	0.40
232687_at	---	1.23E-01	0.12
232716_at	---	2.47E-02	0.18
232797_at	---	8.03E-03	2.55
232835_at	---	1.74E-02	0.23
232843_s_at	DOCK8	1.62E-02	4.02
233020_at	---	2.82E-02	2.91
233039_at	---	1.08E-01	0.10
233085_s_at	OBFC2A	3.76E-03	0.20
233167_at	IMAGE3510317	6.13E-02	4.73
233168_s_at	IMAGE3510317	6.53E-02	2.16
233176_at	---	4.23E-03	0.14
233559_s_at	FENS-1	3.03E-03	2.81
233568_x_at	FLJ10998	1.11E-02	0.27
233626_at	---	7.37E-02	0.25

233642_s_at	HEATR5B	6.99E-02	2.52
233842_x_at	C20orf43	7.09E-02	0.37
233867_at	---	4.11E-02	0.41
233921_s_at	---	4.73E-02	3.08
233984_at	KIAA0831	4.92E-03	2.06
234926_s_at	C20orf43	8.08E-02	0.28
234949_at	C20ORF80	7.72E-03	0.37
234973_at	SLC38A5	9.83E-02	2.50
235016_at	REEP3	3.77E-02	0.43
235028_at	---	8.55E-02	0.47
235094_at	TPM4	1.91E-02	0.24
235102_x_at	PAH	1.20E-02	5.02
235157_at	---	6.91E-03	8.63
235221_at	CBLN3	4.72E-02	4.99
235276_at	EPSTI1	1.06E-02	23.28
235299_at	DKFZP434K0427	2.52E-02	0.30
235346_at	MGC51029	3.66E-02	0.49
235352_at	---	1.01E-02	2.95
235361_at	---	4.37E-02	0.49
235369_at	C14orf28	3.48E-02	2.84
235376_at	---	5.32E-03	0.40
235380_at	---	7.21E-03	5.52
235390_at	FLJ36754	6.30E-02	0.35
235436_at	DDX31	9.27E-02	0.18
235466_s_at	---	3.71E-03	0.07
235556_at	---	1.09E-02	2.66
235643_at	FLJ39885	2.58E-02	24.55
235660_at	GRP58	5.18E-02	0.26
235670_at	---	1.38E-02	4.89
235716_at	TRA2A	5.80E-03	2.60
235727_at	BTBD5	1.30E-01	0.36
235735_at	TNFSF8	1.08E-02	0.20
235739_at	---	7.02E-02	2.66
235751_s_at	LOC284013	1.29E-01	0.08
235812_at	TMEM188	1.66E-03	0.37
235875_at	---	9.25E-03	2.19
235880_at	FLJ37078	2.73E-02	0.46
235911_at	---	1.65E-02	0.42
236004_at	---	1.79E-02	0.42
236125_at	DKFZp586I1420	1.16E-01	2.45
236180_at	---	1.15E-01	0.25
236198_at	---	2.96E-02	3.15
236199_at	---	3.14E-02	2.39
236220_at	---	2.19E-03	0.06
236251_at	---	6.45E-02	3.25
236285_at	LOC113730	5.20E-02	4.92
236338_at	---	5.00E-02	4.80
236379_at	---	9.04E-03	13.45
236404_at	---	3.82E-02	0.32
236439_at	---	1.05E-02	0.32

236484_at	STARD7	1.53E-02	0.18
236487_at	FLJ30655	3.30E-02	4.23
236524_at	---	2.98E-02	0.49
236528_at	UBE2J1	1.19E-02	2.72
236646_at	FLJ31166	3.72E-02	2.15
236649_at	MDS009	6.76E-02	0.39
236692_at	---	4.67E-02	2.28
236787_at	---	2.43E-02	0.23
236841_at	---	1.00E-02	0.41
236875_at	---	9.95E-02	4.28
236922_at	---	7.12E-03	2.04
236923_x_at	---	8.57E-03	0.27
237009_at	---	2.49E-02	20.04
237137_at	SCARNA2	1.52E-02	5.20
237485_at	SFRS3	3.98E-02	3.92
237510_at	MYNN	8.94E-02	3.70
237568_at	---	1.24E-03	3.57
237753_at	---	5.46E-03	2.38
238005_s_at	MAN2C1	2.55E-02	2.41
238032_at	---	1.86E-02	2.38
238063_at	TMEM154	4.85E-02	4.06
238122_at	RBM12B	2.92E-02	0.49
238142_at	---	7.23E-02	0.39
238161_at	---	4.78E-02	0.43
238193_at	---	3.92E-02	0.43
238295_at	C17ORF42	2.15E-02	0.48
238435_at	CA5B	2.98E-04	0.50
238439_at	MGC22805	7.30E-03	11.16
238462_at	KIAA1959	1.45E-02	0.30
238476_at	LOC153222	4.31E-02	3.46
238480_at	FLJ33761	1.50E-02	0.34
238513_at	PRRG4	1.30E-02	6.23
238559_at	---	4.87E-03	0.45
238567_at	SGPP2	1.32E-01	0.19
238568_s_at	NPC1	5.30E-02	3.93
238587_at	KIAA1959	8.81E-02	0.10
238604_at	---	1.66E-02	2.02
238646_at	---	8.69E-04	7.83
238662_at	MGC14798	1.62E-01	0.25
238668_at	---	2.08E-02	0.48
238727_at	---	8.74E-04	0.06
238733_at	---	4.57E-02	2.71
238735_at	---	3.15E-02	0.49
238738_at	PSMD7	1.17E-02	0.40
238893_at	---	4.14E-02	3.69
238908_at	CALU	8.74E-03	2.67
239027_at	FLJ00026	1.43E-02	2.99
239045_at	---	9.34E-02	4.50
239135_at	FLJ11151	8.00E-02	14.60
239138_at	---	2.04E-01	0.21

239186_at	MGC39372	2.53E-03	6.05
239203_at	FLJ39575	7.30E-02	6.13
239258_at	ARHQ	3.06E-02	2.16
239311_at	MAP2K7	3.99E-02	2.54
239346_at	GTF2H3	2.75E-02	0.40
239363_at	HSPC043	6.15E-02	0.44
239451_at	TRA1	5.35E-03	4.54
239519_at	---	2.19E-02	0.19
239567_at	---	7.91E-02	0.20
239571_at	---	5.21E-02	2.27
239845_at	---	1.05E-02	6.77
239914_at	---	7.95E-04	0.31
239942_at	---	2.49E-03	0.37
239979_at	---	7.48E-02	9.00
240046_at	---	7.81E-03	3.74
240057_at	---	8.15E-02	4.47
240170_at	---	3.52E-02	0.38
240173_at	---	4.43E-02	0.20
240174_at	---	6.54E-02	2.75
240190_at	---	2.81E-03	4.18
240257_at	SYNJ2	3.86E-02	2.11
240287_at	---	3.41E-01	2.78
240344_x_at	LOC90624	3.14E-01	0.32
240458_at	---	1.17E-01	7.82
240529_at	---	2.33E-02	0.34
240544_at	---	5.18E-03	2.04
240555_at	---	1.44E-02	0.05
240674_at	---	4.88E-03	0.24
240690_at	---	3.16E-02	0.49
240723_at	---	1.92E-01	0.24
240759_at	---	2.63E-02	0.33
240788_at	---	4.73E-02	0.31
240830_at	---	1.93E-02	7.60
240843_at	PTPN2	4.42E-02	0.40
240845_at	EVI5	4.97E-02	0.41
241036_at	---	4.49E-02	2.16
241100_at	---	1.52E-02	0.42
241154_x_at	---	1.33E-02	0.09
241215_at	---	2.55E-02	0.49
241344_at	---	1.52E-04	0.33
241359_at	---	2.76E-02	3.62
241374_at	FLJ10902	3.29E-02	4.97
241392_at	FLJ10902	5.59E-02	2.77
241692_at	---	1.16E-01	0.16
241751_at	OFD1	5.54E-02	4.53
241769_at	---	8.17E-04	5.88
241773_at	---	1.20E-02	0.36
241812_at	DNAPTP6	1.11E-01	3.47
241817_at	FLJ43654	2.71E-03	0.44
241843_at	EIF5	3.87E-02	2.64

241893_at	---	2.30E-02	0.27
241916_at	PLSCR1	4.79E-02	8.07
241929_at	---	3.30E-02	0.18
241930_x_at	---	2.32E-02	0.39
241936_x_at	---	9.85E-02	2.81
241991_at	---	8.72E-02	3.02
242058_at	---	2.65E-02	3.12
242060_x_at	NY-REN-34	1.91E-02	3.09
242077_x_at	LOC115004	5.83E-02	2.94
242139_s_at	LOC113386	3.73E-03	0.46
242140_at	LOC113386	5.60E-02	0.35
242234_at	HSXIAPAF1	1.51E-02	5.32
242273_at	---	6.51E-02	0.34
242277_at	C6orf56	2.81E-02	0.48
242280_x_at	CPEB4	7.73E-02	0.34
242317_at	---	5.33E-02	0.48
242337_at	---	3.95E-02	0.42
242390_at	---	1.13E-01	2.90
242397_at	---	4.13E-03	2.47
242625_at	cig5	9.26E-03	64.29
242648_at	KLHL8	1.27E-02	0.39
242649_x_at	FLJ39426	3.19E-02	3.76
242677_at	NRP1	3.54E-02	0.08
242681_at	CTNNBIP1	2.87E-03	2.26
242719_at	---	6.87E-03	4.55
242725_at	KDEL2	6.19E-02	2.21
242732_at	---	2.91E-02	0.27
242775_at	---	6.05E-02	0.35
242803_at	---	7.80E-02	0.44
242819_at	---	1.78E-03	2.52
243052_at	LOC148932	3.17E-02	0.45
243149_at	---	1.30E-01	0.29
243158_at	---	4.42E-03	4.11
243179_at	---	2.40E-02	0.44
243210_at	TSC1	6.79E-02	0.39
243271_at	---	1.64E-02	28.58
243371_at	SELK	7.13E-03	3.48
243395_at	---	7.72E-03	2.38
243417_at	---	5.13E-02	3.58
243465_at	---	1.73E-02	7.15
243578_at	---	2.23E-01	0.19
243888_at	---	2.98E-02	2.90
243918_at	---	2.96E-02	2.57
243934_at	---	9.10E-02	4.51
244029_at	CPNE5	8.87E-03	5.38
244050_at	PTPLAD2	2.13E-02	3.86
244054_at	---	4.83E-02	2.28
244087_at	---	3.09E-02	2.77
244154_at	DDHD1	8.08E-02	2.64
244159_at	---	3.70E-02	0.16

244185_at	METAP2	1.00E-02	0.32
244375_at	---	9.19E-02	0.22
244447_at	OAZIN	5.50E-03	4.39
244457_at	---	2.03E-02	2.77
244511_at	---	3.76E-02	2.68
244579_at	---	1.86E-02	0.23
244598_at	---	8.42E-02	3.06
244631_at	---	1.76E-02	0.40
244648_at	---	1.79E-02	2.60
244652_at	IGSF2	7.14E-02	2.26
244654_at	MYO1G	4.18E-02	3.56
244726_at	GRP58	7.81E-02	0.48
244780_at	SGPP2	5.14E-02	0.39
244787_at	--	8.52E-03	3.34
244791_at	B2M	5.88E-02	0.18
33307_at	CGI-96	2.94E-04	0.41
35436_at	GOLGA2	1.88E-02	2.59
36030_at	DKFZp586I2223	8.55E-03	3.39
36564_at	FLJ90005	1.97E-02	4.48
37943_at	KIAA0321	2.56E-02	2.46
41469_at	PI3	1.79E-02	3.90
46167_at	TTC4	4.94E-03	0.17
53720_at	FLJ11286	4.85E-02	7.75
57715_at	LOC51063	8.15E-03	0.42
63009_at	FLJ10539	1.02E-01	0.34
64064_at	IAN4L1	1.02E-01	2.92
64488_at	---	2.31E-02	0.19
AFFX-M27830_M_at	---	8.74E-03	2.46
AFFX-r2-Hs28SrRNA-3_at	---	4.01E-02	2.29
AFFX-r2-Hs28SrRNA-5_at	---	5.45E-03	2.79
AFFX-r2-Hs28SrRNA-M_at	---	3.10E-02	4.74

A.8. SLE serum induced genes regulated by IFNa2b.

		IFNa2b SLE serum	
Systematic	Gene Symbol	Normalized value	
<i>Angiogenesis</i>			
209788_s_at	ARTS-1	2.19	3.35
212298_at	NRP1	0.16	0.04
225036_at	SHB	0.44	0.16
<i>Apoptosis</i>			
201301_s_at	ANXA4	3.16	2.15
201302_at	ANXA4	2.88	3.40
202687_s_at	TNFSF10	60.60	41.62
202688_at	TNFSF10	56.40	88.58
204285_s_at	PMAIP1	2.81	3.60
204286_s_at	PMAIP1	2.09	2.26
204780_s_at	FAS	2.75	2.25
207574_s_at	GADD45B	2.62	17.80
209305_s_at	GADD45B	2.16	8.53
209723_at	SERPINB9	2.25	6.48
210538_s_at	BIRC3	2.40	3.31
214329_x_at	TNFSF10	48.73	16.39
217996_at	PHLDA1	0.44	0.12
219043_s_at	PDCL3	0.37	0.39
225842_at	PHLDA1	0.41	0.26
226116_at	DFFA	0.41	0.40
<i>Biosynthetic process</i>			
201433_s_at	PTDSS1	0.50	0.30
203066_at	GALNAC4S-6ST	0.42	0.38
226702_at	LOC129607	16.19	46.56
226868_at	GLT8D3	0.32	0.27
<i>Catabolic process</i>			
210007_s_at	GPD2	3.34	2.09
<i>Cell adhesion</i>			
201005_at	CD9	0.41	0.19
201015_s_at	JUP	20.48	45.71
201125_s_at	ITGB5	0.47	0.38
204563_at	SELL	4.39	4.98
204619_s_at	VCAN	0.19	0.20
204620_s_at	VCAN	0.33	0.34
211075_s_at	CD47	4.95	2.54
211571_s_at	VCAN	0.18	0.22
213857_s_at	CD47	4.22	2.81
215646_s_at	VCAN	0.19	0.16

219159_s_at	SLAMF7	6.45	5.16
221731_x_at	VCAN	0.35	0.24
222838_at	SLAMF7	7.15	6.99
226016_at	CD47	3.05	4.96
227259_at	CD47	3.44	3.04
234306_s_at	SLAMF7	3.69	7.68
44673_at	SIGLEC1	16.21	13.94

Cell cycle

200731_s_at	PTP4A1	2.11	2.25
202769_at	CCNG2	3.54	8.99
203740_at	MPHOSPH6	0.50	0.33
204170_s_at	CKS2	2.11	3.13
209588_at	EPHB2	2.68	7.03
209589_s_at	EPHB2	3.52	12.22
225662_at	ZAK	0.35	0.46
225814_at	XRN1	5.96	5.52
227322_s_at	BCCIP	0.44	0.25
233632_s_at	XRN1	6.29	5.63
49306_at	RASSF4	3.42	2.76

Cell differentiation

204675_at	SRD5A1	2.73	9.20
204858_s_at	ECGF1	3.43	3.30
206707_x_at	C6orf32	3.63	2.10
210959_s_at	SRD5A1	3.04	4.03
211056_s_at	SRD5A1	2.63	4.18
217497_at	ECGF1	3.46	5.40
226725_at	SLFN5	3.45	6.14
229813_x_at	DAZAP1	0.44	0.30
238430_x_at	SLFN5	4.41	5.14

Cell migration/Cell motility

205566_at	ABHD2	0.39	0.27
225337_at	ABHD2	0.27	0.38
203037_s_at	MTSS1	0.50	0.39
225897_at	MARCKS	4.26	2.25

Cell proliferation

201666_at	TIMP1	0.34	0.49
202212_at	PES1	0.35	0.20
204070_at	RARRES3	3.46	2.24
204698_at	ISG20	177.10	61.16
205569_at	LAMP3	20.07	11.61
33304_at	ISG20	45.72	23.45

Cell wall catabolic process

226748_at	LYSMD2	3.47	3.07
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Chemotaxis

204470_at	CXCL1	0.32	0.03
204533_at	CXCL10	103.46	68.21
225009_at	CMTM4	0.34	0.36
230422_at	FPRL2	2.10	2.48

Chromosome organization and biogenesis

212569_at	SMCHD1	4.27	4.90
212577_at	SMCHD1	3.43	3.78
212579_at	SMCHD1	2.97	2.61
241620_at	SMCHD1	2.90	2.10

Cytoskeleton

208622_s_at	VIL2	2.07	2.56
217892_s_at	LIMA1	0.47	0.22

Dephosphorylation

205076_s_at	MTMR11	2.28	2.21
208874_x_at	PPP2R4	2.10	2.25
226169_at	SBF2	2.24	2.51
235061_at	PPM1K	23.72	39.05

Development

204249_s_at	LMO2	2.97	4.22
225093_at	UTRN	2.21	5.54

DNA integration

222139_at	KIAA1466	4.44	25.87
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DNA repair

202239_at	PARP4	2.48	5.46
202905_x_at	NBN	2.85	3.56
202906_s_at	NBN	3.74	2.65
205875_s_at	TREX1	3.37	4.92

DNA replication

200631_s_at	SET	0.46	0.47
213047_x_at	SET	0.47	0.36
40189_at	SET	0.43	0.36

Immune response/Defense response

201315_x_at	IFITM2	7.08	7.28
201601_x_at	IFITM1	42.61	21.16
201641_at	BST2	9.68	6.58

201762_s_at	PSME2	3.53	3.87
202086_at	MX1	24.52	76.31
202145_at	LY6E	16.79	36.63
202269_x_at	GBP1	22.15	4.88
202270_at	GBP1	21.67	5.64
202748_at	GBP2	4.10	2.46
202869_at	OAS1	27.32	17.48
203153_at	IFIT1	88.49	57.91
203595_s_at	IFIT5	13.97	12.77
203596_s_at	IFIT5	19.06	13.06
203789_s_at	SEMA3C	0.36	0.27
204205_at	APOBEC3G	8.98	5.92
204415_at	IFI6	9.07	7.08
204747_at	IFIT3	26.38	11.13
204972_at	OAS2	17.22	10.04
204994_at	MX2	15.57	17.78
205269_at	LCP2	2.91	4.88
205270_s_at	LCP2	2.29	6.29
205552_s_at	OAS1	23.97	11.96
205660_at	OASL	14.69	8.09
205992_s_at	IL15	11.55	11.51
206247_at	MICB	5.03	3.29
206420_at	IGSF6	2.98	3.27
206553_at	OAS2	16.76	17.84
207565_s_at	MR1	2.22	3.83
208910_s_at	C1QBP	0.49	0.27
209124_at	MYD88	2.23	3.77
209417_s_at	IFI35	26.59	20.67
209795_at	CD69	21.25	24.54
210223_s_at	MR1	2.46	2.45
210797_s_at	OASL	9.16	4.87
211794_at	FYB	2.26	7.48
212203_x_at	IFITM3	14.62	10.59
213716_s_at	SECTM1	4.36	6.71
214022_s_at	IFITM1	54.89	19.08
214059_at	IFI44	28.46	29.54
214214_s_at	C1QBP	0.32	0.20
214453_s_at	IFI44	17.66	13.08
214511_x_at	FCGR1B	3.05	4.83
217502_at	IFIT2	29.48	36.96
218400_at	OAS3	19.99	23.57
218943_s_at	DDX58	46.91	21.68
219209_at	IFIH1	12.10	16.95
219357_at	GTPBP1	2.50	3.44
219364_at	DHX58	126.79	64.62
219890_at	CLEC5A	0.16	0.13
222793_at	DDX58	17.65	16.86
222934_s_at	CLEC4E	2.88	4.24

223434_at	GBP3	19.69	31.70
223501_at	TNFSF13B	8.13	11.40
223502_s_at	TNFSF13B	10.93	14.76
226474_at	NLRC5	9.74	6.77
226757_at	IFIT2	20.47	31.70
228607_at	OAS2	8.49	10.42
229450_at	IFIT3	46.63	37.63
229625_at	GBP5	24.14	7.54
231577_s_at	GBP1	35.67	6.23
232311_at	B2M	2.11	2.09
235574_at	GBP4	8.48	9.22
238581_at	GBP5	76.55	57.93
242907_at	GBP2	7.96	3.94

Inflammatory response

204140_at	TPST1	0.19	0.34
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Kinase activity

201348_at	GPX3	0.42	0.20
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Metabolic process

202070_s_at	IDH3A	0.50	0.40
204058_at	ME1	0.41	0.18
204059_s_at	ME1	0.36	0.15
204224_s_at	GCH1	10.89	4.57
206522_at	MGAM	0.36	0.22
208918_s_at	NADK	5.42	4.06
208919_s_at	NADK	4.01	3.53
208963_x_at	FADS1	0.08	0.38
209696_at	FBP1	0.49	0.46
210046_s_at	IDH2	2.04	5.47
213607_x_at	NADK	3.85	2.82
215159_s_at	NADK	4.92	2.71
217775_s_at	RDH11	0.49	0.47
217776_at	RDH11	0.38	0.50
217884_at	NAT10	0.46	0.26
218231_at	NAGK	4.63	7.86
218473_s_at	GLT25D1	0.30	0.34
218592_s_at	CECR5	0.48	0.32
218869_at	MLYCD	0.44	0.37
223040_at	NAT5	0.49	0.18
223062_s_at	PSAT1	0.43	0.17
225272_at	SAT2	2.31	2.11
225970_at	DDHD1	2.80	3.44
226064_s_at	DGAT2	0.49	0.22
227038_at	SGMS2	0.37	0.37
231736_x_at	MGST1	0.49	0.39
45288_at	ABHD6	0.38	0.33

Methylation

221570_s_at	METTL5	0.41	0.46
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Nucleic acid metabolism

202613_at	CTPS	0.34	0.12
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Nucleosome assembly

214290_s_at	HIST2H2AA3	3.75	2.36
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Nucleotide metabolic process

201013_s_at	PAICS	0.45	0.40
223298_s_at	NT5C3	28.40	7.15

Phagocytosis

202877_s_at	CD93	0.27	0.27
202878_s_at	CD93	0.26	0.32
216950_s_at	FCGR1A	3.07	2.50

Platelet activation

202430_s_at	PLSCR1	6.49	5.77
202446_s_at	PLSCR1	8.04	7.12

Protein amino acid acetylation

203138_at	HAT1	0.45	0.24
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Protein amino acid ADP-ribosylation

213051_at	ZC3HAV1	3.94	4.75
218543_s_at	PARP12	12.12	9.24
223220_s_at	PARP9	18.09	13.76
225634_at	ZC3HAV1	5.15	3.83
227807_at	PARP9	9.32	7.71
229138_at	PARP11	4.59	2.50
229350_x_at	PARP10	3.05	5.32

Protein amino acid phosphorylation

204604_at	PFTK1	0.31	0.26
228468_at	MASTL	4.85	4.52
205139_s_at	UST	0.25	0.23

Protein folding

201947_s_at	CCT2	0.45	0.21
202843_at	DNAJB9	2.14	7.52
204720_s_at	DNAJC6	2.26	2.64
209593_s_at	TOR1B	7.97	2.14
212432_at	GRPEL1	0.47	0.32
217911_s_at	BAG3	2.69	2.06
230659_at	EDEM1	2.16	2.60

Protein homooligomerization

201061_s_at	STOM	6.56	2.27
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Proteolysis

202659_at	PSMB10	3.54	4.43
203936_s_at	MMP9	0.15	0.20
204279_at	PSMB9	7.02	7.37
205559_s_at	PCSK5	0.46	0.21
205560_at	PCSK5	0.44	0.29
205997_at	ADAM28	2.30	12.95
206134_at	ADAMDEC1	4.31	5.67
212779_at	KIAA1109	8.32	4.87
213652_at	PCSK5	0.48	0.24
217752_s_at	CNDP2	3.23	3.70
217933_s_at	LAP3	10.68	10.62
231769_at	FBXO6	8.73	4.37

Regulation of Rab GTPase activity

203020_at	RABGAP1L	4.36	15.66
213982_s_at	RABGAP1L	46.23	21.29

Ribosome biogenesis and assembly

201323_at	EBNA1BP2	0.42	0.16
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RNA processing

200687_s_at	SF3B3	0.47	0.33
201479_at	DKC1	0.47	0.31
201786_s_at	ADAR	5.62	3.25
202462_s_at	DDX46	0.35	0.46
204405_x_at	DIMT1L	0.36	0.29
209486_at	SAS10	0.40	0.42
211932_at	HNRPA3	0.49	0.42
212627_s_at	EXOSC7	0.33	0.23
214661_s_at	NOL14	0.41	0.29
216212_s_at	DKC1	0.26	0.15
217106_x_at	DIMT1L	0.41	0.18
218882_s_at	WDR3	0.46	0.26
219110_at	NOLA1	0.43	0.45
222398_s_at	EFTUD2	0.47	0.48
225291_at	PNPT1	19.27	6.12
226180_at	WDR36	0.46	0.28
227447_at	SKIV2L2	0.40	0.31
229220_x_at	NOM1	0.47	0.26
229632_s_at	INTS10	0.48	0.31
241937_s_at	WDR4	0.29	0.08

Signal transduction

200658_s_at	PHB	0.41	0.23
201995_at	EXT1	3.94	3.94
202686_s_at	AXL	10.24	20.72
203236_s_at	LGALS9	4.31	3.86
203593_at	CD2AP	6.34	3.54
203708_at	PDE4B	2.14	3.43
204271_s_at	EDNRB	0.46	0.16
204834_at	FGL2	5.79	2.16
204882_at	ARHGAP25	2.12	2.18
205842_s_at	JAK2	5.73	7.64
206025_s_at	TNFAIP6	2.98	3.78
206026_s_at	TNFAIP6	2.52	4.14
206267_s_at	MATK	0.43	0.05
209545_s_at	RIPK2	3.26	2.61
209684_at	RIN2	7.71	7.89
210220_at	FZD2	6.61	10.62
213222_at	PLCB1	0.46	0.25
219112_at	RAPGEF6	0.49	0.30
219607_s_at	MS4A4A	5.94	3.43
219666_at	MS4A6A	2.85	5.55
222858_s_at	DAPP1	2.57	5.60
223280_x_at	MS4A6A	4.51	6.65
223922_x_at	MS4A6A	2.54	5.64
224356_x_at	MS4A6A	4.53	5.59
225144_at	BMPR2	2.54	2.32
225171_at	ARHGAP18	0.45	0.48
225188_at	RAPH1	0.46	0.26
225189_s_at	RAPH1	0.38	0.23
225564_at	SPATA13	2.45	2.81
225637_at	DEF8	0.30	0.26
225710_at	GNB4	3.74	2.63
227265_at	FGL2	6.19	5.09
229723_at	TAGAP	6.72	22.43
242388_x_at	TAGAP	6.37	19.26
217763_s_at	RAB31	2.81	3.31
226345_at	ARL5B	3.44	2.20

Spliceosome assembly

202690_s_at	SNRPD1	0.45	0.24
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Steroid biosynthesis

227629_at	PRLR	4.32	2.82
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Synaptic transmission

208912_s_at	CNP	7.50	7.08
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Transcription

200887_s_at	STAT1	6.99	7.41
201074_at	SMARCC1	0.48	0.46
201277_s_at	HNRPAB	0.43	0.30
202396_at	TCERG1	0.49	0.26
202531_at	IRF1	2.81	3.79
202672_s_at	ATF3	4.40	2.69
202863_at	SP100	4.10	3.73
202864_s_at	SP100	3.53	6.58
203275_at	IRF2	3.85	2.68
203753_at	TCF4	2.76	3.66
203882_at	ISGF3G	2.92	3.42
203964_at	NMI	5.63	4.70
204211_x_at	EIF2AK2	3.93	6.85
204702_s_at	NFE2L3	2.86	2.84
206332_s_at	IFI16	7.32	10.14
206715_at	TFEC	3.10	2.36
208012_x_at	SP110	14.01	22.69
208328_s_at	MEF2A	2.40	3.41
208392_x_at	SP110	5.56	28.88
208436_s_at	IRF7	6.15	7.71
208961_s_at	KLF6	3.28	2.58
208965_s_at	IFI16	5.33	19.41
208966_x_at	IFI16	6.33	10.55
209503_s_at	PSMC5	0.41	0.47
209640_at	PML	5.07	2.81
209761_s_at	SP110	8.17	27.09
209762_x_at	SP110	13.87	15.18
209969_s_at	STAT1	9.70	11.36
210218_s_at	SP100	2.56	3.89
211012_s_at	PML	95.94	23.25
211013_x_at	PML	20.72	71.11
211014_s_at	PML	2.11	4.44
211615_s_at	LRPPRC	0.36	0.24
211730_s_at	POLR2L	0.48	0.42
212382_at	TCF4	3.84	5.22
212641_at	HIVEP2	2.18	3.58
212642_s_at	HIVEP2	3.47	3.37
213293_s_at	TRIM22	8.84	13.86
213294_at	---	8.63	12.89
213720_s_at	SMARCA4	0.42	0.49
214009_at	MSL3L1	2.24	2.10
214924_s_at	TRAK1	0.50	0.41
217985_s_at	BAZ1A	2.19	2.19
218088_s_at	RRAGC	2.22	2.32
218188_s_at	TIMM13	0.32	0.37
218250_s_at	CNOT7	0.44	0.49
218502_s_at	TRPS1	0.46	0.28

218645_at	ZNF277P	2.05	2.69
220607_x_at	TH1L	0.25	0.32
222514_at	RRAGC	2.38	2.07
222651_s_at	TRPS1	0.44	0.12
223980_s_at	SP110	13.52	25.82
224701_at	PARP14	10.87	16.08
225006_x_at	TH1L	0.41	0.29
225053_at	CNOT7	0.49	0.45
225076_s_at	ZNFX1	4.31	2.34
225251_at	RAB24	3.10	4.25
225261_x_at	TH1L	0.26	0.12
225344_at	NCOA7	8.92	9.82
225636_at	STAT2	8.19	6.92
225798_at	JAZF1	3.90	3.64
225865_x_at	TH1L	0.35	0.25
228170_at	OLIG1	4.69	15.53
228230_at	PRIC285	5.34	3.78
229215_at	ASCL2	6.17	2.81
229435_at	GLIS3	0.17	0.11
232008_s_at	BBX	2.94	2.89
232787_at	PRIC285	2.35	5.05
235122_at	---	0.22	0.39
235508_at	PML	8.70	4.22
238327_at	TGS1	2.91	5.59
238725_at	---	2.29	3.92
M97935_3_at	STAT1	10.46	9.86
M97935_5_at	STAT1	6.26	4.81
M97935_MA_at	STAT1	19.24	10.34
M97935_MB_at	STAT1	5.16	5.61

Translation

200842_s_at	EPRS	0.34	0.49
200843_s_at	EPRS	0.39	0.42
201206_s_at	RRBP1	2.07	3.29
202387_at	BAG1	3.39	2.60
203462_x_at	EIF3B	0.39	0.34
208787_at	MRPL3	0.37	0.14
211475_s_at	BAG1	2.23	2.54
211501_s_at	EIF3B	0.47	0.28
217809_at	BZW2	0.44	0.21
222427_s_at	LARS	0.36	0.21
223035_s_at	FARSB	0.49	0.13
225158_at	GFM1	0.29	0.18
225940_at	EIF4E3	4.83	3.19
225941_at	EIF4E3	3.10	2.85
226939_at	CPEB2	2.69	2.20

Transport

200991_s_at	SNX17	0.46	0.41
201112_s_at	CSE1L	0.38	0.34
201399_s_at	TRAM1	2.15	2.29
201468_s_at	NQO1	0.41	0.49
201873_s_at	ABCE1	0.44	0.19
202260_s_at	STXBP1	0.37	0.07
202307_s_at	TAP1	4.82	5.45
202499_s_at	SLC2A3	0.40	0.31
203580_s_at	SLC7A6	0.41	0.45
203689_s_at	FMR1	2.79	2.01
203773_x_at	BLVRA	5.65	4.46
204151_x_at	AKR1C1	0.35	0.13
204769_s_at	TAP2	2.67	2.35
204961_s_at	NCF1	6.57	19.33
205241_at	SCO2	3.68	6.30
206491_s_at	NAPA	2.89	3.67
207038_at	SLC16A6	0.34	0.44
207091_at	P2RX7	3.44	3.47
208751_at	NAPA	4.83	3.49
208829_at	TAPBP	2.08	2.39
209160_at	AKR1C3	0.09	0.29
209281_s_at	ATP2B1	0.36	0.35
209884_s_at	SLC4A7	0.27	0.27
210357_s_at	SMOX	0.49	0.19
210766_s_at	CSE1L	0.39	0.34
211729_x_at	BLVRA	5.72	4.06
212295_s_at	SLC7A1	0.36	0.41
212297_at	ATP13A3	0.42	0.19
214084_x_at	NCF1	8.89	24.59
214255_at	ATP10A	4.90	7.41
214934_at	ATP9B	0.40	0.34
215716_s_at	ATP2B1	0.43	0.32
216594_x_at	AKR1C1	0.32	0.25
217897_at	FXD6	3.10	3.53
218404_at	SNX10	6.56	12.89
219356_s_at	CHMP5	2.85	2.76
221087_s_at	APOL3	6.66	9.23
221653_x_at	APOL2	6.66	4.83
221808_at	RAB9A	2.11	3.34
222407_s_at	ZFP106	0.46	0.42
222708_s_at	STX17	4.92	3.67
223180_s_at	C18orf55	0.50	0.11
223723_at	MFI2	0.49	0.36
225143_at	SFXN4	0.25	0.32
225352_at	TLOC1	0.45	0.41
225973_at	TAP2	10.66	6.72
226026_at	DIRC2	0.38	0.43

226794_at	STXBP5	0.40	0.45
228299_at	KCTD20	0.47	0.45
230110_at	MCOLN2	7.51	12.63
230266_at	RAB7B	0.36	0.11
230748_at	SLC16A6	0.38	0.30
230966_at	IL4I1	4.53	2.93
232432_s_at	SLC30A5	0.48	0.37
238423_at	SYTL3	3.87	7.65
244700_at	SEC61B	2.41	3.11

Ubiquitin cycle

1294_at	UBE1L	3.98	3.32
201649_at	UBE2L6	17.26	14.82
205483_s_at	ISG15	48.11	34.58
207713_s_at	RBCK1	2.93	4.06
209042_s_at	UBE2G2	0.40	0.32
210705_s_at	TRIM5	4.60	13.14
219211_at	USP18	283.28	74.56
219352_at	HERC6	38.78	28.86
219863_at	HERC5	39.16	71.37
221827_at	RBCK1	5.95	3.48
222751_at	HERPUD2	2.62	2.12
225554_s_at	ANAPC7	0.45	0.44
226176_s_at	USP42	3.52	2.89

Unknown

201798_s_at	FER1L3	4.09	5.01
200042_at	C22orf28	8.47	3.26
201570_at	SAMM50	0.44	0.42
202085_at	TJP2	2.84	2.53
202702_at	TRIM26	2.77	2.85
203147_s_at	TRIM14	5.35	3.94
203148_s_at	TRIM14	9.06	5.82
203259_s_at	HDDC2	0.48	0.47
203276_at	LMNB1	2.47	2.40
203284_s_at	HS2ST1	0.38	0.35
203420_at	FAM8A1	2.92	6.38
204439_at	IFI44L	74.47	75.34
204601_at	N4BP1	3.99	2.66
204820_s_at	BTN3A3	2.88	3.52
205763_s_at	DDX18	0.32	0.27
206133_at	XAF1	10.76	25.49
208092_s_at	FAM49A	2.25	7.79
208450_at	LGALS2	2.30	10.07
208897_s_at	DDX18	0.32	0.36
209155_s_at	NT5C2	2.37	3.56
209732_at	CLEC2B	3.20	3.19
209846_s_at	BTN3A2	3.13	2.36

210873_x_at	APOBEC3A	11.57	9.68
212074_at	UNC84A	0.47	0.31
212098_at	LOC151162	0.44	0.21
212154_at	SDC2	0.37	0.03
212158_at	SDC2	0.36	0.02
212314_at	KIAA0746	0.43	0.16
212380_at	KIAA0082	4.38	2.35
212395_s_at	KIAA0090	0.44	0.18
212532_s_at	LSM12	0.49	0.50
212539_at	CHD1L	0.49	0.23
212660_at	PHF15	4.53	3.47
212708_at	MSL-1	0.42	0.34
212733_at	KIAA0226	5.20	3.62
212735_at	KIAA0226	4.79	3.68
212851_at	DCUN1D4	0.42	0.24
212946_at	KIAA0564	0.27	0.21
213015_at	---	2.25	3.87
213361_at	TDRD7	7.66	5.52
213375_s_at	CG018	3.34	2.88
213797_at	RSAD2	446.67	73.75
214791_at	LOC93349	7.43	15.30
215416_s_at	STOML2	0.32	0.37
216565_x_at	LOC391020	13.38	13.89
218140_x_at	SRPRB	0.37	0.34
218156_s_at	TSR1	0.45	0.13
218187_s_at	C8orf33	0.47	0.29
218248_at	FAM111A	4.46	2.40
218429_s_at	FLJ11286	4.20	5.02
218512_at	WDR12	0.42	0.24
218593_at	RBM28	0.50	0.33
218594_at	HEATR1	0.44	0.23
218595_s_at	HEATR1	0.46	0.27
218888_s_at	NETO2	0.36	0.15
218962_s_at	TMEM168	0.32	0.30
218986_s_at	FLJ20035	17.03	14.88
219014_at	PLAC8	4.26	13.16
219093_at	PID1	0.16	0.23
219293_s_at	OLA1	0.44	0.46
219496_at	ANKRD57	0.35	0.11
219691_at	SAMD9	12.50	10.52
219736_at	TRIM36	2.74	4.77
219885_at	SLFN12	4.17	4.41
219895_at	FAM70A	3.54	2.92
220467_at	FLJ21272	2.16	2.65
220998_s_at	UNC93B1	4.24	6.29
221044_s_at	TRIM34	3.93	3.61
221766_s_at	FAM46A	5.02	7.85
221816_s_at	PHF11	4.51	4.35

221865_at	C9orf91	2.95	2.93
221867_at	N4BP1	2.05	3.76
221963_x_at	---	0.48	0.41
222154_s_at	LOC26010	17.41	6.81
222512_at	NUB1	5.58	5.30
222631_at	PI4K2B	6.89	2.74
223070_at	SELK	2.29	3.09
223133_at	TMEM14B	0.31	0.32
223156_at	MRPS23	0.44	0.16
224634_at	GPATCH4	0.33	0.10
224702_at	TMEM167	0.48	0.39
224973_at	FAM46A	5.59	3.39
224981_at	LOC124446	2.97	11.94
224990_at	C4orf34	2.42	2.97
225136_at	PLEKHA2	2.27	2.01
225415_at	DTX3L	6.35	5.00
225466_at	FLJ36874	2.27	2.38
225468_at	FLJ36874	4.45	2.47
225480_at	C1orf122	0.40	0.49
225502_at	DOCK8	4.08	4.06
225922_at	KIAA1450	2.76	4.51
225924_at	KIAA1450	2.21	3.11
225929_s_at	RNF213	11.29	16.27
225931_s_at	RNF213	11.25	38.71
225956_at	LOC153222	2.35	3.25
225957_at	LOC153222	2.14	3.87
225971_at	---	5.72	6.16
226109_at	C21orf91	4.20	2.57
226152_at	TTC7B	8.26	7.56
226230_at	SMEK2	0.30	0.49
226254_s_at	KIAA1430	0.33	0.10
226312_at	RICTOR	2.55	3.04
226316_at	---	0.47	0.25
226438_at	---	2.19	2.71
226560_at	---	0.44	0.36
226603_at	SAMD9L	34.78	27.30
226662_at	---	7.65	3.42
226773_at	---	8.52	8.14
226823_at	PHACTR4	2.43	2.31
226874_at	KLHL8	0.45	0.39
226876_at	FAM101B	0.47	0.24
226896_at	CHCHD1	0.49	0.41
226905_at	FAM101B	0.31	0.19
227034_at	ANKRD57	0.36	0.16
227384_s_at	LOC727820	2.36	3.13
227517_s_at	GAS5	0.37	0.17
227609_at	EPSTI1	16.27	17.42
227665_at	---	0.41	0.29

228149_at	FLJ31818	2.17	3.21
228238_at	GAS5	0.48	0.17
228248_at	RICTOR	3.36	2.71
228531_at	SAMD9	17.16	21.06
228617_at	XAF1	27.55	51.86
228869_at	---	2.04	3.37
228990_at	C1orf79	0.47	0.18
229067_at	SRGAP2P1	3.17	3.06
229390_at	FAM26F	14.71	11.80
229391_s_at	FAM26F	10.51	10.28
229429_x_at	FAM91A2	2.38	4.24
230000_at	RNF213	12.42	19.86
230036_at	SAMD9L	34.94	31.13
230233_at	---	5.23	3.23
230314_at	---	3.37	5.74
230383_x_at	---	6.55	16.73
230741_at	---	2.76	3.06
230795_at	---	2.25	3.51
231956_at	KIAA1618	15.63	6.41
232024_at	GIMAP2	9.44	9.88
232150_at	---	5.54	3.50
232155_at	KIAA1618	101.28	31.13
232375_at	---	7.99	6.00
233559_s_at	WDFY1	2.44	2.81
235157_at	---	15.65	8.63
235276_at	EPSTI1	22.99	23.28
235643_at	SAMD9L	25.29	24.55
235670_at	---	3.52	4.89
235735_at	---	0.34	0.20
235911_at	LOC440995	0.37	0.42
236125_at	---	2.16	2.45
236285_at	---	5.77	4.92
238439_at	ANKRD22	110.36	11.16
238476_at	LOC153222	2.31	3.46
238513_at	PRRG4	3.16	6.23
238587_at	STS-1	0.26	0.10
239027_at	DOCK8	2.01	2.99
239979_at	---	10.77	9.00
240173_at	---	0.17	0.20
240287_at	LOC730249	10.96	2.78
241812_at	LOC26010	4.23	3.47
241916_at	---	17.68	8.07
241930_x_at	LOC442113	0.46	0.39
241991_at	---	3.51	3.02
242234_at	XAF1	13.76	5.32
242625_at	RSAD2	99.17	64.29
242648_at	KLHL8	0.40	0.39
243271_at	---	33.65	28.58

243465_at	---	9.61	7.15
243934_at	---	2.04	4.51
244050_at	PTPLAD2	2.98	3.86
37943_at	ZFYVE26	2.64	2.46
53720_at	FLJ11286	4.93	7.75
63009_at	SHQ1	0.33	0.34
64488_at	---	0.25	0.19

A.9. Genes blocked in SLE serum in the presence of anti type-I IFN antibodies.

		<i>SLE</i>	<i>SLE</i>	<i>SLE</i>	<i>SLE</i>	<i>SLE</i>	<i>SLE</i>	<i>SLE</i>	<i>SLE</i>	<i>SLE</i>
		<i>serum</i>	<i>serum</i>	<i>serum</i>	<i>serum</i>	<i>serum</i>	<i>serum</i>	<i>serum</i>	<i>serum</i>	<i>serum</i>
		<i>SLE</i>	<i>anti</i>	<i>Cont</i>	<i>SLE</i>	<i>anti</i>	<i>Cont</i>	<i>SLE</i>	<i>anti</i>	<i>Cont</i>
		<i>serum</i>	<i>IFN</i>	<i>Ab</i>	<i>serum</i>	<i>IFN</i>	<i>Ab</i>	<i>serum</i>	<i>IFN</i>	<i>Ab</i>
<i>Systematic</i>	<i>Gene Symbol</i>	<i>Normalized</i>			<i>Normalized</i>			<i>Normalized</i>		
<i>Apoptosis</i>										
202687_s_at	TNFSF10	197.99	24.13	250.39	46.11	2.62	45.66	7.89	0.28	9.30
202688_at	TNFSF10	581.54	38.55	471.97	58.62	2.92	82.08	20.38	0.33	14.90
<i>Biosynthetic process</i>										
226702_at	LOC129607	75.28	46.07	81.82	39.29	1.79	34.20	34.12	1.04	29.96
Cell cycle										
200887_s_at	STAT1	9.29	7.38	12.32	7.65	1.28	7.67	5.73	1.15	6.18
202686_s_at	AXL	26.32	4.82	28.05	11.46	1.52	9.00	29.47	5.82	25.34
225814_at	XRN1	8.52	2.26	9.00	3.65	0.91	3.01	5.41	1.36	2.89
<i>Cell migration</i>										
223220_s_at	PARP9	16.83	7.24	21.86	14.14	0.60	18.01	10.95	0.71	8.78
227807_at	PARP9	10.29	3.94	11.18	6.70	0.74	6.69	6.65	1.05	4.56
204698_at	ISG20	150.64	19.40	232.34	51.12	9.31	46.80	29.71	12.51	28.26
<i>Chemotaxis</i>										
204533_at	CXCL10	310.58	16.53	253.74	36.72	1.41	29.72	27.82	0.60	14.76
DNA repair										
202239_at	PARP4	7.63	3.25	7.94	4.43	1.97	4.38	4.81	1.60	4.31
<i>GTPas activity</i>										
213982_s_at	RABGAP1L	53.36	5.70	61.42	14.82	2.46	9.23	12.20	1.71	12.43
<i>Immune response/Defense response</i>										
201641_at	BST2	13.33	4.26	16.91	4.98	0.76	6.80	4.28	0.70	4.42
202086_at	MX1	117.11	32.15	114.62	76.54	1.32	84.93	49.58	0.41	48.36
202145_at	LY6E	103.60	11.00	44.78	33.97	2.42	31.03	13.97	0.63	8.91
202269_x_at	GBP1	14.23	4.58	14.40	3.37	0.53	3.70	2.43	0.65	3.09
202270_at	GBP1	19.30	4.80	16.73	2.61	0.54	2.70	3.56	0.42	3.02
203153_at	IFIT1	557.18	97.13	770.87	26.52	0.53	32.07	13.15	0.03	11.27
203595_s_at	IFIT5	35.65	9.27	25.67	11.64	0.14	9.20	5.02	0.66	5.54
203596_s_at	IFIT5	15.71	4.87	20.18	8.57	0.85	7.00	16.56	1.92	10.96
204415_at	IFI6	8.79	1.87	13.63	8.33	0.78	12.79	4.85	0.48	4.47
204747_at	IFIT3	26.29	5.03	23.69	6.99	0.36	7.26	7.50	0.58	2.97
204994_at	MX2	28.83	10.39	33.97	17.31	0.75	16.72	11.27	0.55	8.83
205660_at	OASL	15.94	3.70	17.37	7.94	0.93	8.18	4.19	0.39	3.67
209417_s_at	IFI35	50.60	7.58	45.67	13.28	1.05	15.89	13.14	1.46	11.06
210797_s_at	OASL	6.89	2.19	4.90	3.97	0.86	4.65	4.23	0.58	2.58

214059_at	IFI44	29.43	13.31	66.22	30.80	0.75	26.61	28.43	0.97	10.69
214453_s_at	IFI44	20.79	6.17	26.42	10.41	0.37	9.76	10.33	0.29	7.77
217502_at	IFIT2	81.69	14.40	144.12	33.37	1.27	30.81	18.53	0.96	14.97
218943_s_at	DDX58	39.14	8.95	50.23	25.53	1.86	21.16	10.19	0.80	9.33
219209_at	IFIH1	41.67	13.46	44.31	13.64	3.35	15.00	8.57	2.23	8.08
219364_at	DHX58	98.89	7.17	67.17	119.28	8.67	116.61	22.87	0.37	31.51
222793_at	DDX58	24.33	3.82	29.86	11.42	1.28	11.28	17.23	1.19	8.98
223501_at	TNFSF13B	17.44	5.78	21.17	11.65	1.37	11.11	7.29	0.77	5.48
223502_s_at	TNFSF13B	51.84	13.48	63.05	11.13	2.05	16.24	5.58	0.76	7.52
226474_at	NLRC5	21.24	7.87	13.88	2.98	1.29	5.80	4.91	1.73	6.62
226757_at	IFIT2	90.27	19.05	72.96	24.05	0.49	12.89	14.68	0.50	10.89
229450_at	IFIT3	82.41	30.33	103.59	42.71	1.00	46.98	15.13	0.34	14.75
229625_at	GBP5	24.43	5.89	28.98	6.55	1.06	4.68	2.68	0.44	2.46
231577_s_at	GBP1	22.57	7.81	25.82	2.88	0.58	3.54	3.72	0.73	4.67
238581_at	GBP5	300.15	58.15	348.42	28.32	1.04	24.51	22.86	2.72	10.65

Inflammatory response

44673_at	SIGLEC1	43.77	4.25	31.81	7.68	0.86	14.81	8.07	1.15	6.77
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Metabolic process

202869_at	OAS1	37.51	13.01	55.35	13.10	0.54	14.48	10.87	0.08	8.49
204972_at	OAS2	12.00	4.99	15.01	6.47	0.77	8.27	13.05	0.33	8.18
205552_s_at	OAS1	17.09	4.24	24.56	12.52	0.34	12.30	7.99	0.33	3.95
206553_at	OAS2	45.62	14.73	51.44	10.62	0.91	10.37	11.72	0.62	7.24
218400_at	OAS3	47.25	11.65	41.18	15.29	1.05	18.60	18.13	0.97	17.68
223298_s_at	NT5C3	22.49	1.07	24.87	4.38	0.98	4.80	3.71	1.12	2.47
225291_at	PNPT1	6.28	1.27	6.26	5.30	0.24	4.68	6.89	0.23	5.91
228607_at	OAS2	16.99	7.25	23.74	9.84	0.74	8.90	6.76	0.14	7.90

Platelet activation

202430_s_at	PLSCR1	6.02	3.32	9.42	4.13	0.73	4.36	7.71	2.41	8.16
202446_s_at	PLSCR1	7.97	4.10	7.52	5.79	1.50	4.56	7.83	2.71	8.25

Protein amino acid ADP-ribosylation

213051_at	ZC3HAV1	9.49	4.36	9.02	4.02	1.07	3.57	2.81	0.90	3.78
218543_s_at	PARP12	12.75	4.24	12.11	8.47	0.77	10.62	7.30	0.66	7.25
225634_at	ZC3HAV1	7.01	1.68	9.53	3.79	1.37	3.50	2.11	0.88	1.90

Protein folding

209593_s_at	TOR1B	3.16	1.41	4.09	1.91	0.47	2.43	1.64	0.35	1.40
201601_x_at	STOM	74.93	4.72	71.50	14.02	2.38	14.84	9.02	2.68	9.10

Proteolysis

217933_s_at	LAP3	15.69	8.54	19.45	8.94	1.58	8.30	8.54	1.69	7.25
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RNA processing

201786_s_at	ADAR	3.21	1.84	4.05	3.33	0.86	3.81	3.21	0.60	3.58
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Signal transduction

203236_s_at	LGALS9	4.18	1.54	2.80	4.42	1.78	3.90	3.12	0.99	2.04
209588_at	EPHB2	7.69	4.92	7.24	5.56	2.21	7.70	8.13	3.12	6.31
227265_at	FGL2	13.60	3.54	20.31	4.86	1.26	4.70	2.00	0.42	1.29
235061_at	PPM1K	121.27	22.14	167.07	13.48	1.08	18.50	36.41	1.70	20.39

Synaptic transmission

208912_s_at	CNP	23.10	5.13	31.34	6.14	1.99	8.49	2.50	0.73	3.00
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Transcription

202307_s_at	TAP1	12.39	7.44	13.03	4.68	1.59	5.43	2.79	1.16	2.82
203964_at	NMI	7.95	2.38	9.53	4.00	1.27	3.64	3.26	1.05	2.43
204211_x_at	EIF2AK2	9.07	4.42	8.64	9.18	0.24	12.10	3.87	0.32	4.23
206332_s_at	IFI16	18.74	7.84	22.36	8.86	1.99	9.69	6.27	1.78	5.02
208012_x_at	SP110	63.43	19.07	50.47	16.86	1.98	16.11	10.92	1.41	12.51
208436_s_at	IRF7	18.45	8.02	18.30	6.42	2.00	8.35	3.87	1.11	6.18
208965_s_at	IFI16	27.22	9.51	30.10	22.48	3.08	20.32	11.94	3.43	10.51
208966_x_at	IFI16	13.88	7.03	14.92	10.17	2.20	9.66	8.31	1.79	6.74
209761_s_at	SP110	59.90	11.08	29.98	34.37	3.83	42.16	9.65	1.38	10.91
209762_x_at	SP110	22.99	7.72	24.19	14.53	1.96	15.10	10.47	2.28	8.45
209969_s_at	STAT1	18.52	10.40	19.61	8.96	1.64	8.36	8.85	1.32	8.78
211013_x_at	PML	63.70	39.01	77.86	73.97	2.03	61.62	76.32	15.27	75.13
213293_s_at	TRIM22	17.95	6.26	18.20	11.99	2.79	13.21	12.37	2.12	9.12
213294_at	---	21.45	9.09	24.30	11.96	0.82	11.95	8.34	0.65	7.44
223980_s_at	SP110	64.73	16.36	71.94	16.12	1.56	21.53	16.50	1.11	15.44
224701_at	PARP14	15.21	3.31	16.33	10.21	0.84	12.12	26.79	1.21	11.88
225344_at	NCOA7	27.44	1.88	24.59	6.63	1.54	6.59	5.20	1.04	3.48
225636_at	STAT2	13.85	11.99	20.16	5.62	2.22	8.56	4.25	1.37	5.88
M97935_3_at	STAT1	13.94	6.89	15.67	7.12	1.32	7.30	9.66	1.39	7.65
M97935_5_at	STAT1	8.15	3.84	7.65	3.41	1.07	3.31	4.02	0.68	4.63
M97935_MA_at	STAT1	14.78	6.65	13.21	9.13	1.34	9.01	8.19	0.84	4.36
M97935_MB_at	STAT1	6.88	2.35	6.72	4.33	0.60	3.65	5.93	1.54	3.08

Transport

214255_at	ATP10A	11.58	4.69	12.26	3.45	1.06	3.12	10.18	4.46	14.48
221087_s_at	APOL3	23.72	11.03	23.70	6.71	2.91	5.83	4.94	1.64	3.91
225973_at	TAP2	11.78	3.50	12.51	4.95	0.96	7.36	5.20	0.92	4.30

Ubiquitin cycle

201649_at	UBE2L6	27.11	8.76	25.06	12.47	1.65	13.81	9.63	0.98	7.67
205483_s_at	ISG15	84.28	16.09	76.28	33.50	1.19	36.71	14.64	0.60	25.06
219211_at	USP18	167.63	17.68	219.61	61.50	0.56	56.19	40.21	0.37	31.50
219352_at	HERC6	61.89	11.07	52.93	15.37	0.45	13.80	25.29	1.25	20.61
219863_at	HERC5	173.29	33.89	176.25	59.58	1.13	53.80	35.20	0.56	38.43

Unknown

200042_at	C22orf28	5.18	1.14	5.98	2.66	0.76	2.60	2.50	0.74	2.30
203147_s_at	TRIM14	4.94	2.37	5.05	4.01	0.78	3.90	3.09	0.46	2.74
203148_s_at	TRIM14	8.12	2.93	11.13	7.26	0.23	4.05	3.35	0.28	4.15
204439_at	IFI44L	131.83	37.75	130.60	69.18	0.89	51.84	46.90	0.91	32.77
204601_at	N4BP1	4.06	2.23	4.55	2.23	0.81	2.28	2.09	0.66	1.35
206133_at	XAF1	41.78	18.80	46.14	24.59	1.26	19.28	16.12	1.97	18.95
210873_x_at	APOBEC3A	22.95	4.75	29.06	9.12	2.12	9.63	4.33	1.34	5.38
213361_at	TDRD7	8.29	2.34	8.56	5.21	1.44	5.42	3.90	1.41	3.45
213797_at	RSAD2	239.02	22.84	248.49	45.98	1.25	46.31	36.50	1.19	24.14
218429_s_at	FLJ11286	5.11	2.12	5.99	6.86	2.24	6.58	3.61	1.37	3.68
218986_s_at	FLJ20035	34.81	6.02	47.28	10.22	0.87	11.04	9.26	0.69	8.79
219691_at	SAMD9	17.05	4.06	17.10	11.24	1.04	9.65	6.08	0.49	6.32
221044_s_at	TRIM34	3.84	2.59	3.39	3.35	0.92	3.39	3.66	1.04	2.87
221766_s_at	FAM46A	21.26	5.75	21.04	6.49	1.14	3.92	3.50	1.17	2.58
221816_s_at	PHF11	8.24	4.20	7.92	2.58	1.25	3.02	3.87	1.56	4.99
222154_s_at	LOC26010	11.50	2.17	11.81	4.68	0.70	5.63	5.87	1.20	4.63
222631_at	PI4K2B	5.12	1.00	5.59	1.95	0.61	1.64	2.06	0.39	1.26
224973_at	FAM46A	5.76	2.07	7.71	3.71	0.79	4.49	1.82	0.73	1.82
225415_at	DTX3L	7.61	3.61	6.04	5.00	1.47	5.18	3.28	0.56	2.00
225929_s_at	RNF213	21.22	7.79	21.62	10.05	1.22	12.81	20.20	2.74	12.03
225931_s_at	RNF213	31.13	10.80	38.13	13.54	2.34	18.46	137.61	22.00	118.46
226603_at	SAMD9L	54.48	12.97	58.02	20.28	0.94	21.07	18.42	0.62	11.11
226773_at	---	9.66	3.54	9.63	9.64	3.09	8.70	5.79	1.24	4.58
227609_at	EPSTI1	26.15	10.39	30.32	14.97	0.95	15.36	13.50	0.84	10.49
228248_at	RICTOR	2.64	0.48	2.30	2.67	1.27	2.87	2.82	1.06	2.27
228531_at	SAMD9	30.98	8.98	35.52	17.05	1.20	16.73	17.68	1.51	15.01
228617_at	XAF1	83.52	38.77	103.83	40.28	2.62	42.51	41.46	3.21	34.47
230000_at	RNF213	36.36	10.37	26.92	10.99	2.51	11.80	19.60	5.65	19.68
230036_at	SAMD9L	75.41	24.29	76.28	18.59	0.47	22.92	21.52	0.42	13.94
231956_at	KIAA1618	7.34	4.79	7.09	3.78	0.93	5.22	9.50	2.02	7.23
232155_at	KIAA1618	17.31	12.02	21.78	32.02	8.76	27.28	54.42	1.29	53.82
232375_at	---	8.33	5.65	9.69	4.32	1.41	5.14	6.00	1.58	4.95
235157_at	---	8.55	2.56	9.31	6.35	0.65	8.56	11.84	0.53	7.25
235276_at	EPSTI1	21.76	7.63	24.43	42.28	4.20	43.05	13.72	0.70	9.68
235643_at	SAMD9L	70.04	20.30	54.28	15.04	0.64	13.98	14.05	0.93	9.93
239979_at	---	32.18	10.36	23.44	4.67	0.51	6.84	4.85	0.66	4.94
242234_at	XAF1	7.10	3.82	8.56	3.55	1.16	4.44	5.97	0.84	2.82
242625_at	RSAD2	143.78	19.49	171.05	41.05	1.32	42.88	45.01	1.25	36.23
243271_at	---	68.24	29.87	65.73	19.00	1.32	27.86	18.01	1.03	14.19
53720_at	FLJ11286	19.55	5.60	13.49	5.52	2.60	5.80	4.31	1.85	4.97

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