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(54) Title: IDENTIFYING AND MODULATING MOLECULAR PATHWAYS THAT MEDIATE NERVOUS SYSTEM PLASTICITY

(57) Abstract: The present invention provides methods for identifying genes and pathways involved in plasticity. The invention applies some of these methods to identify genes that are differentially regulated in at least a portion of the nervous system of an individual subjected to conditions known to result in altered nervous system plasticity, i.e., dark rearing (DR) or monocular deprivation (MD). The genes are targets for pharmacological agents that modify plasticity. The invention also identifies biological pathways that are enriched in genes that are differentially regulated under conditions known to result in altered nervous system plasticity. The present invention further provides methods and compositions for modifying plasticity in the nervous system of a subject. The invention includes a method for modifying plasticity in the nervous system of a subject comprising administering a plasticity-modifying agent to the subject, wherein the plasticity-enhancing agent modulates a gene or pathway that is differentially regulated in developmental conditions that alter nervous system plasticity (e.g., DR or MD). The methods and compositions may be administered to a subject suffering from damage to the nervous system or from a neuropsychiatric disorder in order to enhance recovery, reorganization, or function of the nervous system. The methods optionally include administering a proteolysis-enhancing agent to the subject.



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IDENTIFYING AND MODULATING MOLECULAR PATHWAYS THAT MEDIATE NERVOUS SYSTEM PLASTICITY

Related Applications

[0001] The present application claims priority under 35 U.S.C. § 119(e) to U.S. provisional patent application U.S.S.N. 60/792,275, filed April 14, 2006, which is incorporated herein by reference.

Government Support

[0002] This invention was made with Government Support under Grant No. EYO 141 34 awarded by the NIH. The Government has certain rights in the invention.

Background of the Invention

[0003] Diseases and accidents leading to nervous system damage or degeneration are among the leading causes of mortality and morbidity in many countries. For example, approximately 700,000 people suffer a first or recurrent stroke annually in the United States, resulting in over 150,000 deaths. Although stroke represents the most common cause of damage to the central nervous system (CNS), a number of other conditions are also significant causes of functional deficits due to loss of brain tissue, either as a direct consequence of injury, or secondary to events such as swelling. Among these are primary brain tumors, brain metastases, and surgery for these or other conditions.

[0004] Strokes are a result of a sudden disruption of blood flow to a part of the brain and occur when a blood vessel that normally supplies brain tissue either bursts or becomes transiently or permanently blocked, such as by a blood clot (*e.g.*, a thromboembolus) or other embolus or obstruction. The resulting disruption in normal blood flow deprives the affected tissue of needed oxygen and nutrients and can also impair removal of waste products, resulting in damage to, or death of, nervous system cells. Currently the only therapy for ischemic stroke approved by the U.S. Food and Drug Administration (FDA) is infusion of the thrombolytic agent tissue type plasminogen activator (tPA) within a short time window following the causative event. Such thrombolytic therapy was shown to be both safe and beneficial if delivered within 3 hours of the onset of symptoms (NINDS, Tissue plasminogen activator for acute ischemic stroke. The national institute of neurological disorders and stroke RT-PA stroke study group. *N. Engl. J. Med.* 333: 1581-1587, 1995).

[0005] While stroke is the third leading cause of death in industrialized countries, in most cases stroke is not fatal. However, stroke is a major cause of morbidity and a leading cause of serious, long-term disability. About 4.8 million stroke survivors are alive today in the United States, with a much larger total number worldwide. Many of these individuals suffer from functional limitations affecting the senses, motor activity, speech and/or the ability to understand speech, behavior, thought patterns, memory, emotions, or other aspects of cognition. Although functional deficits following stroke may be permanent, in many cases full or partial recovery is possible. The mainstays of treatment are supportive care and rehabilitation therapy, which frequently continues for months or years. Unfortunately, there are no pharmacological agents that have demonstrated efficacy in improving the long-term outcome of stroke.

[0006] Approximately 10,000-12,000 individuals suffer spinal cord injuries (SCI) each year in the United States, bringing the projected prevalence rate in the United States to nearly 280,000 by the year 2014 (DeVivo, M.J., 2002). Improvements in supportive care have greatly increased the survival rate following such injuries, but therapeutic options remain limited, and efforts focus on rehabilitation. Tumors affecting the spinal cord or meninges (either primary tumors or metastases) are also a significant source of morbidity.

[0007] Disorders of the nervous system also have a massive impact on society. Disorders of brain development, such as autism, now afflict about 1 in 166 children. The total number of individuals in the U.S. afflicted with autism, learning disabilities, and similar disorders is estimated to exceed 4 million. Neuropsychiatric disorders such as schizophrenia and bipolar disorders extract a huge cost in lifetime care for afflicted individuals as well as emotional toll on caregivers and families. Neurodevelopmental disorders such as autism are usually treated with behavioral therapies alone, and these strategies have limited success. Similarly, neuropsychiatric disorders such as schizophrenia and bipolar disorder have very limited therapeutic possibilities.

[0008] Thus there is a need in the art for improved treatments, particularly pharmacological treatments, that would enhance recovery following damage to the CNS and/or help improve CNS and cognitive function in neuropsychiatric and neurodevelopmental disorders. Common to a large range of CNS conditions is the concept that they centrally involve the function of synapses and their ability to change (*i.e.*, plasticity). Thus, there is a need for new approaches to the identification of genes, molecules, cell types, and biological pathways that play a role in key nervous system properties such as plasticity and that can be modulated to provide a therapeutic benefit.

Summary of the Invention

[0009] The invention provides a method of identifying a gene involved in plasticity comprising steps of: subjecting an individual to a condition that modifies nervous system plasticity; measuring level or activity of each of a plurality of genes in at least a portion of the individual's nervous system; and identifying one or more genes whose expression or activity is differentially regulated in the portion of the individual's nervous system relative to its expression or activity under alternative conditions. In some embodiments, the condition comprises depriving at least a portion of the individual's nervous system of normal inputs. The method may comprise identifying a biological pathway or process enriched in genes that are differentially regulated in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition.

[0010] The invention provides genes that are differentially regulated under conditions that modify plasticity. The invention provides biological pathways that are enriched in such genes. The invention identifies a specific cell type, parvalbumin containing interneurons, as being downregulated under conditions that prolong plasticity. Based at least in part on the identification of these genes, pathways, and cell type, the invention provides combinations of plasticity-modifying agents of particular use. For example, in one embodiment an activator of the insulin-like growth factor 1 (IGF1) pathway (*e.g.*, IGF1 or an active peptide fragment thereof; or a modulator of the JAK/STAT pathway, *e.g.*, IFN γ or an HMG-CoA reductase inhibitor such as a statin) are administered to a subject either individually or in a single composition.

[0011] The present invention provides a method for modifying plasticity in the nervous system of a subject comprising the step of: administering a plasticity-modifying agent to a subject in need thereof, wherein the agent is administered either alone or in combination with one or more additional agents in an amount effective to modify nervous system plasticity, wherein the plasticity-modifying agent modulates a gene or pathway that is differentially regulated in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition. The agent may be administered once, multiple times, and/or continuously. The time may be selected in conjunction with the amount to be effective to modify nervous system plasticity. Exemplary plasticity-modifying condition comprise dark rearing or monocular deprivation.

[0012] The invention includes a method for promoting recovery and/or reorganization in the nervous system of a subject in need of enhancement of recovery and/or reorganization of the nervous system comprising administering a plasticity-modifying agent to the subject, wherein the plasticity-enhancing agent modulates a gene or pathway that is differentially regulated in the nervous system of an individual subjected to a plasticity-modifying condition, *e.g.*, dark-rearing (DR) or monocular deprivation (MD). The agent is administered in an amount effective to promote recovery or reorganization in the nervous system. The agent may be administered once, multiple times, and/or continuously. The time may be selected in conjunction with the amount to be effective to promote nervous system recovery or reorganization. The subject may be in need of recovery or reorganization of the nervous system as a result of ischemic, hemorrhagic, neoplastic, degenerative, traumatic, and/or neurodevelopmental damage to the nervous system. The subject may be in need of reorganization of the nervous system as a result of a neurodevelopmental or neuropsychiatric disorder. The method can include a step of identifying or providing, *e.g.*, diagnosing a subject as having suffered such damage or having a neurodevelopmental or neuropsychiatric disorder. The methods can include a step of identifying or diagnosing the subject as having a reasonable likelihood (*e.g.*, at least a 5% chance, at least a 10%, or at least a 50% chance).

[0013] The methods may also include administering a proteolysis-enhancing agent such as tissue plasminogen activator (tPA), plasmin, or a PAI inhibitor to the nervous system of the subject. A plasticity-modifying agent of the present invention is, in general, distinct from the proteolysis-enhancing agents described herein. The plasticity-modifying agent and the proteolysis-enhancing agent may be administered as part of a single composition or individually. The present invention provides a composition comprising a plasticity-modifying agent and a proteolysis-enhancing agent. The composition(s) can be delivered using a variety of techniques including injection, via infusion pump, from an implantable microchip, or using a polymeric delivery vehicle. The composition(s) can be administered, for example, to one or more subdivisions or areas of the brain, the spinal cord, or to one or more nerves or nerve tracts innervating diverse regions of the body.

[0014] In certain embodiments the composition is administered by implanting into the subject a drug delivery device that releases the plasticity-modifying agent over a period of time at or in the vicinity of a desired location. The desired location can be, for example, an area of ischemic, hemorrhagic, neoplastic, degenerative, traumatic, and/or neurodevelopmental damage in the central or peripheral nervous system, or location in a brain hemisphere opposite to an area of damage. In some embodiments the drug delivery

device comprises a pump. In some embodiments the drug delivery device comprises a biocompatible polymer, *e.g.*, a biodegradable polymer. In some embodiments the polymeric matrix of the drug delivery device comprises a hydrogel. In some embodiments of the invention the composition comprises a plurality of polymeric microparticles or nanoparticles having the plasticity-modifying agent associated therewith (*e.g.*, encapsulated therein, adsorbed thereon, entangled in a polymer network, *etc.*).

[0015] The invention also includes a drug delivery device for implantation into the body of a subject to modify plasticity. In certain embodiments of the invention the device is implanted to promote nervous system reorganization and/or recovery following ischemic, hemorrhagic, neoplastic, traumatic, degenerative, and/or neurodevelopmental damage.

[0016] An inventive device may include a proteolysis-enhancing agent, *e.g.*, a proteolytic agent such as a protease. Alternatively or additionally, a proteolysis-enhancing agent can be administered separately. In certain embodiments the proteolysis-enhancing agent is plasmin, a plasminogen activator, and/or an inhibitor of an endogenous plasminogen activator inhibitor. For example, in certain embodiments, the proteolysis-enhancing agent is tissue plasminogen activator (tPA), *e.g.*, human tPA. In certain embodiments of the invention, the proteolysis-enhancing agent is plasmin. In certain embodiments, the proteolysis-enhancing agent promotes degradation of a component of the extracellular matrix (ECM). In certain embodiments, the proteolytic agent directly or indirectly degrades fibrin.

[0017] Optionally, the plasticity-modifying agent and/or the proteolysis-enhancing agent is covalently attached to a polymer by an optionally cleavable linkage. In some embodiments, one or both of the plasticity-modifying agent and the proteolysis-enhancing agent is delivered in a solution that forms a gel following contact with physiological fluids. The plasticity-modifying agent and, optionally, a proteolysis-enhancing agent may, for example, be delivered in an amount effective to promote structural reorganization of synaptic connections, increase formation of new synaptic connections, increase dendritic spine motility, promote growth of axons and synaptic connections, inhibit at least in part functional and/or structural deterioration or degradation, stabilize synapses, or any combination of the foregoing.

[0018] In certain embodiments the composition comprises one or more neural growth enhancing agents, neurotransmitters or analogs thereof, neurally active growth factors, neural signaling molecules, neurally active small molecules, and neurally active metals. Alternatively or additionally, one or more of these agents can be administered separately, for example, by focal administration to the nervous system or by an alternate route.

[0019J] The invention further provides a method of treating a subject in need of enhancement of recovery or reorganization in the nervous system comprising focally administering a composition comprising a plasticity-modifying agent and a proteolysis-enhancing agent to the central or peripheral nervous system of the subject. The subject will typically have suffered nervous system damage as a result of ischemic, hemorrhagic, neoplastic, degenerative, traumatic, and/or neurodevelopmental damage. The invention provides methods of treating a subject in need of enhancement of recovery and/or reorganization in the nervous system comprising administering a plasticity-modifying agent, a proteolysis-enhancing agent, and a neural growth enhancing agent to the subject. One, more than one, or all of the agents can be administered focally to the central or peripheral nervous system. Agents can be administered separately or in a single composition. Any of the methods for administration contemplated herein can be used.

[0020] In any of the inventive methods, the subject may be engaged in a program of rehabilitation designed to promote functional recovery following ischemic, hemorrhagic, neoplastic, traumatic, and/or neurodevelopmental damage to the nervous system, wherein the subject is so engaged during at least part of the time interval during which the agent is administered or during which the agent remains active in the nervous system of the subject.

[0021] In any of the methods described herein, the subject may be engaged in a program of behavioral or cognitive therapy to improve function of the nervous system following from a neurodevelopmental disorder, wherein the subject is so engaged during at least part of the time interval during which the agent is administered or during which the agent remains active in the nervous system of the subject.

[0022] The present invention provides drug delivery devices comprising: a biocompatible polymer and a plasticity-modifying agent, wherein the plasticity-modifying agent is released from the polymer in an amount effective to promote structural or functional recovery or reorganization in the nervous system of the subject. The device may comprise a proteolysis-enhancing agent.

[0023] The present invention provides compositions comprising a plasticity-modifying agent and a neural growth enhancing agent, which is optionally selected from among neurotransmitters or analogs thereof, neurally active growth factors, neural signaling molecules, and neurally active small molecules, and neurally active metals. The invention comprises drug delivery devices, *e.g.*, polymer-based drug delivery devices, comprising the composition.

[0024] This application refers to various patents and publications. The contents of all of these are incorporated by reference. In addition, the following publications are incorporated herein by reference: Ausubel, F., (ed.). *Current Protocols in Molecular Biology, Current Protocols in Immunology, Current Protocols in Protein Science, and Current Protocols in Cell Biology*, all John Wiley & Sons, N.Y., edition as of July 2002; Sambrook, Russell, and Sambrook, *Molecular Cloning: A Laboratory Manual*, 3rd ed., Cold Spring Harbor Laboratory Press, Cold Spring Harbor, 2001; Kandel, E., Schwartz, J.H., Jessell, T.M., (eds.), *Principles of Neural Science*, 4th ed., McGraw Hill, 2000; Cowan, W.M., Südhof, T.C., and Stevens, C.F., (eds.), *Synapses*, The Johns Hopkins University Press, Baltimore and London, 2001; and Hardman, J., Limbird, E., Gilman, A. (Eds.), Victor, M. and Ropper, A.H., *Adams and Victor's Principles of Neurology*, 7th ed., McGraw Hill, 2000; Grossman, R.I. and Yousem, D.M., *Neuroradiology: The Requisites*, 2nd ed., CV. Mosby, 2003; Gillen, G. and Burkhardt, A. (eds.), *Stroke Rehabilitation: A Function-Based Approach*, 2nd ed., CV. Mosby, 2004; Somers, M.F., *Spinal Cord Injury: Functional Rehabilitation*, 2nd ed., Prentice Hall, 2001; *Goodman and Gilman's The Pharmacological Basis of Therapeutics*, 10th Ed., McGraw Hill, 2001 (referred to herein as *Goodman and Gilman*). In the event of a conflict or inconsistency between any of the incorporated references and the instant specification or the understanding of one or ordinary skill in the art, the specification shall control, it being understood that the determination of whether a conflict or inconsistency exists is within the discretion of the inventors and can be made at any time.

[0025] Where ranges of numerical values are stated herein, the endpoints are included within the range unless otherwise stated or otherwise evident from the context. Where a range of values is provided, it is understood that each intervening value, to the tenth of the unit of the lower limit unless the context clearly dictates otherwise, between the upper and lower limits of that range is also specifically disclosed. Each smaller range between any stated value or intervening value in a stated range and any other stated or intervening value in that stated range is encompassed within the invention. The upper and lower limits of these smaller ranges may independently be included in or excluded from the range, and each range where either, neither or both limits are included in the smaller ranges is also encompassed within the invention, subject to any specifically excluded limit in the stated range. Where the stated range includes one or both of the limits, ranges excluding either or both of those included limits are also included in the invention.

[0026] This application refers to various genes and proteins using names that are well known in the art. At times one or more identifiers and/or accession numbers for these genes

and proteins are provided. Such names, identifiers, and/or accession numbers are utilized in various databases available to one of skill in the art such as Genbank and Pubmed. For example, one of skill in the art can search the Entrez Gene database provided by the National Center for Biotechnology Information (NCBI), available at the web site having URL www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=gene and can thereby locate the Gene ID for any particular gene or protein of interest. The Gene ID entry provides biological information, alternate names, chromosomal location, *etc.*, as well as links to database entries for the corresponding nucleotide and protein sequences and references in the scientific literature. It will be appreciated that the names and/or sequences of genes mentioned herein may differ in different species. The invention encompasses the genes regardless of species. When the methods for modifying plasticity, nervous system structure or function, nervous system recovery or reorganization, *etc.*, are applied to a subject it may be preferable to employ agents that modulate the expression and/or activity of genes and/or pathways as they exist in the species to which the subject belongs, although in many cases such agents will be effective in multiple species. In certain embodiments of the invention the gene is a human gene. One of skill in the art will be able to identify the human homologs of mouse genes mentioned herein in other species such as humans.

Brief Description of the Drawing

[0027] *Figure 1: Analysis and characterization of genes activated in different paradigms of visual input deprivation. (A) Three experimental groups were considered: control mice, dark-reared (DR) mice and monocularly-deprived (MD) mice. From each sample, tissue from anatomically defined primary visual cortex (V1) was taken at P27. For control and DR mice, V1 was taken from both hemispheres, while for MD mice only V1 contralateral to the deprived eye was used. For each sample, total RNA was extracted and processed for the microarray procedure. MD and DR samples were compared to the control independently, each with two different computational methods (see Example 1): the Significance Analysis of Microarrays (SAM) for analysis of single genes, and gene set enrichment analysis (GSEA). Each procedure identified single genes or gene sets that were up- or down-regulated in deprived groups versus control. This led to the identification of cellular events involved in the two models of input deprivation. (B, C) Comparison of gene expression in (B) dark-reared versus control and (C) monocularly deprived versus control animals, showing the expression levels of all probes. Genes showing significantly different expression levels ($p \leq$*

0.01) are shown in red (overexpression in deprivation protocol) or in green (overexpression in control). Gene expression is shown on a logarithmic scale. The dashed white line corresponds to identity ($y=x$). (D) Heat map showing the levels of expression of representative genes that showed differential expression among those selected for our analysis ($p \leq 0.01$). Each column corresponds to a separate sample ($n=6$ for MD, $n=3$ for DR and $n=3$ for control). High levels of expression correspond to brilliant red, low levels of expression correspond to dark blue (see bottom of the figure for color scale). For each group, 25 randomly chosen genes among the significant genes are shown here. Genes within each group are sorted based on their expression values.

[0028] *Figure 2: Regulation of genes involved in excitatory and inhibitory transmission in MD and DR animals.* (A) Numbers of inhibitory/ excitatory receptor genes that are significantly upregulated in MD or DR versus control. (B) Representation of the Microarray Expression Levels (MEL) in control (con), Monocularly Deprived (MD) and Dark Reared (DR) animals of glutamic acid decarboxylase genes (GAD65 and GAD67), the synthetic enzymes for GABA, and different classes of inhibitory neurons. Only the probes for parvalbumin are significantly downregulated in DR, while the other markers are either upregulated or unchanged (star indicates two-tailed t test, $P < 0.05$).

[0029] *Figure 3: Confirmation of selected molecules with RT-PCR.* (A) Heat map of the genes confirmed with semi-quantitative PCR. The level of expression is represented in logarithmic scale; red corresponds to maximal expression and blue to minimal expression. The genes are ranked according to their expression level after MD. (B, C) Representation of the fold increase of selected molecules in DR (B) and MD (C) versus control, showing the ratio between DR or MD versus control for Microarray Expression Levels (red) and PCR values (green). A star indicates that the microarray expression of the corresponding gene is significantly upregulated (two-tailed t test $P < 0.05$) in DR vs. control or MD versus control.

[0030] *Figure 4: Gene Set Enrichment Analysis of gene expression after DR and MD.* (A) Example analysis of enrichment of the ARF pathway in the MD versus control data set. The hypothesis tested is that the expression of the ARF gene set ($n=19$ genes) is enriched in the MD versus control data set. The genes in the dataset are ranked according to a correlation statistic (signal-to-noise ratio); genes up-regulated after MD vs. control appear first while genes up-regulated in control (that is, downregulated in MD vs. control) appear late. The straight lines represent genes in the ranked list that are in the ARF pathway (bottom). The running enrichment score is plotted in the upper graph (top). The peak enrichment score for the ARF pathway in the MD versus control data set is 0.48, leading to a normalized

enrichment score (NES) of 6.8. (B) Heat map of the expression levels of all the probes of the ARF pathway gene set in the MD and control samples. Highest levels of expression correspond to brilliant red, while lowest levels of expression correspond to dark blue. (C) Distribution of normalized enrichment score (NES) values for the DR versus control data set. The arrows highlight two pathways that are particularly enriched in DR and are discussed in the text: the CREB pathway and the Channel Passive Transporter pathway. The insets show the running enrichment scores for these two pathways; the red arrows show the positions of Creb and GluRI probes respectively. (D) Distribution of NES values in the GSEA analysis for the MD versus control data set. The arrows indicate two pathways discussed in the text which are particularly enriched in MD: the EGF pathway and the IGF1 pathway. For each of these pathways, the insets show the running enrichment score. The red arrows in the insets point to the positions of Stat1 and IGF1-IGFBP5 probes respectively.

[0031] *Figure 5.* Immunohistochemistry for molecules that show increased expression following DR and MD. Immunohistochemistry for selected molecules was performed on coronal slices containing V1 from P27 control, Dark Reared (DR) and Monocularly Deprived (MD) mice. In DR mice, the expression of three proteins: (A) Parvalbumin, (B) GluRI and (C) Phospho-Creb was examined. The parvalbumin gene is down-regulated in DR versus control and the immunohistochemistry shows a decrease in the number of parvalbumin-positive neurons in DR animals. The histogram on the right shows a significant decrease ($P < 0.01$) in the number of parvalbuminergic neurons versus control. GluRI and P-Creb proteins were over-expressed in visual cortex of DR animals versus control. In MD mice, the expression of (D) activated Stat1 and (E) IGFBP5 was examined. Both proteins are selectively up-regulated in V1 after 15 days of MD relative to control. Bars in the right panels (B-E) show the intensity of the staining in sections of DR or MD and control animals; for all the molecules examined the intensity of staining was significantly higher in the deprived conditions than in controls ($P < 0.05$). For each molecule, low magnification pictures (scale bar = 765 μm) and high magnification pictures (scale bar = 100 μm) are shown. Arrows in the low magnification pictures demarcate V1.

[0032] *Figure 6:* Application of TGF β 1 prevents the ocular dominance shift after MD in mouse V1. (A) Left: Mouse brain showing the location of V1 (black region). Right: Ocular dominance index map in mouse V1. The dotted line separates the binocular zone (b) from the monocular zone (m). Scale bar, 1 mm. (B) Histograms of ocular dominance index in the binocular zone of three representative mice. Red line, P27 control mouse; black line, P27 mouse after 7 days of MD; blue line, P30 mouse after 7 days of MD plus IGF1 application

for the same period. The data from each animal typically includes a region within binocular cortex containing over 2000 pixels. (C). Mean ocular dominance indices of the 3 groups of mice. Open circles, mean ocular dominance index of the binocular zone pixels from each animal; filled circles, average value of each group.

[0033] *Figure 7*: Immunohistochemistry for selected markers of the IGF1 pathway. (A) Double staining for IGFBP5 (green) and GAD67 (red) in visual cortex of a P28 mouse. Yellow arrow shows an overlap between the two colors suggesting that IGFBP5 is present in GABAergic neurons; however the presence of cells immunopositive for IGFBP5 but not for GAD67 (green arrow) and vice versa (red arrow) shows that IGFBP5 is present in other cell classes as well. Scale bar= 17 μ m. (B) Immunostaining for selected molecules in three different conditions: P28 control (animal reared in normal light conditions), P28 MD (animals monocularly deprived for 4 days), and P28 MD+IGF1 (animals deprived for 4 days and simultaneously injected IP daily with IGF1 solution). In all the MD panels the cortex shown is contralateral to the deprived eye. Bars at right show the staining intensity of each molecule in the different conditions. Scale bar= 70 μ m.

Brief Description of the Table Appendix

[0034] The Appendix, which is a part of the instant specification, consists of the following Tables:

[0035] *Table 4* lists genes whose expression is downregulated in visual cortex under conditions of DR.

[0036] *Table 5* lists genes whose expression is upregulated in visual cortex under conditions of DR.

[0037] *Table 6* lists genes whose expression is downregulated in visual cortex under conditions of long term MD.

[0038] *Table 7* lists genes whose expression is upregulated in visual cortex under conditions of long term MD.

[0039] *Table 8* lists genes whose expression is downregulated in visual cortex under conditions of short term MD

[0040] *Table 9* lists genes whose expression is upregulated in visual cortex under conditions of short term MD.

[0041] *Table 10* lists genes that are downregulated in visual cortex under conditions of short term MD in subjects treated with an activator of the IGF1 pathway.

[0042] *Table II* lists genes that are upregulated in visual cortex under conditions of short term MD in subjects treated with an activator of the IGF1 pathway.

Definitions

[0043] *Approximately*: As used herein, the term "approximately" in reference to a number is generally taken to include numbers that fall within a range of 10% in either direction of the number (greater than or less than) unless otherwise stated or otherwise evident from the context (except where such number would exceed 100% of a possible value).

[0044] *Agonist*: As used herein, the term "agonist" generally refers to a substance that can directly interact with (*e.g.*, bind to) a receptor and initiate a physiological or a pharmacological response characteristic of the activity of that receptor, *e.g.*, the activity that is normally induced by interaction of an endogenous positively-acting ligand with the receptor. Substances generally recognized in the literature as agonists of a particular receptor are of use in the methods described herein. The term "agonist" also refers to partial agonists, *i.e.*, compounds that are capable of partially activating a receptor, *e.g.*, activating it to a lesser extent than its endogenous ligand. The term also encompasses substances that indirectly stimulate a receptor, *e.g.*, by inhibiting reuptake or breakdown/metabolism of an endogenous direct agonist and/or by stimulating the production or release of an endogenous direct agonist.

[0045] *Antagonist*: As used herein, the term "antagonist" generally refers to a substance that opposes the receptor-associated responses normally induced by another bioactive agent such as an endogenous positively-acting ligand. Typically, an antagonist binds to a receptor and prevents binding of an endogenous ligand that would normally activate the receptor, or prevents binding of an exogenous agonist to the receptor. The antagonist may or may not induce an effect itself. The activity of a receptor is generally taken to be the activity associated with binding of an endogenous positively-acting ligand. Substances generally recognized in the literature as antagonists of a particular receptor are of use in the methods described herein. The term also encompasses substances that indirectly inhibit a receptor, *e.g.*, by inhibiting reuptake or by stimulating breakdown/metabolism of an endogenous direct agonist and/or by stimulating the production or release of an endogenous direct antagonist.

[0046] *Biocompatible*: A material is considered "biocompatible" if it is substantially non-toxic to the recipient, in the quantities and at the location used, and also does not elicit or

cause a significant deleterious or untoward effect on the recipient's body, *e.g.*, a significant immunological or inflammatory reaction, unacceptable scar tissue formation, *etc.*

[0047] *Biodegradable*: As used herein, the term "biodegradable," refers to a material that is capable of being broken down physically and/or chemically within the body of a subject, *e.g.*, by hydrolysis under physiological conditions, by natural biological processes such as the action of enzymes present within the body, *etc.*, to form smaller chemical species which can be metabolized and/or excreted.

[0048] *Biological information resource*: As used herein, the term "biological information resource" refers to a compilation of reliable information about biochemical species (*e.g.*, genes or their expression products, substrates, cofactors, physiologically important ions or small molecules), biological processes, and optionally, biological pathways, from which it is possible to conveniently determine information such as (i) whether a biochemical species is a component of a particular biological process; (ii) which biochemical species are components of a particular biological process; (iii) which biological processes include a particular biochemical species as a component; (iv) whether a particular biological process includes a particular biochemical species as a component, *etc.* A biological information resource can also include any type of additional biological information. For example, information such as identifiers of compounds known to interact with a biochemical species or known to influence a biological pathway can be included. Names of diseases or clinical conditions that are related to a biological process or biochemical species, *e.g.*, in which the biological process or biochemical species plays a causative role, or in which a defect in the biological process or biochemical species plays a causative role, can be included. By "reliable information" is meant information that is generally recognized in the art as being substantially accurate. Typically such information will have been published in the scientific literature and described therein in sufficient detail to be capable of being independently verified and will have been replicated and/or acknowledged as being accurate in one or more additional scientific publications. A biological information resource will typically comprise a database and will provide one or more software tools that allow a user to readily obtain access to the information and to search the information using one or more query terms, *e.g.*, an identifier for a biochemical species, biological process, *etc.* An "identifier" refers to any term or combination of terms that is used to refer to a biochemical species, biological process, *etc.* The identifier can be, for example, the name of a gene or the name of a biological process.

[0049] *Biological pathway*: As used herein, the term "biological pathway" refers to a sequence of reactions (*e.g.*, physical interactions between molecules, enzyme reactions) that

takes place in a living organism, typically resulting in a biological effect. A pathway typically involves a cascade of events in which molecules involved in the pathway (referred to as "components" of the pathway) signal to or act upon each other, often in a characteristic and ordered manner. Many of the components of the pathway are RNA or polypeptide expression products of genes (also referred to as "gene products"). Such genes may also be referred to as components of the pathway. Biological pathways of interest herein include the IGF1 pathway, the JAK/STAT pathway, the PI3 kinase pathway, and subpathways thereof.

[0050] *Biological process:* As used herein, the term "biological process" refers to a series of events accomplished by one or more biochemical species or ordered assemblies of biochemical species. The biochemical species or assemblies thereof are referred to as "components" of the biological process. The components are said to be "involved in" the biological process. For example, a gene product that is a component of a biological process, *i.e.*, plays a role in carrying out that biological process, is said to be involved in that biological process. Genes whose expression product(s) are components of a biological process may also be referred to as components of the pathway. The series of events making up a biological process is typically directed towards achieving a biological goal of significance to the biological system. Examples of biological processes include, without limitation, cell communication, metabolism, morphogenesis, secretion, *etc.* It will be appreciated that a biological process may comprise a plurality of biological processes (subprocesses). A biological process may comprise or be performed by one or more biological pathways. The "central nervous system" (CNS) includes the brain, spinal cord, optic, olfactory, and auditory systems. The CNS comprises both neurons and glial cells (neuroglia), which are support cells that aid the function of neurons. Oligodendrocytes, astrocytes, and microglia are glial cells within the CNS. Oligodendrocytes myelinate axons in the CNS, while astrocytes contribute to the blood-brain barrier, which separates the CNS from blood proteins and cells, and perform a number of supportive functions for neurons. Microglial cells serve immune system functions.

[0051] *Concurrent administration:* The term "concurrent administration," as used herein with respect to two or more agents, *e.g.*, therapeutic agents, is administration performed using doses and time intervals such that the administered agents are present together within the body, or at a site of action in the body such as in the CNS in amounts sufficient to have a biological effect over a time interval of minutes, hours, days, weeks, *etc.* The agents may, but need not be, administered together as part of a single composition. In addition, the agents may, but need not be, administered simultaneously (*e.g.*, within less than 5 minutes, or within

less than 1 minute) or within a short time of one another (*e.g.*, less than 1 hour, less than 30 minutes, less than 10 minutes, approximately 5 minutes apart).

[0052] *Critical period:* As used herein, the term "critical period" refers to a time period during the development of an organism in which the organism's nervous system is particularly able to acquire a specific functional ability and/or structural configuration, typically at least in part in response to external environmental stimuli. Absence of the appropriate stimuli during the critical period typically results in failure to develop the functional ability and/or structural configuration that would develop had these stimuli been present. The timing and duration of the critical period may depend upon the environmental stimuli received. For example, lack of certain environmental stimuli prolongs the critical period.

[0053] *Deprived condition:* As used herein, the term "deprived condition" refers to an environment that fail to provide adequate environmental stimuli needed to allow normal development of one or more functional or structural features of the nervous system. An individual subjected to a deprivation condition typically receives fewer and/or less intense or varied stimuli of one or more types than an individual subjected to "normal conditions." In the case of an animal raised in a laboratory, "normal conditions" are standard laboratory conditions typically used for the maintenance of such animals.

[0054] *Effective amount:* As used herein, an "effective amount" of an active agent refers to the amount of the active agent sufficient to elicit a desired biological response. As will be appreciated by those of ordinary skill in this art, the absolute amount of a particular agent that is effective may vary depending on such factors as the desired biological endpoint, the agent to be delivered, the target tissue, *etc.* Those of ordinary skill in the art will further understand that an "effective amount" may be administered in a single dose, or may be achieved by administration of multiple doses. A desired biological response may be, for example, (i) functional or structural reorganization of synaptic connections, dendrites, or axon projections; (ii) maintenance of synaptic connections, dendrites, or axon projections under conditions in which they would otherwise deteriorate ; (iii) regeneration of a nerve or an axonal projection system or its maintenance under conditions in which it would otherwise deteriorate; (iv) an improvement in performance of a task requiring motor or sensory function; (v) an improvement in performance of a task requiring cognitive function, *e.g.*, improved performance on a test that measures learning and/or memory; (vi) a slowing in the rate of decline in motor, sensory, and/or cognitive function.

[0055] *Enriched condition:* As used herein, the term "enriched condition" refers to an environment that provides receives more stimuli and/or more intense or varied stimuli of one or more types than an individual subjected to "normal conditions."

[0056] *Expression product:* As used herein, the term "expression product" or "gene product" refers to an RNA transcribed from a gene or a polypeptide translated from an RNA transcribed from a gene. RNAs or polypeptides that are modified following their transcription or translation are considered expression products of the gene that encodes them. Modifications include, *e.g.*, splicing, cleavage, addition of phosphate or fatty acid groups, *etc.*

[0057] *Focal delivery:* As used herein, the term "focal delivery" (or "focal administration" in reference to delivery of a pharmacological agent), refers to delivery that does not rely upon transport of the agent to its intended target tissue via the vascular system, *e.g.*, the agent is not administered directly into a blood vessel. The agent is delivered directly to its intended target tissue or in the vicinity thereof, *e.g.* by injection through a needle, catheter, or cannula, or by implantation of a delivery vehicle or device containing the agent. If the agent is delivered to the vicinity of its target tissue rather than into the target tissue itself, the agent may reach its target tissue by diffusion. For purposes of the present invention, any method that achieves delivery of an agent to the CNS or portion thereof without requiring transport via the vascular system from a site outside the skull or meninges (the membranes that cover the brain and the spinal cord), is considered to achieve focal delivery of the agent. Specifically included are delivery by use of an implanted or external pump, and/or delivery directly into one or more ventricles of the CNS. It will be understood that once having been focally delivered a portion of the agent (typically only a minor fraction thereof) may in part enter the vascular system and be transported to another location.

[0058] *Function:* As used herein, the term "function," with reference to the nervous system or a component thereof, is used broadly herein to refer to any function, role, task, or activity performed by the nervous system or a component thereof. The term includes, without limitation, the ability to process and recall information, regulate behavior, stimulate release of endogenous chemicals, control motor functions, receive and process sensory input, maintain consciousness, *etc.*

[0059] *Functional recovery:* As used herein, the term "functional recovery" refers to the process in which a nervous system or component thereof that has at least in part lost the ability to perform a function that it previously performed, regains at least in part the ability to perform the function. Functional recovery may take place in at least two different ways: (i) the recovery in function may involve partial or complete recovery of the portion of the

nervous system that previously performed the function; (ii) the recovery in function may involve a portion of the nervous system performing a function that it did not previously perform. Of course in some instances both processes may take place. Functional recovery can also refer to preservation of the ability of the nervous system or a portion thereof to perform a function that it previously performed, after the nervous system or component thereof has been physically altered, disrupted, or otherwise subjected to a physical or chemical insult or neurodegenerative disease, when such physical alteration, disruption, physical or chemical insult or neurodegenerative disease would otherwise be expected to lead to deterioration or loss of the ability of the nervous system or portion thereof to perform the function.

[0060] *Functional reorganization:* The term "functional reorganization," as used in reference to the nervous system or a portion thereof, refers to the process in which a portion of the nervous system wholly or partially assumes, *i.e.*, takes on, a function (*e.g.*, a sensory, motor, or cognitive function) that was not previously performed by that portion of the nervous system. The function or task may, but need not have been, previously performed by a different portion of the nervous system. Functional reorganization may, but need not, entail one or more aspects of structural reorganization. Functional reorganization may also be referred to as functional rearrangement.

[0061] An example of functional reorganization is the capacity of an area of sensory or motor cortex adjacent to an area of injury or necrosis of CNS tissue to control CNS output to a portion of the body that was previously controlled by the injured or necrotic tissue, or to receive and process input from a region of the body from which input was previously received and processed by the injured or necrotic tissue. Another example is the capacity of an area of sensory or motor cortex corresponding in location to an area of injury or necrosis of CNS tissue, but located in the opposite hemisphere of the brain, to control CNS output to a portion of the body that was previously controlled by the injured or necrotic tissue, or to receive and process input from a region of the body from which input was previously received and processed by the injured or necrotic tissue. Yet another example is provided by the nervous system's response to monocular deprivation, which is further discussed below.

[0062] *Infarct:* As used herein, the term "infarct" refers to an area of localized tissue necrosis resulting from inadequate blood supply, *e.g.*, due to obstruction of a blood vessel. Also referred to as an infarction. When the necrotic tissue is brain tissue, the infarct may be referred to as a cerebral infarct or cerebral infarction.

[0063] *Modulate*: As used herein, the term "modulate" means to alter, *e.g.*, to increase or enhance, to decrease or inhibit, or to cause a variation in a temporal pattern. To "modulate a gene" means to modulate the level and/or activity of an RNA or polypeptide expression product of the gene, *e.g.*, by administering an agonist or antagonist. "Level" of an expression product refers to amount, *e.g.*, concentration by weight or volume, number of molecules per cell or by weight or volume, *etc.* To "modulate a pathway" means to modulate at least one reaction and/or gene involved in the pathway, typically resulting in an alteration in the biological effect or outcome of the pathway. To "modulate a cell" means to increase or enhance, or to decrease or inhibit, the development, survival, and/or activity of the cell.

[0064] *Neural tissue*: As used herein, the term "neural tissue" refers to one or more components of the central nervous system and/or peripheral nervous system. Such components include brain tissue and nerves, which may be present in bundles or tracts. In general, brain tissue and nerves contain neurons (which typically comprise cell body, axon, and dendrite(s)), glial cells (*e.g.*, astrocytes, oligodendrocytes, and microglia in the CNS; Schwann cells in the PNS). It will be appreciated that brain tissue and nerves typically also contain various noncellular supporting materials such as basal lamina (in the PNS), endoneurium, perineurium, and epineurium in nerves, *etc.* Additional nonneural cells such as fibroblasts, endothelial cells, macrophages, *etc.*, are typically also present. See Schmidt and Leach, 2003, for further description of the structure of various neural tissues.

[0065] *Peripheral nervous system*: As used herein, the term "peripheral nervous system" (PNS) includes the cranial nerves arising from the brain (other than the optic and olfactory nerves), the spinal nerves arising from the spinal cord, sensory nerve cell bodies, and their processes, *i.e.*, all nervous tissue outside of the CNS. The PNS comprises both neurons and glial cells (neuroglia), which are support cells that aid the function of neurons. Glial cells within the PNS are known as Schwann cells, and serve to myelinate axons by providing a sheath that surrounds the axons. In various embodiments of the invention the methods and compositions described herein are applied to different portions of the PNS.

[0066] *Plasticity*: As used herein, the term "plasticity" refers to the capacity of the nervous system, or a portion thereof, to change (*e.g.*, to reorganize) its structure and/or function, generally in response to an environmental condition, injury, experience, or ongoing nervous system activity. Plasticity may involve the proliferation of neurons or glia, the growth or movement of neuronal processes and/or alterations in their shape. Plasticity may involve formation of new synaptic connections between neurons and/or strengthening or weakening of existing synaptic connections. Formation of new synaptic connections may

involve growth or movement of neuronal processes. Plasticity may also involve alterations in non-neuronal components of the nervous system, *e.g.*, astrocytes or other glial cells.

[0067] *Plasticity-modifying agent*: As used herein, the term "plasticity-modifying agent" refers to a substance whose administration to a subject, either alone or in combination with one or more other substances or non-pharmacological therapy, results in a detectable alteration in the plasticity of at least a portion of the nervous system. The alteration may be evidenced by an alteration in nervous system function and/or structure as compared with the function and/or structure that would be observed in the absence of the agent. The agent has a clinically significant effect on the nervous system to modify plasticity and is not administered simply for nutritional or dietary purposes. The agent may increase, decrease, and/or prolong plasticity.

[0068] *Plurality*: As used herein, the term "plurality" means more than one.

[0069] *Polypeptide*: As used herein, the term "polypeptide" refers to a polymer of amino acids. As used herein, the term "protein" refers to a molecule composed of one or more polypeptides. The terms "protein," "polypeptide," and "peptide" may be used interchangeably herein. Polypeptides as described herein typically contain only natural amino acids, although non-natural amino acids (*i.e.*, compounds that do not occur in nature in polypeptides but that can be incorporated into a polypeptide chain) and/or amino acid analogs as are known in the art may also be employed.

[0070] *Proteolysis*: As used herein, the term "proteolysis" refers to the breakdown, or degradation, of proteins into smaller polypeptides, typically by cleavage of peptide bonds. Ultimately proteolysis may result in breakdown of the protein into individual amino acids.

[0071] *Proteolysis-enhancing agent*: As used herein, the term "proteolysis-enhancing agent" refers to a substance, *e.g.*, a protease, that increases, contributes to, or causes proteolysis of one or more proteins or inhibits an inhibitor of proteolysis.

[0072] *Purified*: As used herein, the term "purified" means separated from many other compounds or entities. A compound or entity may be partially purified, substantially purified, or pure, where it is pure when it is removed from substantially all other compounds or entities (other than solvents, ions, *etc.*), *i.e.*, it is preferably at least about 90%, more preferably at least about 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or greater than 99% pure. A partially or substantially purified compound or entity may be removed from at least 50%, at least 60%, at least 70%, or at least 80% of the material with which it is naturally found, *e.g.*, cellular material such as cellular proteins and/or nucleic acids. In a preferred embodiment a purified protein is removed from at least 90%, preferably at least 95%, more

preferably at least 99%, or more, of the other proteins in a preparation, so that the purified protein constitutes at least 90%, preferably at least 95%, more preferably at least 99%, of the material in the preparation on a dry w/w basis.

[0073] *Recovery*: As used herein, the term "recovery" refers to structural and/or functional recovery.

[0074] *Reorganization*: As used herein, the term "reorganization" refers to structural and/or functional reorganization.

[0075] *RNAi agent*: As used herein, the term "RNAi agent" refers to a nucleic acid that inhibits gene expression by an RNAi interference mechanism. Examples include short interfering RNAs (siRNAs), short hairpin RNAs (shRNAs), microRNAs (miRNAs) and nucleic acids that are processed intracellularly, *e.g.*, by a member of the RNase III family of nucleases such as DICER that cleaves double-stranded RNAs, to produce an siRNA, shRNA, or miRNA. It will be appreciated that an RNAi agent, if produced using chemical synthesis, can include one or more deoxyribonucleotides or nucleotide analogs, modified backbone structures, *etc.*, in addition to or instead of ribonucleotides linked by phosphodiester bonds.

[0076] *Sequential administration*: As used herein, "sequential administration" of two or more agents refers to administration of two or more agents to a subject such that the agents are not present together in the subject's body at greater than *de minimis* concentrations. Thus the agents are not present together in the subject's body in concentrations sufficient for the agents to each have a separate biological effect. In certain embodiments a first agent is administered to a subject. A second agent is administered at a later time at which the concentration of the first agent has declined to less than 1%, less than 5%, or less than 10% of its peak concentration in the CNS or PNS. Administration of the agents may, but need not, alternate. Each agent may be administered multiple times.

[0077] *Small molecule*: As used herein, the term "small molecule" refers to organic compounds, whether naturally-occurring or artificially created (*e.g.*, via chemical synthesis) that have relatively low molecular weight and that are not proteins, polypeptides, or nucleic acids. Typically, small molecules have a molecular weight of less than about 1500 g/mol. Also, small molecules typically have multiple carbon-carbon bonds.

[0078] *Spine dynamics*: As used herein, the term "spine dynamics" refers to a change in any of various structural properties of spines over time. The properties include spine shape, size, number, density, and motility. Spine dynamics may be examined with respect to the individual spine or with respect to a plurality (*i.e.*, more than one) of spines.

[0079] *Spine motility:* As used herein, the term "spine motility" refers to a change in spine length over time. When examined with respect to a plurality of spines, spine motility refers to the average change in spine length over time.

[0080] *Structural recovery:* The term "structural recovery," as used in reference to the nervous system or a portion thereof, refers to the partial or complete restoration of a structure that has physically altered, disrupted, or otherwise subjected to a physical or chemical insult, which is intended to include deprivation of oxygen and/or nutrients. "Structural recovery" can also refer to preservation of a structure that has been physically altered, disrupted, or otherwise subjected to a physical or chemical insult, when such physical alteration, disruption, physical or chemical insult would otherwise be expected to lead to deterioration and/or loss or alteration in normal structural features. The structure can be, for example, a synaptic connection, a nerve, nerve bundle, nerve tract, nucleus, brain region, connection between brain regions, *etc.*

[0081] *Structural reorganization:* The term "structural reorganization," as used in reference to the nervous system or a portion thereof, refers to an alteration in the pattern of connections between two or more neurons or between one or more neurons and one or more glial cells (*e.g.*, astrocytes, oligodendrocytes, microglia, Schwann cells) that takes place over a period of time or an alteration in the position of two or more neuronal or glial cell bodies or cell processes (axons, dendrites, dendritic spines) with respect to one another. The alteration may include the formation of synapses between neurons that did not synapse with each other at the beginning of the time period. The alteration may include the formation of additional synapses between neurons that had at least one synaptic connection at the beginning of the time period. The alteration may also or alternatively include loss of synapses that existed at the beginning of the time period. Reorganization may entail growth or retraction of neural processes such as axons (*e.g.*, axonal sprouting or regeneration), dendrites, or dendritic spines, migration of neurons or glia, and/or neuronal or glial cell division. Structural reorganization may also be referred to as structural rearrangement.

[0082] *Subject:* As used herein, the term "subject" or "individual" refers to an individual to whom an agent is to be delivered, *e.g.*, for experimental, diagnostic, and/or therapeutic purposes and/or an individual who is subjected to a condition that modifies plasticity. Preferred subjects are mammals, particularly domesticated mammals (*e.g.*, dogs, cats, *etc.*), primates, or humans.

[0083] *Synapses:* As used herein, the term "synapses" refer to "specialized intercellular junctions between neurons or between neurons and other excitable cells where signals are

propagated from one cell to another with high spatial precision and speed" (De Camilli, in Cowan, *supra*). They are the primary sites of intercellular communication in the mammalian nervous system. In general, the basic structure of a synapse consists of a close juxtaposition of specialized regions of the plasma membrane of two neurons, referred to as the presynaptic and postsynaptic neurons, to form a synaptic junction. The presynaptic neuron is the nerve cell transmitting a signal while the postsynaptic neuron is the recipient of the signal. Most neurons in the vertebrate nervous system possess a cell body and two types of cell processes, axons and dendrites. Signals, *i.e.*, action potentials, are initiated and transmitted by the axon while dendrites (and also the cell body) receive inputs via synaptic contacts from other neurons.

[0084] *Treating:* As used herein, the term "treating" generally refers to medical and/or surgical management of a patient for purposes of bringing about an improvement in the state of a subject with respect to a disease, disorder, or condition from which the subject suffers and/or reducing or slowing further deterioration of the subject's condition. Treating can include reversing, alleviating, and/or inhibiting the progress of, the disease, disorder, or condition to which such term applies, and/or reversing, alleviating, inhibiting the progress one or more symptoms or manifestations of such disease, disorder or condition.

Detailed Description of Certain Embodiments of the Invention

Methods for Identifying Genes, Biological Pathways, and Cells Involved in Plasticity

[0085] The invention provides methods to identify molecular targets (*e.g.*, genes and their expression product(s)) that may be modulated in order to modify plasticity in the nervous system of an individual. The genes are differentially regulated in at least a portion of the nervous system of individuals subjected to a condition that modifies plasticity. For example, in certain embodiments, inventive methods identify a gene wherein the level and/or activity of an expression product of the gene differs in at least a portion of the nervous system of a subject if the subject has been subjected to a condition known to modify plasticity relative to its expression or activity in that portion of the nervous system in a subject who has not been subjected to the condition or who has been subjected to an alternate condition. In some embodiments, inventive methods identify a gene wherein the level and/or activity of an expression product of the gene differs in a portion of the nervous system that has been subjected to a condition that modifies plasticity relative to its expression or activity in a

portion of the nervous system that has not been subjected to a condition that modifies plasticity (*e.g.*, a portion located at a corresponding position of the opposite brain hemisphere of a subject). The portion of the nervous system may be any functionally or structurally defined part, area, region, unit, or component of the nervous system (which terms are used interchangeably herein). Portions of the nervous system include cortex, cerebellum, thalamus, hypothalamus, hippocampus, amygdala, basal ganglia (caudate nucleus, putamen and globus pallidus), midbrain, pons, medulla, nerve tracts, *etc.*, and any sub-portion of the foregoing. For example, subregions of the cortex include visual cortex, auditory cortex, somatosensory cortex, entorhinal cortex, olfactory cortex, Broca's area, Wernicke's area, *etc.* It will be appreciated that these regions themselves may be composed of smaller subregions. For example, the primate cortex has been divided into Brodmann areas 1-49 and 52, some of which include subareas, based on cytoarchitectural distinctions. Important areas of the primate visual cortex are referred to as V1, V2, V3, V4, and MT (also referred to as V5). Portions of the nervous system also include the six major cortical layers (I-VI) and their sublayers. Portions of the nervous system also include cortical columns, a term that refers to collections of cells arranged vertically from the surface of the cortex to the white matter that comprise functional and/or anatomical units. Thus, a cortical column can be defined on the basis of anatomical features (*e.g.* stereotyped patterns of pyramidal cell apical dendrite bundles), functional features (*e.g.* columns of cortical cells all responding to the same stimulus orientation) or both. Cortical columns include ocular dominance, orientation, spatial frequency, and color columns. In certain embodiments, the portion of the nervous system comprises cells of one or more types, *e.g.*, one or more neuronal cell types. Cells may be excitatory or inhibitory. Exemplary cell types found in the nervous system include pyramidal cells, stellate cells, interneurons (*e.g.*, chandelier cells, neurogliaform cells, basket cells, double basket cells, Purkinje cells, granule cells, Cajal-Retzius cells, Meynert cells, *etc.*).

[0086] Inventive methods are applied herein to identify genes that are differentially regulated in the visual cortex under monocular deprivation or dark rearing, both of which are conditions known to modify plasticity. The invention identifies biological pathways enriched in such genes.

[0087] The invention provides a method of identifying a gene involved in plasticity (referred to herein as a "plasticity-related gene") comprising steps of: (i) subjecting an individual to a condition that modifies plasticity; (ii) measuring level or activity of each of a plurality of genes in at least a portion of the individual's nervous system; and (iii) identifying one or more genes whose expression or activity is differentially regulated in the portion of the

individual's nervous system relative to its expression or activity under alternative conditions. Conditions may be environmental conditions that are deficient in one or more environmental stimuli that the individual would normally experience. Conditions may include one or more environmental stimuli that the individual would not normally experience. Alternative conditions may be normal environmental conditions, *e.g.*, standard laboratory conditions. Conditions suitable for maintaining animals are discussed *in* Guide for the Care and Use of Laboratory Animals, Institute for Laboratory Animal Research (ILAR) Commission on Life Sciences, National Research Council, National Academies Press, Washington, D.C. (1996). It will be appreciated that a range of conditions may be considered "normal" but will generally not include specific efforts to deprive or supplement the nervous system inputs that typically would be received by animal maintained as described in the foregoing reference.

(0088) Inventive methods may include identifying one or more biological processes or pathways involving one or more of the plasticity-related genes. The biological process pathway may be enriched for genes identified by the method. For example, the biological process or pathway may include a higher proportion of genes identified by the method than would be expected based on the number of genes in the process or pathway and the number of known genes in an individual of that particular species. In other words, genes identified as being differentially regulated are over-represented among the genes in the biological process or pathway. See Examples for further details.

[0089] In certain embodiments of the invention, the individual is subjected to the condition during at least a portion of a critical period for development of one or more nervous system structure(s), functions, or properties. Nervous system structures, functions, or properties for which a critical period has been well documented in one or more species include ocular dominance, orientation bias, development of the neuromuscular junction, climbing fiber refinement, whisker barrel map formation, whisker RF tuning, cortical tonotopic map, sound localization, birdsong, and human language. The conditions may include depriving the individual of normal inputs needed for the establishment of any of these structures, functions, or properties. The timing of critical periods and the effects of specific environmental conditions are known in the art (see, *e.g.*, Hensch, 2004, *Annu. Rev. Neurosci.*, 27:549).

10090] In certain embodiments of the invention, conditions include subjecting a subject to an alteration in visual input, optionally during a critical period for development of the visual cortex. Alteration of visual input during postnatal development causes adaptive changes in the maturation of visual cortex circuitry. One method of use for identifying genes, biological

pathways, and cells involved in activity-dependent plasticity is to alter visual experience during a critical period of development. The timing of such critical periods for development of the visual system is known in the art⁴. One example of altering visual experience is to raise animals in complete darkness from birth (dark rearing). Dark-rearing (DR) has diverse effects on the visual cortex, causing an upregulation of miniature synaptic potentials in subsets of neurons⁵, a reduction in spine number together with an increase in area of the spines that remain⁶, a change in the threshold for eliciting synaptic potentiation and depression^{7,8}, and a prolongation of the critical period for eliciting experience dependent changes in visual function⁹.

[0091] One example of manipulation of use to study the influence of activity on visual cortex neurons and networks and to identify genes, biological pathways, and cells involved in plasticity is monocular deprivation (MD). In animals with binocular vision, inputs to a portion of the visual cortex become anatomically and functionally segregated into alternating stripes of input from the two eyes, referred to as ocular dominance columns. As a consequence, individual cortical neurons that were originally responsive to both eyes become responsive to only one eye. However, if one eye is deprived of visual input during a critical period (monocular deprivation), that eye loses most of its ability to activate the cortex, and the responses of cells shift towards the nondeprived eye eye, *i.e.*, ocular dominance (OD) shifts in favor of the nondeprived eye. The rapid appearance of the functional deficit is followed by structural changes including a reduction in cortical area driven by the deprived eye and expansion of the area driven by the nondeprived eye, which take place on a timescale of weeks to months. The extent and complexity of thalamocortical axonal arbors from the deprived eye are reduced, while the extent and complexity of arbors from the nondeprived eye increase. MD, which can be achieved by suturing the lids of one eye during the critical period, causes an increase in the proportion of neurons in the binocular part of the V1 region of the cortex that respond to the open eye¹³. Short-term MD causes a reorganization of intracortical connections both functionally and structurally¹⁴⁻¹⁷, whereas long-term MD leads in addition to a reduction of thalamocortical arbors from the deprived eye and an expansion of arbors from the non-deprived eye^{18,19}.

[0092] The individual can be subjected to the condition during all or part of a critical period, *e.g.*, for a total of between 10% and 100% of the critical period. The individual can be subjected to the condition intermittently or continuously. In certain embodiments of the invention the critical period is, *e.g.*, between 24 hours and 1 year in length, *e.g.*, between 24 hours and 60 days in length. The critical period can commence at any time after birth or even

prior to birth and may terminate at any later time, depending upon the particular nervous system structure(s), functions, or properties under consideration.

[0093] Any suitable method can be used to identify the differentially regulated genes. In general, the methods involve obtaining samples of nervous system tissue (*e.g.*, samples of tissue from a portion of the brain such as cortex, hippocampus, *etc.*) from a subject who has been subjected to a condition (*e.g.*, a reduction in or increase in inputs) that modifies plasticity in at least a portion of the nervous system. The level and/or activity of each of a plurality of gene products is measured in the sample and is compared with the level and/or activity that would exist under alternate conditions. The method can involve obtaining a sample of nervous system tissue from a different subject who has not been subjected to the condition or obtaining a sample of nervous system tissue from the same subject but from a portion of the nervous system that has not been subjected to the condition. The level and/or activity in the two samples can be compared in an experiment performed on the two samples. Alternatively or additionally, a comparison with previously gathered data on expression levels and/or activity can be used.

[0094] Methods for determining the level of a gene product are well known in the art, and any suitable method can be used. For example, if the gene product is an RNA, its level can be measured using cDNA or oligonucleotide microarrays, subtractive hybridization, Northern blots, quantitative reverse transcription polymerase chain reaction (RT-PCR), *etc.* If the gene product is a polypeptide, its level can be measured using a variety of immunologically based methods such as immunohistochemistry, enzyme-linked immunosorbent assay (ELISA), Western blot, protein array technology (*e.g.*, antibody arrays or arrays using other specific binding agents, *etc.*).

[0095] Activity of a gene product can also be measured in a variety of ways that will typically depend upon the specific gene product whose activity is being measured. For example, if the gene product is a kinase or phosphatase, the extent to which an endogenous substrate is phosphorylated provides an indication of the activity of the gene product. The substrate is isolated from cell in which it is expressed, and its phosphorylation state is evaluated. Alternatively or additionally, *in vitro* kinase or phosphatase assays can be performed. If the gene product is a transcription factor, an assay that involves measuring expression of a reporter construct that contains a DNA element responsive to the transcription factor can be used. The activity of certain polypeptides is regulated by post-translational modification, localization, and/or physical association (typically noncovalent binding) with one or more cellular structures or molecules. For example, certain polypeptides are activated

or inactivated by phosphorylation. Activity may be assessed using binding assays, assays that determine subcellular localization or association with particular intracellular structures or molecules, assays that determine modification state, electrophoresis, mass spectrometry, *etc.* One of skill in the art will be able to select appropriate methods for determining and comparing the activity of gene products.

[0096] In certain embodiments of the invention a highly parallel method is used. By "highly parallel" is meant that the method determines the level or activity of at least 10 gene products essentially simultaneously and/or in a single experiment. Examples include microarray analysis and protein array analysis, wherein the array comprises at least 10 features (*e.g.*, at least 10 specific binding agents such as oligonucleotides or antibodies are affixed to the array). In certain embodiments of the invention the highly parallel method determines the level or activity of at least 100, at least 1000, at least 10,000, or at least 100,000 gene products essentially simultaneously and/or in a single experiment.

[0097] Many of the genes that have been or will be identified using the above methods are components of one or more biological processes or pathways. Such biological processes or pathways may be identified using a variety of methods. One of skill in the art will be familiar with processes and pathways in which some of the genes play a role or will be able to identify such processes and pathways by searching the literature or by using readily available biological information resources.

[0098] One biological information resource of particular use is the Gene Ontology project (www.geneontology.org). The Gene Ontology (GO) provides a list of three structured, controlled vocabularies (ontologies) that describe gene products and their associated biological processes and cellular constituents using a uniform terminology. In particular, the Gene Ontology database annotates (and thereby associates) identifiers of gene products (*e.g.*, gene names) with identifiers of biological processes of which those gene products are components. The Gene Ontology database can thus be used to identify the gene products that carry out a particular biological process and/or to identify the biological processes in which any gene product of interest plays a role. While the Gene Ontology database is used herein to exemplify the identification of biological processes and pathways that involve genes that are differentially regulated in the nervous system of an individual subjected to a plasticity-modifying condition, any similar compilation of information that associates identifiers of biochemical species with identifiers of biological processes and/or pathways could be used instead of, or in addition to, the Gene Ontology database. For example, the Kyoto Encyclopedia of Genes and Genomes (KEGG) offers somewhat similar facilities. Numerous

additional computer-based resources that provide convenient, unified access to biological information are available on the World Wide Web.

[0099] In certain embodiments, biological processes or pathways whose components (*e.g.*, genes) are over-represented among the plasticity-related genes are identified as likely to be involved in modifying plasticity, *i.e.*, they are identified as plasticity-related processes or pathways. A gene (or other biochemical species) that is a component of a biological process is over-represented among the plasticity-related genes if the likelihood that the number of plasticity-related genes that are associated with that biological process is greater than the number of plasticity-related genes that would be expected to be associated with that biological process based on the number of plasticity-related genes identified and the number of genes that are components of the biological process or pathway. Genes that are components of a biological process or pathway identified as being a plasticity-related process or pathway are candidate plasticity-related genes even if they are not themselves differentially regulated under plasticity-modifying conditions. For example, a first polypeptide that acts as a ligand, receptor, substrate, or binding partner for a second polypeptide whose expression is differentially regulated under plasticity-modifying conditions may be a component of a biological pathway of which the first polypeptide is a component and may be modulated instead of, or in addition to, modulating the first polypeptide.

[00100] In certain embodiments of the invention, once a gene, pathway, or process is identified using the methods described above, its role in nervous system structure(s), functions, or properties is more precisely evaluated using any of a variety of approaches. Certain of these approaches are also useful to modulate plasticity for therapeutic purposes, *e.g.*, to improve recovery or reorganization of the nervous system in a subject in need of recovery or reorganization. For example, an agent that modulates the gene, pathway, or process can be administered to an individual and the effect of the agent on the nervous system is determined. The individual may or may not be subjected to a plasticity-modifying condition such as a deprived or enriched condition. The agent can be administered during all or part of the period of time over which the individual is subjected to the condition. In certain embodiments, a transgenic non-human animal (*e.g.*, a mouse or rat) that has temporally and/or spatially altered expression of the gene (*e.g.*, that lacks or has reduced expression of the gene or has elevated or ectopic expression of the gene) is analyzed to determine whether the animal has altered nervous system structure or function and/or altered plasticity relative to an animal in which expression of the gene is not altered (*e.g.*, a "wild

type" animal). The transgenic animal can be generated using standard methods known in the art and is an aspect of this invention. In certain embodiments, an agent that modulates a gene, pathway, or process that is differentially regulated in individuals subjected to a plasticity-modifying condition is administered to a non-human animal. The animal may or may not be subjected to a plasticity-modifying condition or an event that damages the nervous system. The animal exhibits altered plasticity relative to an animal to which the agent is not administered. The animal is used as a model to screen for additional agents that are useful to alter plasticity and/or promote reorganization or recovery of the nervous system.

[00101] In certain embodiments of the invention, an agent that modulates a gene that is a component of a plasticity-related biological process or pathway is administered. The gene itself may or may not be differentially regulated under a plasticity-modifying condition. In some instances, agents that modulate particular genes, pathways, or pathways will be known to those of skill in the art. Any such agent can be used. In certain embodiments of the invention an RNAi agent such as an siRNA or shRNA is used to inhibit expression of a gene, *e.g.*, by triggering degradation of mRNA transcribed from the gene. RNA-mediated interference (RNAi) has recently emerged as a powerful method to reduce the expression of any target transcript in mammalian cells (see, *e.g.*, Elbashir, 2001; Brummelkamp, 2002; McManus & Sharp, 2002; and U.S. Patent Publications 2005/0026278, 2004/0259248, and 2003/0108923). Briefly, it has been found that the presence within a cell of a short double-stranded RNA molecule referred to as a short interfering RNA (siRNA), one strand of which is substantially complementary to a transcript present in the cell (the target transcript) over a length of about 17-29 nucleotides, results in inhibition of expression of the target transcript. The mechanism typically involves degradation of the transcript by intracellular machinery that cleaves RNA (although translational inhibition can also occur). Short hairpin RNAs are single-stranded RNA molecules that include a stem (formed by self-hybridization of two complementary portions of the RNA) and a loop. The stem-loop structure can be processed intracellularly into an siRNA. In some embodiments, an antibody, aptamer, or other molecule with specific binding properties is used to modulate activity of a polypeptide. In some embodiments, a ligand (*e.g.*, an agonist or antagonist) is used to modulate activity of a receptor. In certain embodiments of the invention, the agent is one that can cross the blood brain barrier so as to achieve an effective concentration in the CNS when administered to the subject at a location outside the nervous system (*e.g.*, orally, intravenously, intraperitoneally) at concentrations that do not cause unacceptable side effects.

[00102] In certain embodiments, antisense oligonucleotides complementary to an mRNA transcript that encodes a polypeptide, or ribozymes that cleave the mRNA transcript, are used to decrease expression. Antisense oligonucleotides, or a vector that provides a template for intracellular synthesis of an antisense oligonucleotide, or cells that synthesize the oligonucleotide, can be administered. Antisense technology and its applications are well known in the art and are described in Phillips, M.L. (ed.) "Antisense Technology," *Methods Enzymol.*, Vol. 313 and 314, Academic Press, San Diego, 2000, and references mentioned therein. See also Crooke, S. (ed.) "Antisense Drug Technology: Principles, Strategies, and Applications" (1st ed), Marcel Dekker, ISBN: 0824705661, 1st edition (2001), and references therein.

[00103] In some embodiments, an aptamer that binds to a polypeptide and inhibits its activity is used. An aptamer is an oligonucleotide (*e.g.*, DNA, RNA, which can include various modified nucleotides, *e.g.*, 2'-O-methyl modified nucleotides) that binds to a particular protein. Aptamers are typically derived from an *in vitro* evolution process (SELEX), and methods for obtaining aptamers specific for a protein of interest are known in the art (see, *e.g.*, Brody, 2000).

[00104] Ribozymes and deoxyribozymes are RNA and DNA molecules that can act as enzymes by folding into a catalytically active structure that is specified by the nucleotide sequence of the molecule. Such molecules have been shown to catalyze the sequence-specific cleavage of RNA molecules. The cleavage site is determined by complementary pairing of nucleotides in the RNA or DNA enzyme with nucleotides in the target RNA. Thus, RNA and DNA enzymes can be designed to cleave to any RNA molecule, thereby increasing its rate of degradation (Gotten and Birnstiel, 1989; Usman, 1996; and Sun, 2000).

[00105] It will be appreciated that synthetic nucleic acids such as siRNA, antisense oligonucleotides, aptamers, ribozymes, *etc.*, can include RNA, DNA, nucleoside analog(s), and/or may include modified sugars, or modified backbone structures.

[00106] Expression or activity of a gene, pathway, or process identified using the methods of the invention can be modulated as described above for purposes of modifying nervous system structure(s), functions, or properties. These approaches are of use to modulate plasticity for therapeutic purposes, *e.g.*, to improve recovery or reorganization of the nervous system in a subject in need of nervous system recovery or reorganization.

[00107] The invention provides methods for modifying plasticity by modulating particular cell types present in the nervous system. Cells present in the nervous system have been classified into a number of different cell types based on their level of expression of a

molecule or portion thereof, or a set of two or more molecules or portions thereof (referred to herein as "markers"). The molecule or portion thereof may be, *e.g.*, a particular gene product, a lipid, a carbohydrate modification of a polypeptide or lipid, *etc.*, (referred to herein as "markers"). The marker(s) are said to be characteristic of the cell type. Cells may be classified into types with varying degrees of specificity. For example, the cell type may be an interneuron or may be more specifically classified as being a particular type of interneuron. Certain cell types may be identified based on their expression of a single marker. Other cell types may be identified based on their expression of two or more markers (referred to as a "set" of markers), in which case each marker may be expressed in more than one cell type with specific sets of markers serving to identify specific cell types. In some instances the cell is identified based on whether or not the marker is detectably present in the cell or at its surface at significant levels (above background). In some instances the cell is identified as being of a particular type based on the level at which the marker is present in the cell relative to the level at which it is present in cells of other types. Markers include molecules and portions thereof, wherein absence of the molecule or portion thereof may in part be used to classify cells into different types. Expression of a marker or a specific set of markers may correlate with various parameters such as morphology (*e.g.*, branching pattern of neuronal processes), location, and/or electrophysiologic properties.

[00108] The invention provides methods for selecting a cell type as a target for modulation to regulate plasticity based on identifying genes that are differentially regulated under plasticity-modifying conditions. Cells of the cell type are involved in regulating one or more aspects of plasticity. Cells of the cell type may play a role in maintaining or terminating a critical period. They may play a role in modifying the ability of other cells to respond to inputs, *e.g.*, nerve impulses arising as a result of environmental stimuli. They may regulate formation of new synaptic connections between neurons and/or regulate the strengthening or weakening of existing synaptic connections. The invention provides methods of selecting a cell type as a target for modulation comprising steps of: (i) subjecting an individual to a condition that modifies plasticity; (ii) measuring level or activity of each of a plurality of genes in at least a portion of the individual's nervous system; (iii) identifying one or more genes whose expression or activity is differentially regulated in the portion of the individual's nervous system relative to its expression or activity under alternative conditions; and (iv) selecting a cell type as a target for modulation, wherein a product of at least one of the genes is a marker of the cell type. "Product" here refers to an expression product of the gene or to a molecule or molecular modification that is present in a cell or at its surface as a result of the

expression of the gene. For example, if the gene encodes a kinase, the "product" may be the phosphorylated form of a substrate of the kinase. In certain embodiments of the invention, the cell type expresses at least two of the differentially regulated genes or expresses at least one of the differentially regulated genes and does not significantly express at least one of the differentially regulated genes. The method may include determining that the number of cells of the cell type is altered in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition. For example, immunohistochemistry or *in vivo* imaging can be used to evaluate cell number.

[001091] The marker may be any marker recognized in the art as useful to classify cells present in the nervous system into different cell types. In certain embodiments of the invention, the marker is a calcium binding protein. A variety of calcium binding proteins (CBPs) such as calbindin, parvalbumin, and calretenin are recognized in the art as being markers of different types of interneurons (Markram *et al.*, 2004, *Nat. Rev. Neurosci.*, 5:793; and Flames *et al.*, 2005, *Neuron*, 46:377). The marker may be a neuropeptide such as somatostatin, vasoactive intestinal peptide, neuropeptide Y, or cholecystokinin. These neuropeptides are recognized in the art as being markers of different types of interneurons (Markram, 2004; and Flames and Marin, 2005). Certain cell types are identified based on their expression of one or more CBPs and one or more neuropeptides.

[00110] In illustrative embodiments, as described in the Examples, inventive methods are applied to identify the gene that encodes parvalbumin (PV) as being downregulated (underexpressed) in the visual cortex under conditions of DR, which conditions prolong the state of plasticity associated with the critical period. The invention further identifies PV expressing interneurons as being reduced in number in visual cortex under conditions of DR. Thus in certain embodiments of the invention, the cell type selected as a target for modulation is a PV-expressing interneuron, *i.e.*, parvalbumin is a marker of the cell type selected as a target for modulation. In the cortex, interneurons that express PV are inhibitory interneurons that utilize γ -aminobutyric acid (GABA) as their neurotransmitter and are morphologically classified as basket cells and chandelier cells (Markram, 2004).

[00111] The invention includes computer-readable media (*e.g.*, a hard disk, floppy disk, compact disk, zip disk, flash memory, magnetic memory, *etc.*) that store information related to any of the methods described above. Information may be organized in the form of a database, *i.e.*, a collection of data that is organized so that its contents can easily be accessed, managed and updated. Information may identify one or more genes that are differentially

regulated in at least a portion of the nervous system of an individual subjected to plasticity-modifying conditions, optionally under conditions in which an agent is administered to an individual during or after the time period in which the individual is subjected to plasticity-modifying conditions. Genes can be identified by name, by sequence, by accession number(s), *etc.* It will be appreciated that the information about expression and/or activity may relate to the genes themselves and/or to any of their expression products (RNA or protein). The information may indicate the nature of the conditions under which differential regulation was observed, may identify genes whose expression is altered by a plasticity-modifying agent, *etc.* Genes may be listed in order or ranked, *e.g.*, according to the significance of their differential regulation. Exemplary collections of such information are provided in Tables 4-1 1. Computer-readable media may store information identifying genes that are not differentially regulated, provided that they also include information pertaining to genes that are differentially regulated and identifies those genes as being relevant to plasticity, to nervous system structure, function, recovery or reorganization, *etc.* Additional information related to the gene(s) and/or to their role in plasticity or nervous system recovery or reorganization can be included, *e.g.*, (i) quantitative information related to the extent to which the gene(s) is/are differentially regulated and/or its significance; (ii) information identifying a biological pathway or process enriched in one or more of the genes; (iii) results obtained by administering an agent that modulates expression or activity of one or more of the genes to a subject, *etc.* The invention also includes methods comprising the step of electronically sending or receiving any of the afore-mentioned information and, optionally, storing at least part of the information and/or creating a new computer-readable medium or copy containing at least part of the information.

Compositions and Methods for Modulating Plasticity and Promoting Nervous System Reorganization and Recovery

[00112] The present invention is based in part on the identification of genes that are differentially regulated in response to particular environmental conditions that modify plasticity, namely dark rearing and monocular deprivation. The invention is based in part on the identification of biological processes and pathways that are enriched for one or more of these differentially regulated genes and are therefore considered herein to be differentially regulated pathways. In some embodiments, the present invention encompasses the recognition that expression products of certain genes that are differentially regulated in

response to DR and/or MD are involved in plasticity. In some embodiments, the present invention encompasses the recognition that certain of these genes are implicated as being involved in structural and/or functional nervous system reorganization following nervous system damage and can be manipulated to achieve therapeutic benefit. In some embodiments, the present invention encompasses the recognition that certain of these expression products, and agents that modulate their expression and/or activity, are of use to promote nervous system recovery and/or reorganization following nervous system damage, *e.g.*, following ischemic, hemorrhagic, neoplastic, degenerative, traumatic, and/or neurodevelopmental damage and/or to inhibit nervous system deterioration that would otherwise occur, *e.g.*, as a result of deprivation of input.

[00113] The invention identifies (i) genes whose expression is downregulated in visual cortex under conditions of DR (Table 4), (ii) genes whose expression is upregulated in visual cortex under conditions of DR (Table 5), (iii) genes whose expression is downregulated in visual cortex under conditions of long term MD (Table 6), (iv) genes whose expression is upregulated in visual cortex under conditions of long term MD (Table 7), (v) genes whose expression is downregulated in visual cortex under conditions of short term MD (Table 8), and (vi) genes whose expression is upregulated in visual cortex under conditions of short term MD (Table 9). The invention identifies genes that are differentially regulated in visual cortex under conditions of short term MD in subjects who are treated with a plasticity-modifying agent, namely an activator of the IGF1 pathway (Tables 10 and 11). These genes are identified as candidates for modulation to modify plasticity and/or to promote functional and/or structural nervous system reorganization or recovery of the nervous system. The genes were identified at least in part by hybridizing mRNA to a microarray from Affymetrix (www.affymetrix.com) that contained probes for a large number of mouse genes (see Example 1). The numbered rows in Tables 4-11 list (from left to right, separated by spaces or tabs) the Affymetrix identifier of the probe, the p value, the data for experimental condition (*e.g.*, MD or DR) and control, the gene symbol corresponding to the probe (where available), accession number(s) for the genes and/or proteins, and Reference Sequence (RefSeq) identifier. Items that are not available or not included are indicated by —. It will be appreciated that the entries in the tables can be arranged in a number of different ways and the specific ordering presented in the tables is not intended to be limiting. For example, the entries can be listed and/or ranked on the basis of ascending p value, on the basis of the absolute or relative magnitude of the difference in expression between the experimental and control conditions, *etc.*

[00114] One of ordinary skill in the art will be able to obtain additional information about the genes and their expression product(s) listed in Tables 4-1 1 and/or discussed herein, *e.g.*, their sequences, by searching public databases such as those available through Entrez, the search and retrieval system used at the National Center for Biotechnology Information (www.ncbi.nlm.nih.gov) for databases, including PubMed, Nucleotide and Protein Sequences (*e.g.*, Genbank), Protein Structures, Complete Genomes, Taxonomy, *etc.*, (www.ncbi.nlm.nih.gov/gquery/gquery.fcgi). These databases can be searched using the symbols or names of the genes. One of skill in the art will also recognize that additional information can be found at the publicly available Affymetrix website, Netaffx Analysis Center (www.affymetrix.com/analysis/index.affx), visited April 12, 2006, which allows one to correlate GeneChip[®] array results with array design and annotation information and can be queried by ID. The website includes libraries for each microarray that provide the IDs of the probes and accession numbers for the corresponding genes and proteins.

[00115] The invention provides methods for modifying plasticity in the nervous system of a subject comprising steps of: administering a plasticity-modifying agent to a subject in need thereof, wherein the agent is administered either alone or in combination with one or more additional agents in an amount effective to modify nervous system plasticity, wherein the plasticity-modifying agent modulates a gene or pathway that is differentially regulated in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition. In other words, when administered to the subject, the agent modulates a gene or pathway, wherein the gene or pathway is a gene or pathway that is differentially regulated in the nervous system of an individual subjected to a plasticity-modifying condition, *e.g.*, a gene or pathway identified using the methods of the present invention. The subject to whom the agent is administered may or may not be subjected to a plasticity-modifying condition. In certain embodiments of the invention, the plasticity-modifying condition is DR or MD. In certain specific embodiments, the plasticity-modifying condition is MD. In certain embodiments of the invention the agent modifies plasticity in a manner that depends on nervous system activity, *e.g.*, the extent to which the nervous system undergoes structural or functional alteration in the presence of the agent will depend on the type of inputs received by the nervous system and/or the type of stimuli to which the nervous system is subjected. In certain embodiments of the invention, the agent enhances the ability of the nervous system to modify its structure or function in response to the presence of a second agent such as a neural growth enhancing agent. Thus the plasticity-enhancing agent may at least in part play a permissive role, contributing to structural or functional recovery or reorganization in the

nervous system when administered to a subject who is receiving rehabilitative therapy that modifies nervous system inputs or who is receiving a neural growth enhancing agent.

[00116] The invention further provides methods of promoting reorganization or recovery in the nervous system of a subject comprising steps of: administering a plasticity-modifying agent to a subject in need thereof, wherein the agent is administered either alone or in combination with one or more additional agents in an amount effective to promote nervous system reorganization or recovery, wherein the plasticity-modifying agent modulates a gene or pathway that is differentially regulated in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition, *e.g.*, conditions of DR or MD. The subject may have suffered ischemic, hemorrhagic, neoplastic, traumatic, neurodegenerative, toxic, and/or neurodevelopmental damage to the nervous system. The agent may contribute to (*e.g.*, enhance) recovery or reorganization in the subject's nervous system and/or promote normalization of function. In other words, the degree of reorganization or recovery of the nervous system, or improvement of function, is greater than would have been the case if the agent had not been administered to the subject. In certain embodiments of the invention, the agent does not act solely or primarily by exerting a neuroprotective effect, *e.g.*, does not act solely or primarily by inhibiting cell death or dysfunction (*e.g.*, necrosis or apoptosis). In certain embodiments of the invention, the agent exerts both a neuroprotective effect and a plasticity-enhancing effect. According to certain embodiments of the invention, the agent is capable of exerting a neuroprotective effect but is administered within a particular time window subsequent to a specific damaging event such as a stroke, at a time that falls outside the time window during which the agent would exert a neuroprotective effect.

[00117] The above methods may modify plasticity and/or promote recovery or reorganization in any one or more portions of the nervous system. For example, in certain embodiments of the invention, a method modifies plasticity, *e.g.*, promotes plasticity, and/or promote recovery or reorganization in at least a portion of the visual cortex. In certain embodiments of the invention, the portion of the nervous system is one located in proximity to an implanted drug delivery device. For example, the portion of the nervous system may be located up to 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 centimeters (cm) away from the surface or border of the device.

[00118] Typically, agents and compositions in accordance with the invention promote structural reorganization and/or functional reorganization of the nervous system or a portion thereof or maintain the nervous system in a state in which such reorganization can occur. In certain specific embodiments, agents of the invention promote structural and/or functional

recovery of the nervous system or a portion thereof. It will be appreciated that often there will be a correlation between (i) structural reorganization and/or recovery and (ii) functional reorganization and/or recovery, *e.g.*, both structural reorganization and/or recovery as well as functional reorganization and/or recovery take place. However, in some embodiments of the invention, functional reorganization and/or recovery take place without detectable evidence of structural reorganization and/or recovery. In some embodiments of the invention, structural reorganization and/or recovery take place without detectable evidence of functional reorganization and/or recovery during a particular time period of evaluation. In such embodiments, functional reorganization and/or recovery may occur at a later time, and/or the recovery may not be detected using the particular measurement tools and methods used for the evaluation. It will also be appreciated that reorganization is typically associated with recovery, but reorganization can precede noticeable evidence of recovery, sometimes by a significant period of time.

[00119] Functional recovery from damaging events may involve regrowth of physical connections (*e.g.*, synapses) between surviving nervous system cells (*e.g.*, neurons, glial cells) and/or establishment of new connections. Certain of the plasticity-modifying agents may interact directly with cells (*e.g.*, neurons, glial cells, *etc.*) to enhance their plasticity and/or stimulate their capacity for structural and/or functional reorganization. Agents may be administered in conjunction with an agent that causes degradation of molecule(s) present in the ECM that would otherwise impede beneficial structural changes or would exert inhibitory effects on nervous system cells. In certain embodiments of the invention, two or more agents are administered concurrently or sequentially to a subject. Either or both of the agents may be focally administered to the nervous system of the subject.

Plasticity-Modifying Agents

[00120] The invention identifies a number of genes and biological pathways that may be modulated to modify plasticity. Before discussing certain of these genes and pathways it should be noted that certain of the genes and their encoded polypeptides discussed herein are members of families, and in some cases multiple isoforms of a particular polypeptide exist, as well as post-translationally modified forms (*e.g.*, forms that have been modified by phosphorylation, glycosylation, acylation, *etc.*). In such cases a single name may be used to collectively refer to multiple genes or polypeptides. For example, "PI3K" refers to any member or set of members of the PI3K family. "AKT" refers to at least Akt1, Akt2, and/or Akt3, *etc.* "STAT" refers to at least STAT12, 3, 4, 5a, 5b, 6, and/or 7, *etc.* "JAK" refers to at least JAK1, JAK2, JAK3, and/or Tyk2, *etc.* Similarly, the "JAK/STAT pathway" refers to

any pathway involving at least one JAK and at least one STAT. It will be appreciated that in certain embodiments of the invention it will be desirable to selectively modulate one or more members of a family, *e.g.*, one or more members that is/are present in the nervous system. It will be also be appreciated that multiple variant polypeptides encoded by a single gene may arise from RNA and/or protein splicing and that gene editing can also give rise to variants, all of which may be referred to by the same name or symbol herein. The invention thus includes embodiments in which any one or more members of a family, isoforms, splice variants that arise from RNA or protein splicing or gene editing, post-translationally modified forms, *etc.*, are modulated.

[00121] One of ordinary skill in the art will readily understand which particular genes and gene products (*e.g.* mRNA and polypeptides) are referred to using the names listed herein and will be able to retrieve the sequences of these genes and gene products and relevant information such as sources from which the molecule can be purified or obtained using, *e.g.*, publicly available databases such as Genbank and PubMed. For example, one of skill in the art can search the Entrez Gene database provided by the National Center for Biotechnology Information (NCBI), available at the web site having URL www.ncbi.nlm.nih.gov/entrez/query.fcgi?C3VID=search&DB=gene and can thereby locate the Gene ID for any particular gene or polypeptide of interest. It will be appreciated that allelic variants, homologs, and biologically active fragments or variants of the molecules described herein also be used.

[00122] In some embodiments (described in more detail in the Examples), IGFBP5 is identified as being differentially regulated under a particular deprived condition (MD). IGFBP5 is a component of the IGF1 pathway. The invention contemplates modulating one or more components of the IGF1 pathway in order to modify plasticity. The invention contemplates modulating one or more components of the IGF1 pathway to promote recovery or reorganization of the nervous system in a subject in need thereof.

[00123] As described in the Examples, IGFBP5 is significantly upregulated under conditions of MD in the visual cortex of subjects that are subjected to MD. IGFBP5 is one of the most upregulated genes after MD both at the mRNA and protein level. Furthermore, the IGF1 pathway is one of the biological pathways that is most enriched for genes that are differentially regulated after MD, and both IGFBP5 and IGF1 are constituents of several highly enriched pathways after MD. Therefore, the IGF1 pathway is identified as being a plasticity-related pathway of particular interest. As described in Example 4, administration of an activator of the IGF1 pathway prevented many of the effects of monocular deprivation on

the V1 region of the cortex. To the best of the inventors' knowledge, these results represent the first evidence showing the possible functional involvement of the IGF1/IGFBP5 system in experience-dependent plasticity in the cortex. The results demonstrate that IGF1 and/or pathways and mechanisms involving IGF1 stabilize synapses and alter plasticity.

{00124] IGF1 is a member of a superfamily of growth-promoting peptides related to insulin in sequence and biological activity. The actions of IGF1 are mediated by the type I IGF receptor (IGFIR), which transmits binding of IGF1 to an intracellular signaling cascade. Binding of IGFs to the IGFIR enhances the receptors' tyrosine kinase activity, resulting in phosphorylation of insulin receptor substrates IRS1-IRS4, which leads to activation of two major downstream signaling pathways, the mitogen activated protein kinase (MAPK) and the phosphoinositide 3-kinase (PI3K) pathways. The PI3K pathway is discussed further below. Six IGF binding proteins (IGFBP1-IGFBP6) regulate the biological activity of IGF1 by a variety of mechanisms, and some of the IGFBPs have effects independent of IGF1. IGF1, IGFIR, and certain of the IGFBPs are expressed in the CNS and have been postulated to have a variety of different functions therein (Russo, 2005). IGF1 interacts with a variety of different proteins, and activation of the IGF1 pathway results in phosphorylation of a large number of downstream substrates.

[00125] The IGF1 pathway can be modulated using a variety of different methods. In certain embodiments of the invention, the pathway is modulated so as to increase the activity of the pathway. IGF1 or a biologically active fragment thereof can be administered to the subject to activate the pathway. In some embodiments, the tripeptide GPE is used. Alternatively or additionally, a different ligand of an IGF receptor can be administered. The ligand can be an agonist or antagonist, depending *on* whether it is desired to inhibit or activate the receptor. In some embodiments, methods include (i) administering agent that disrupts the physical association between IGF1 and an IGFBP; (ii) administering an agent that activates or inhibits a kinase that phosphorylates one or more IGF1 substrates; (iii) administering an agent that activates or inhibits a phosphatase that dephosphorylates one or more IGF1 substrates; (iv) administering an agent that upregulates expression of IGF1 or IGFIR; (v) administering an agent that upregulates or downregulates expression of an IGFBP; (vi) administering an agent that increases the expression or activity of a component of the PI3K, and/or Akt signaling cascade, *etc.* In one embodiment, an RNAi agent is used to inhibit expression of one or more genes in the pathway, *e.g.*, a gene encoding an IGF binding protein such as IGFBP5.

[00126] In certain embodiments of the invention, the phosphoinositide 3-kinase (PI3K) signal transduction pathway is modulated. Phosphoinositide 3-kinase, also referred to as phosphatidylinositol 3-kinase, is a lipid kinase and a serine/threonine kinase that is a component of a signal transduction pathway involving Src-like or receptor tyrosine kinases such as the IGF1 receptor. Thus, the PI3K pathway is responsible at least in part for the actions of IGF1. The PI3K kinase superfamily includes a large number of structurally related enzymes with differing regulation and substrates (see Foster, 2003 and Paez *et al*, 2003, for reviews). "Classical" PI3K comprises a regulatory subunit (p85) and a 110-kDa catalytic subunit (p110). PI3K acts through a downstream effector protein kinase B (PKB, also named Akt) to regulate many cellular processes including cell survival, cell proliferation, vesicular trafficking, inflammation and apoptosis inhibition. Three isoforms of Akt (Akt1, Akt2, and Akt3) are known. When activated, PI3K phosphorylates phosphoinositides at the 3' position of the inositol ring. Following their phosphorylation the phosphoinositides promote Akt activation by phosphorylation. Activated Akt (phosphoAkt) then phosphorylates a variety of substrates.

[00127] As described in the Examples, PI3K, which is activated by IGF1, was significantly diminished in expression after MD, but expression was fully restored after MD when IGF1 treatment was administered, suggesting that the plasticity-related effects of IGF1 may at least in part be mediated through PI3K. The present invention encompasses modulating the PI3K pathway, optionally by modulating the expression or activity of Akt, to modify plasticity in a subject in need thereof. For example, the invention encompasses administering an agent that inhibits or enhances phosphorylation of Akt. The invention contemplates modulating one or more components of the PI3K pathway, *e.g.*, Akt, to promote recovery or reorganization of the nervous system in a subject in need thereof. Agents that modulate activity of PI3K and/or Akt are known in the art (see, *e.g.*, U.S. Patent Publication 2003/0236271, which describes bicyclic or tricyclic fused heteroaryl derivatives useful to inhibit PI3K; and U.S. Patent Publication 2004/0176385, describing small molecule inhibitors of PI3K). In some embodiments, the agent is an RNAi agent, such as an siRNA that is targeted to a component of the PI3K signal transduction pathway (see, *e.g.*, U.S. Patent Publication 2005/0272682).

[00128] In certain embodiments (described in more detail in the Examples), STAT1 is identified as being differentially regulated under a particular deprived condition (monocular deprivation), and the JAK/STAT pathway is identified as being a plasticity-related pathway. In particular, STAT1 is upregulated in the visual cortex of subjects that are subjected to MD.

Furthermore, phosphorylated STAT1 was upregulated, indicating activation of the JAK-STAT cascade. The invention contemplates modulating one or more components of the JAK/STAT pathway in order to modify plasticity in a subject in need thereof. The invention also contemplates modulating one or more components of the JAK/STAT pathway to promote recovery or reorganization of the nervous system in a subject in need thereof. The JAK/STAT pathway is the major signaling mechanism for a diverse group of cytokines and growth factors (reviewed in Rawlings *et al*, 2004, *J. Cell Sci*, 117:1281). Binding of these ligands to their receptors induces multimerization of receptor subunits that are associated with Janus tyrosine kinases (JAKs), allowing transphosphorylation of the JAKs. Activated JAKs phosphorylate signal transducers and activators of transcription proteins (STATs), transcription factors that are present in the cytoplasm in latent form until activated. Phosphorylated STATs dimerize and are translocated into the nucleus, where they activate or repress transcription of target genes. In addition to these main components of the JAK/STAT pathway, other proteins that contribute to JAK/STAT signaling include signal-trans adapter molecules (STAMs), STAT-interacting protein (StIP), and the SH2B/Lnk/APS family. There are three main classes of negative regulators of JAK/STAT signaling: suppressor of cytokine signaling (SOCS) proteins, protein inhibitors of activated STATs (PIAS) proteins, and protein tyrosine phosphatases (PTPs).

[00129] The JAK/STAT pathway can be modulated using a variety of different methods. A component of the JAK/STAT pathway (*e.g.*, a STAT or JAK polypeptide), or a ligand of a JAK-binding cytokine receptor can be administered. For example, a receptor agonist can be administered to activate the pathway, or an antagonist can be administered to inhibit the pathway. Other methods to modulate the JAK/STAT pathway include administering an agent that (i) disrupts or inhibits the physical association between a JAK and a STAT; (ii) activates or inhibits a kinase that phosphorylates one or more JAK substrates; (iii) activates or inhibits a phosphatase that dephosphorylates one or more JAK substrates; (iv) upregulates expression of a component of the JAK/STAT pathway; (v) downregulates expression of a component of the JAK/STAT pathway; (vi) disrupts the physical association between a JAK-binding cytokine receptor and a JAK; (vii) activates or inhibits a JAK-binding cytokine receptor; (viii) inhibits or enhances translocation of a STAT to the nucleus; (ix) inhibits association of a STAT with DNA; (x) disrupts the physical association between a JAK-binding cytokine receptor and an endogenous JAK regulating protein such as a SOCS or PIAS protein; (xi) induces or inhibits expression of an endogenous JAK regulating protein, *etc.* As noted above, RNAi agents are of use to inhibit expression of genes in the pathway, *e.g.*, one or more JAK,

STAT, SOCS, or PIAS proteins. In general, inhibiting expression of a JAK or STAT will inhibit the JAK/STAT pathway, while inhibiting expression of a negative regulator such as a SOCS or PIAS protein will activate the pathway.

[00130] The present invention encompasses the discovery that phosphorylated STAT1 is upregulated after MD. Without wishing to be bound by any theory, this upregulation may be a response of the brain to remove or reduce deprived eye connections as well as possibly expand non-deprived eye connections. Thus, upregulating STAT1 or otherwise activating the pathway in which it acts would enhance plasticity and/or increase the ocular dominance shift in a MD model.

[00131] In some embodiments, the agent that modulates the JAK/STAT pathway is a cytokine. Cytokines are polypeptides secreted by immune system cells (*e.g.*, lymphocytes, macrophages, *etc.*) that exert a biological effect on other immune system cells and/or on other cells in the body. Examples include interferons, interleukins, chemokines, *etc.* The cytokine may upregulate a component of the JAK/STAT pathway such as STAT1. IFN γ is an exemplary cytokine of use in the invention to activate the JAK/STAT pathway. In some embodiments, the agent reduces STAT1 expression or activity. Exemplary agents that reduce STAT1 expression or activity include ionomycin and fludarabine. Without wishing to be bound by any theory, administration of these agents may alter the ocular dominance shift in an MD model. In some embodiments, the agent is a peroxisome proliferator receptor (PPAR)-gamma agonist. Examples include various prostoaglandins such as 15-deoxy-delta 12, 14-prostaglandin J(2), thiazolidinediones such as rosiglitazone, *etc.* In certain embodiments of the invention, one or more of these agents is administered to inhibit phosphorylation of one or more STAT or JAK proteins. In some embodiments, the agent is an HMG-CoA reductase inhibitor. HMG-CoA reductase inhibitors include statins such as simvastatin, atorvastatin, lovastatin, *etc.* These agents may be administered to inhibit the JAK/STAT pathway. Agents that inhibit STAT1 phosphorylation by inhibiting JAKs include typhostins such as AG490 which blocks the action of JAK2 (Meydan *et al.*, 1996, *Nature*, 379:645) and WHI-P131, which blocks the action of JAK3 (Sudbeck *et al.*, 1999, *CUn. Cancer Res.*, 5:1569). Typhostins are low molecular weight compounds that specifically inhibit protein tyrosine kinases. See also U.S. Patent 6,080,748, which describes a variety of dimethoxyquinazoline compounds useful as inhibitors of JAK3. See also U.S. Patent Publications 2003/0236244, 2004/0209799, 2004/0097504, 2005/0159385, and 2005/0148574.

[00132] The invention provides methods of modifying plasticity comprising steps of: modulating a cell type characterized in that one or more markers of the cell type is a product of a gene that is differentially regulated in at least a portion of the nervous system of an individual subjected to a condition that modifies plasticity. The invention provides methods of modifying plasticity comprising steps of: modulating a marker of a cell type characterized in that one or more markers of the cell type is a product of a gene that is differentially regulated in at least a portion of the nervous system of an individual subjected to a condition that modifies plasticity.

[00133] As noted above, the invention identifies the gene that encodes PV as being downregulated (*i.e.* underexpressed) in the visual cortex under conditions of DR, which prolong the state of plasticity associated with the critical period. The invention identifies PV expressing interneurons as being reduced in number in visual cortex under conditions of DR. Based at least in part on these discoveries, the invention provides methods of modifying plasticity in the nervous system of a subject comprising administering a plasticity-modifying agent to the subject, wherein the plasticity-modifying agent modulates development, survival, and/or activity of parvalbumin expressing interneurons in at least a portion of the brain. In some embodiments, the agent inhibits development, survival, and/or activity of parvalbumin expressing interneurons in at least a portion of the brain. In certain embodiments of the invention, the plasticity-modifying agent inhibits expression or activity of parvalbumin.

[00134] Exemplary methods of inhibiting development, survival, and/or activity of parvalbumin expressing interneurons include administering L-type calcium channel antagonists such as nimodipine or nifedipine (Jiang *et al*, 2005, *Neuroscience*, 135:839). In some embodiments, PV expressing interneurons are targeted for elimination by administering a complex comprising a cytotoxic agent and a targeting moiety, wherein the targeting moiety specifically binds to a marker of PV expressing interneurons, *e.g.*, a molecule or portion thereof present at the cell surface of PV expressing interneurons. The complex or a portion thereof may be internalized. The cytotoxic agent selectively kills interneurons that have the marker present at their cell surface. "At the cell surface" is used herein to mean that a molecule or portion thereof is exposed to the extracellular environment and accessible to binding by a suitable binding agent.

[00135] The cytotoxic agent may be covalently or noncovalently associated with the targeting moiety. Alternatively or additionally, both the cytotoxic agent and the targeting moiety may be covalently or noncovalently associated with a third entity. For example, in some embodiments, the cytotoxic agent and the targeting moiety are covalently attached to

one another either directly or via a linker moiety to form a conjugate. In some embodiments, the cytotoxic agent and the targeting moiety are associated with a delivery vehicle such as a polymeric scaffold, polymeric particle, or liposome. A variety of cytotoxic moieties can be used. Exemplary classes include alkalizing or alkylating agents, alkyl sulfonates, aziridines, ethylenimines and methylamelamines, nitrogen mustards, certain antibiotics, anti-metabolites, folic acid analogues, purine analogs, pyrimidine analogs, arabinosides, platinum analogs, microtubule inhibitors (*e.g.*, microtubule depolymerizing agents or stabilizers), topoisomerase inhibitors, proteasome inhibitors, proapoptotic agents, kinase inhibitors, radioisotopes, toxins such as diphtheria toxin, *Pseudomonas* exotoxin A (PE), cholera toxin (CT), pertussis toxin (PT), ricin A chain, botulinum toxin A, conotoxins, *etc.* The marker may be, *e.g.*, an ion channel or receptor subunit that is expressed by PV expressing interneurons. Typically, the marker is present at the cell surface of PV expressing interneurons at a higher average level than the level at which it is present at the cell surface of most or all other cell types in the nervous system. Examples include α subunits of L-type calcium channels (*e.g.*, subunit 1.2 or 1.3; Jiang and Swann, 2005), NR2A subunits of NMDA receptors (KLinney, 2006), and the following ion channel subunits: HCN2, Kv3.1, Kv1.2, Kv1.6, Kv1.1, Kv3.2, HCN1, KV β 1, and Ca α 1A (Markram, 2004). The targeting moiety can be ligand of a receptor or channel that includes any of the foregoing subunits, an antibody or other specific binding agent (*e.g.*, an aptamer or a binding peptide selected through phage display) that binds to a marker such as any of the foregoing subunits, *etc.*

[00136] Alternatively or additionally, in certain embodiments of the invention, it is desirable to reduce plasticity by accelerating or enhancing the development, survival, and/or activity of PV expressing interneurons. For example, agonists of L-type calcium channels such as BayK 8644 can be used.

[00137] In some embodiments, the present invention relates to administering combinations of multiple plasticity-modifying agents to a subject. The agents may be administered together in a single composition or separately. In some embodiments, an agent that modulates the IGFl pathway and an agent that modulates the JAK/STAT pathway are administered. In some embodiments, an agent that modulates the IGFl or JAK/STAT pathway and that inhibits development, survival, and/or activity PV expressing interneurons is administered. In some embodiments, an agent that modulates the IGFl pathway, an agent that modulates the JAK/STAT pathway, and an agent that inhibits development, survival, and/or activity PV expressing interneurons are administered.

[00138] In some embodiments, the invention relates to compositions comprising multiple plasticity-modifying agents. One such composition comprises an agent that activates the IGF1 pathway and an agent that activates or inhibits the JAK/STAT pathway. The composition can comprise any agent that activates the IGF1 pathway and any agent that activates or inhibits the JAK/STAT pathway. In some embodiments, the composition comprises IGF1 or a biologically active variant or fragment thereof such as GPE, and an HMG-CoA reductase inhibitor such as a statin. In some embodiments, the composition comprises IFN γ or a biologically active fragment or variant thereof and an HMG-CoA reductase inhibitor.

Combined Administration of Plasticity-Modifying Agent and Proteolysis-Enhancing Agent

[00139] In certain embodiments of the invention, one or more plasticity-modifying agents and one or more proteolysis-enhancing agents are administered to a subject. As described in co-pending patent application U.S.S.N. 11/205,501, entitled COMPOSITIONS AND METHODS FOR ENHANCING STRUCTURAL AND FUNCTIONAL NERVOUS SYSTEM REORGANIZATION, now published as U.S. Patent Publication 2006/0104969, the inventors have shown that focal administration of proteolysis-enhancing agents such as tPA, plasmin, or agents with plasmin-like activity to the nervous system of a subject promotes reorganization and recovery in the subject's nervous system. The invention provides methods for modifying plasticity in the nervous system of a subject comprising the step of: administering a plasticity-modifying agent and a proteolysis-enhancing agent to a subject in need thereof, wherein the agents are administered in an amount and for a time effective to modify nervous system plasticity, wherein the plasticity-modifying agent modulates a gene or pathway that is differentially regulated in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition. For example, in certain embodiments of the invention, the agent modulates a gene or pathway that is differentially regulated in at least a portion of the nervous system of an individual subjected to conditions of dark rearing (DR) or monocular deprivation (MD). The plasticity-modifying agent can be, *e.g.*, any of the agents described herein.

[00140] Without wishing to be bound by any theory, proteolysis of one or more ECM component(s), mediated by a proteolysis-enhancing agent such as tPA and/or plasmin, creates an environment that is permissive for structural reorganization and may enhance activity of a plasticity-modifying agent. Thus, the present invention encompasses the recognition that

enhancing proteolytic activity in the nervous system following nervous system damage in combination with administering a plasticity-modifying agent may permit increased structural remodeling relative to either therapy alone, thereby contributing to improved functional recovery. The following sections describe proteolysis-enhancing agents of use in the invention, drug delivery devices, methods and locations for the focal administration of plasticity-promoting agents and proteolysis-enhancing agents, and various other features of the invention.

[00141] A variety of different proteolysis-enhancing agents, or combinations thereof, are of use in the invention. In certain embodiments of the invention, the proteolysis-enhancing agent is a polypeptide. In certain embodiments of the invention, the polypeptide is a protease. In certain embodiments of the invention, the proteolysis-enhancing agent enhances proteolysis of fibrin. The agent may directly cleave fibrin or may activate an endogenous protease that cleaves fibrin. In certain embodiments of the invention, the agent enhances proteolysis of a component of the ECM other than fibrin in addition to, or instead of, enhancing proteolysis of fibrin. For example, the proteolysis-enhancing agent may cleave one or more extracellular matrix components including, but not limited to, collagen, laminin, fibronectin, and proteoglycans. It is noted that the classification of a particular agent as a plasticity-promoting agent or a proteolysis-enhancing agent should not be understood to be limiting in any way. Thus the effect(s) of the proteolysis-enhancing agent on the nervous system may result wholly or in part from one or more activities that does not involve proteolysis. While the plasticity-promoting agents of the present invention are not recognized as having proteolytic activity, such activity is not excluded, and the effect(s) of the plasticity-promoting agent on the nervous system may result wholly or in part from proteolysis that occurs as an indirect effect of their administration. For example, administration of the plasticity-promoting agent may increase expression of an endogenous proteolysis-enhancing agent such as plasmin or inhibit the expression of an endogenous inhibitor of a proteolysis-enhancing agent.

[00142] Suitable agents for use in the present invention include components of the tPA/plasmin cascade. Components of the tPA/plasmin cascade include plasminogen activators such as tissue plasminogen activator (tPA) and variants thereof, plasminogen, and plasmin. Plasminogen activators (PAs) are serine proteases that catalyze the conversion of plasminogen to plasmin (Vassalli, 1991) by cleavage of a single peptide bond (R561-V562) yielding two chains that remain connected by two disulfide bridges (Higgins and Bennett, 1990). Plasmin is a potent serine protease whose major substrate *in vivo* is fibrin, the

proteinaceous component of blood clots. Plasminogen activation by tPA is stimulated in the presence of fibrin. Plasmin has a broad substrate range and is capable of either directly or indirectly cleaving many other proteins, including most proteins found in the ECM. "Direct," as used herein, means that the protease physically interacts with the polypeptide that is cleaved, while "indirect" means that the protease does not usually physically interact with the polypeptide that is cleaved, but tends to interact with another molecule, *e.g.*, another protease, which in turn directly or indirectly cleaves the polypeptide. Plasmin is also capable of activating metalloprotease precursors. Metalloproteases in turn degrade ECM molecules. Metalloproteases are of use in certain embodiments of the present invention. In addition to the aforementioned substrates, plasmin cleaves and activates various growth factors and growth factor precursors. Although the liver is the major site of plasmin synthesis, plasminogen mRNA and protein have been detected in numerous brain regions. Thus, plasminogen is available to be cleaved by tPA administered to the nervous system.

[00143] Two PAs, tissue-type PA (tPA) and urokinase-type PA (uPA) have been identified in mammals. A major physiological function of PAs is to trigger the lysis of clots by activating plasminogen to plasmin, which degrades fibrin. In the body, PA activity is regulated in part by various endogenous serine protease inhibitors that inhibit PAs, a number of which have been identified. Neuroserpin (Gene ID 5274) belongs to the serpin family of the serine protease inhibitors and is expressed by neurons of both the developing and the adult nervous system. Neuroserpin is present in regions of the brain where either tPA message or tPA protein are found, suggesting that neuroserpin may be the selective inhibitor of tPA in the CNS. Plasminogen activator inhibitor 1 (PAI-1; Gene ID 5054) is the main plasminogen activator inhibitor (PAI) in plasma but is also found in the nervous system. Protease-nexin I (Gene ID 5270), PAI-2 (Gene ID 5055), and PAI-3 (Gene ID 268591, *Mus musculus*) are other endogenous PAIs. Protease-nexin I and neuroserpin inhibit plasmin in addition to PAs.

[00144] While not wishing to be bound by any theory, there are a number of potential substrates for tPA and/or plasmin whose proteolysis may contribute to structural reorganization in the nervous system. Among these are various ECM proteins such as fibrin, fibronectin, tenascin, and laminin. In addition to plasmin, tPA may activate other proteases such as the plasmin-like protein hepatocyte growth factor (HGF), which may in turn cleave additional substrates.

[00145] tPA for use in the present invention may be from any species, although for administration to humans, it is generally desirable to use human tPA or a variant thereof. tPA and useful variants thereof, including variants with improved properties are described in U.S.

Patents 6,284,247; 6,261,837; 5,869,314; 5,770,426; 5,753,486 5,728,566; 5,728,565; 5,714,372; 5,616,486; 5,612,029; 5,587,159; 5,520,913; 5,520,911; 5,411,871; 5,385,732; 5,262,170; 5,185,259; 5,108,901; 4,766,075; 4,853,330, and other patents assigned to Genentech, Inc. (see also Higgins 1990). For example, and without limitation, the tPA variant may have an alteration in the protease domain, relative to naturally occurring tPA, and/or may have a deletion of one or more amino acids at the N-terminus, relative to naturally occurring tPA. The tPA variant may have one or more additional glycosylation sites relative to naturally occurring tPA and/or may have an alteration that disrupts glycosylation that would normally occur in naturally occurring tPA when expressed in eukaryotic cells, *e.g.*, mammalian cells. Properties that may be of use include, but are not limited to, increased half-life, increased activity, increased affinity or specificity for fibrin, *etc.*

[00146] Human tPA has been assigned Gene ID 5327 in the Entrez Gene database (National Center for Biotechnology Information; NCBI) and the GenBank entry for the full length amino acid, mRNA, and gene sequences are AAA98809, K03021, and NM_000930, respectively. However, it is noted that it may be preferable to use the mature form of tPA, lacking the signal sequence peptide (as described, *e.g.*, in U.S. Patent 4,853,330 and Yelverton 1983) or a variant thereof.

[00147] The chymotrypsin family serine proteases, of which tPA is a member, are normally secreted as single chain proteins and are activated by a proteolytic cleavage at a specific site in the polypeptide chain to produce a two chain form (Renatus, 1997, and references therein). Both the single chain and two chain forms are active towards plasminogen, although the activity of the two-chain form is greater. Plasmin activates single-chain tPA to the two-chain form, thus resulting in a positive feedback loop. The single chain, the two chain form of tPA, and/or combinations thereof, may be used in the present invention.

[00148] tPA and variants thereof are commercially available and have been approved for administration to humans for a variety of conditions. For example alteplase (Activase[®], Genentech, South San Francisco, CA) is recombinant human tPA. Reteplase (Retavase[®], Rapilysin[®]; Boehringer Mannheim, Roche Centoror) is a recombinant non-glycosylated form of human tPA in which the molecule has been genetically engineered to contain 355 of the 527 amino acids of the original protein. Tenecteplase (TNKase[®], Genentech) is a 527 amino acid glycoprotein derivative of human tPA that differs from

naturally occurring human tPA by having three amino acid substitutions. These substitutions decrease plasma clearance, increase fibrin binding (and thereby increase fibrin specificity), and increase resistance to plasminogen activator inhibitor-1 (PAI-I). Anistreplase (Eminase[®], SmithKline Beecham) is a commercially available human tPA.

[00149] Additional plasminogen activators include streptokinase (Streptase[®], Kabikinase[®]) and urokinase (Abbokinase[®]), both of which are commercially available.

[00150] Alternatively or additionally, proteolysis-enhancing agents of use in the invention include tPA activators such as *Desmodus rotundus* salivary plasminogen activator (DSPA) Desmoteplase (Paion, Germany) which is derived from vampire bat saliva (Liberatore, 2003, and references therein). Four distinct proteases have been characterized and are referred to as *D rotundus* salivary plasminogen activators (DSPAs). Full-length vampire bat plasminogen activator (DSPAl) is the variant most intensively studied and exhibits >72% amino acid sequence identity with human tPA. However, 2 important functional differences are apparent. First, DSPAs exist as single-chain molecules that are not cleaved into 2 chain forms. Second, the catalytic activity of the DSPAs appears to be dependent on a fibrin cofactor. Urokinase plasminogen activators such as rescupase (Saruplase[®], Grunenthal), and microplasmin (a cleavage product of plasminogen) are also of use in various embodiments of the invention. Alfimeprase (Nuvelo) is yet another proteolysis-enhancing agent of use in the present invention. Alfimeprase is a recombinantly produced, truncated form of fibrolase, a known directly fibrinolytic zinc metalloproteinase that was first isolated from the venom of the southern copperhead snake (*Agkistrodon contortrix contortrix*) (Toombs, 2001). These enzymes breaks down fibrin directly. Fibrolase itself is of use in the present invention. Also of use is staphylokinase (Schlott, 1997).

[00151] In some embodiments of the invention plasmin or mini-plasmin is administered instead of, or in addition to, tPA. A variety of other agents that have plasmin-like activity may be used. In general, such substances are able to cleave typical plasmin substrates, such as the synthetic substrate S-2251[™] (Chromogenix-Instrumentation Laboratory, Milan, Italy), which is a conveniently assayed chromogenic substrate for plasmin and activated plasminogen. Other agents that have tPA-like activity (*e.g.*, they are able to cleave plasminogen and activate it in a similar manner to tPA) can be used.

[00152] Lumbrokinase is an enzyme or group of enzymes derived from earthworms *Lnmbriticus rubellus* which has been known for some time (see, *e.g.*, reporting cloning of a gene encoding lumbrokinase, PI239, GenBank Accession No. AF433650; Ge, 2005). Other

fibrinolytic proteases isolated from earthworms are of use (Cho, 2004). Also of use is nattokinase.

[00153] In some embodiments, a variety of fibrinolytic enzymes that have been isolated from various worms, insects, and parasites can be used in accordance with the present invention. For example, destabilase, an enzyme present in the leech, hydrolyzes fibrin cross-links (Zavalova, 1996; Zavalova, 2002).

[00154] In some embodiments of the invention, plasminogen is administered instead of, or in addition to, tPA.

[00155] Instead of, or in addition to, administering a molecule that itself has plasminogen activator activity, plasmin activity, or plasmin-like activity, substances that increase endogenous expression of plasminogen activators or plasmin may be administered. Such substances may act by increasing transcription or translation of the mRNA that encodes the molecule, stabilizes the molecule, *etc.* They include, but are not limited to, brain derived neurotrophic factor (BDNF), transforming growth factor- β (TGF- β), phorbol esters, and retinoic acid.

[00156] A variety of other agents can be administered to enhance proteolysis in the central or peripheral nervous system in order to treat nervous system damage due to ischemic, hemorrhagic, neoplastic, traumatic, degenerative, and/or neurodevelopmental conditions. Certain of these agents are administered focally while others are administered using an alternate route of administration, *e.g.*, oral, intravenous, intraperitoneal, intramuscular, intradermal, transdermal, subcutaneous, pulmonary (*e.g.*, by inhalation into the lungs), nasal, *etc.* For example, sulodexide is a fibrinolytic agent that releases cellular tPA and thus is of use to increase tPA activity. In certain embodiments of the invention it is administered orally (Harenberg, 1998). Other agents of use in the invention to inhibit PAI include enalapril (Sakata, 1999) and amprotherin (Parkinnen, 1993).

[00157] Aspirin, which has been reported to stimulate plasmin activity, is of use in the invention (Milwidksy, 1991). In certain embodiments aspirin is not used, or if the subject is receiving aspirin, a different agent is used in addition to aspirin.

[00158] Another strategy that may be used to increase the level of plasminogen activator activity, plasmin activity, or plasmin-like activity is to administer a substance that inhibits one or more of the endogenous inhibitors of tPA or plasmin. Such endogenous inhibitors include PAI-I, PAI-2, PAI-3, and neuroserpin. A plasminogen activator inhibitor will be referred to as a PAI herein. In some embodiments, an inactive form of a PAI, which is

unable to inhibit plasminogen activators, is used (see, *e.g.*, PCT Publication WO 97/39028; and Lawrence *et al.*, 1997, *J. Biol. Chem.*, 272:7676; both of which describe various inactive forms of PAI). Without wishing to be bound by any theory, an inactive form of PAI may compete with an active form and thereby prevent inhibition of tPA. Small molecules and peptides that inhibit one or more PAIs are known in the art and are of use in the present invention. Examples include PAI-039 (Hennan, 2005), ZK4044 (Liang, 2005), tiplaxtinin (Elokda, 2004), piperazine-based derivatives (Ye, 2004), T-686 (Ohtani, 1996), fendosal (HP129), AR-H029953XX, XR1853, XR51 18 and the peptide TVASS (Gils, 2002).

[00159] RNAi may be used to reduce expression of a transcript that encodes an inhibitory protein, *e.g.*, an endogenous PAI. siRNAs or shRNAs targeted to a transcript that encodes an endogenous PAI can be delivered together with a proteolysis-enhancing agent or administered separately. Alternatively or additionally, a vector that provides a template for intracellular synthesis of one or more RNAs that hybridize to each other or self-hybridize to form an siRNA or shRNA that inhibits expression of an inhibitory protein, or cells that synthesize such RNAs, can be administered.

100160] Antisense oligonucleotides complementary to an mRNA transcript that encodes an inhibitory protein, or ribozymes that cleave the transcript, or vector that provide template for intracellular synthesis of an antisense RNA or ribozyme can also be used to downregulate expression of the inhibitor. In some embodiments of the invention, an aptamer that binds to a PAI and inhibits its inhibitory activity is used. In some embodiments, an RNA or DNA enzyme that cleaves a transcript that encodes a PAI and thus inhibits its inhibitory activity is used.

[00161] In certain embodiments, an antibody or antibody fragment that binds to a PAI is used to inhibit its activity, or any polypeptide having a similar binding specificity, *e.g.*, an affibody. The antibody or antibody fragment can be any immunoglobulin or immunoglobulin-like molecule that binds to an antigen and can be monoclonal or polyclonal.

[00162] Any substance that acts to counteract the effect of a molecule that is inhibitory for activity of a proteolysis-enhancing agent, whether by causing degradation, by sequestering, by reducing expression, or by blocking interaction of the molecule with another molecule or with a cell will be said to counteract the inhibitory molecule and is within the scope and spirit of the invention.

[00163] The present invention encompasses the recognition that enhancing proteolytic activity in the nervous system following nervous system damage may permit increased structural remodeling, thereby contributing to improved functional recovery and will increase

the efficacy of a plasticity-enhancing agent. However, the invention described herein does not require any particular mechanism of action. The invention encompasses use of variants or modified forms of the proteolysis-enhancing agents, wherein the variants or modified forms do not enhance proteolysis. For example, the invention encompasses variants of proteases (*e.g.*, variants having a mutation in an active site region) in which the sequence has been altered, such that the variant is no longer an active proteolytic agent. The invention also encompasses embodiments in which the proteolysis-enhancing agent has been chemically inactivated, such that it no longer enhances proteolysis. Thus in some embodiments of the invention an inactive form of a proteolysis-enhancing agent is focally administered. However, in general, a proteolysis-enhancing agent is active or capable of being activated when used according to the present invention.

[00164] It will be appreciated that various agents have been focally administered to the nervous system of a subject suffering from ischemic, hemorrhagic, neoplastic, traumatic, toxic, neurodegenerative, and/or neurodevelopmental damage to the nervous system, for purposes other than enhancing proteolysis. For example, analgesic agents are commonly administered. Should it be the case that any of such previously administered agents enhance proteolysis, such agent may be explicitly excluded from the present invention or, if used in the present invention, its use in the context of the present invention differs from such previous use. For example, its use in the context of the present invention involves administration to a different location, uses a different administration means, involves administration in combination with a plasticity-modifying agent, and/or employs a different dose and/or time course, *etc.*

[00165] The ability of PAs to trigger the lysis of clots has led to the use of PAs and other plasminogen-activating proteases such as streptokinase as thrombolytic agents for the treatment of myocardial infarction and stroke, as mentioned above. However, studies have suggested that tPA, which is released by neurons following excitotoxicity such as occurs in ischemia, could increase neuronal damage. Furthermore, release or leakage of tPA out of the vascular system and the attendant potential for damage to nervous system tissue, is a recognized hazard of thrombolytic therapy. Thus the invention described herein, which demonstrates that appropriate administration of plasmin and/or plasminogen-activating proteases such as tPA can actually contribute to structural and/or functional nervous system reorganization and recovery, is particularly noteworthy.

[00166] It will be appreciated that various embodiments of the present invention differ from previously reported uses of tPA (*e.g.*, for purposes of thrombolysis) in at least one of the

following ways, which are described in further detail below: (i) administration as described herein is focally directed to the nervous system and does not typically take place via the vascular system; (ii) administration as described herein is typically performed at least 3 hours following the onset of a stroke or other damaging event and typically at least 12 hours or more following the onset of the damaging event; (iii) administration as described herein may occur multiple times (*e.g.*, 2, 3, or more times) following the onset of a damaging event and/or may occur either intermittently or continuously over a prolonged time period following the onset of a damaging event (*e.g.*, over at least 1 week, 4 weeks, 1 month (30 days), 3 months, 6 months, 1 year, 2 years, 3 years, or even longer); (iv) administration as described herein typically does not use doses that would be sufficient to cause effective blood clot lysis at the site of administration when administered using methods that are intended to achieve blood clot lysis.

Variants and Fragments

[00167] It will be appreciated that most proteins can tolerate a certain amount of sequence variation without substantial loss of functional activity, provided that such sequence variation does not affect key residues that are required for such functional activity. The present invention therefore encompasses variants of the plasticity-enhancing or proteolysis-enhancing polypeptides (and other polypeptides disclosed herein), wherein such variants retain a significant amount of biological activity. For example, the fragment can have substantially similar activity (*e.g.*, at least about 10-20% of the relevant activity) to the original polypeptide, at least about 50% of the relevant activity, *etc.* The term "variants" includes fragments, *i.e.*, polypeptides whose sequence is a continuous subset of a polypeptide disclosed herein. Biologically active variants or fragments of certain polypeptides of interest herein are known in the art. The invention contemplates the use of any such variant or fragment. For example, GPE is a biologically active fragment of IGFI of use in the invention. Specifically encompassed are variants or fragments in which one or more kringle domains of a polypeptide disclosed herein, *e.g.*, plasmin or tPA, is removed. Certain fragments of use in this invention contain a protease domain and, optionally, at least one kringle domain

[00168] As is well known in the art, certain amino acids are generally similar with respect to particular properties and can frequently be substituted for one another in a polypeptide without significantly altering the functional and structural properties of the polypeptide. For example, the variants may contain one or more conservative amino acid substitutions, which may be defined in accordance with Stryer, *Biochemistry*, 3rd ed., 1988. Amino acids in the

following groups possess similar features with respect to side chain properties such as charge, hydrophobicity, aromaticity, *etc.*, and can be substituted for one another in accordance with certain embodiments of the invention: (1) Aliphatic side chains: G, A, V, L, I; (2) Aromatic side chains: F, Y, W; (3) Sulfur-containing side chains: C, M; (4) Aliphatic hydroxyl side chains: S₃T; (5) Basic side chains: K, R, H; (6) Acidic amino acids: D, E, N, Q; (7) Cyclic aliphatic side chain: P (P may be considered to fall within group (I)). One of ordinary skill in the art will recognize that other definitions of conservative substitutions can also be used. Amino acid abbreviations used herein are in accordance with common usage in the art.

[00169] The present invention encompasses administration of variants that are at least 80% identical, at least 85% identical, at least 90% identical, at least 95% identical, or at least 98% identical to one or more of the polypeptides disclosed herein over a number of amino acids equal to at least 50% of the number of amino acids the polypeptide. Percent identity may be calculated by standard methods. For example, the percent identity between first and second polypeptides over a window of evaluation may be computed by aligning the polypeptides, determining the number of polypeptides within the window of evaluation that are opposite an identical polypeptides allowing the introduction of gaps to maximize identity, dividing by the total number of amino acid positions in the window, and multiplying by 100. Various computer programs such as BLAST2, BLASTP, Gapped BLAST, *etc.*, generate alignments and provide % identity between sequences of interest. Algorithms employed in those programs (utilizing default values) can be used.

[00170J The present invention encompasses variants in which up to 20%, up to 15%, up to 10%, up to 5%, or up to 2% of the amino acid residues are either substituted (*e.g.*, conservatively substituted), deleted, or added, relative to a polypeptide disclosed herein. Specifically encompassed are allelic variants that exist within a population. The invention encompasses variants that are specifically recognized by immunological reagents (*e.g.*, monoclonal or polyclonal antibodies) that recognize a polypeptide disclosed herein, *i.e.*, the immunological reagent binds to the variant with a substantially similar affinity (*e.g.*, having a K_a at least 50% as great) as that with which it binds to the polypeptide.

[00171] The invention encompasses variants that have a substantially similar overall structure to the polypeptides disclosed herein. For example, certain variants possess sufficient structural similarity to a protein disclosed herein so that when its 3-dimensional structure (either actual or predicted, structure) is superimposed on the structure of the protein the volume of overlap is at least 70%, at least 80%, or at least 90% of the total volume of the structure. Furthermore a partial or complete 3-dimensional structure of a variant may be

determined by crystallizing the protein using methods known in the art. Alternatively or additionally, an NMR solution structure can be generated (see, *e.g.*, Heinemann, 2001; Wishart D. 2005; and references therein). A modeling program such as MODELLER (Sali and Blundell, 1993), or any other modelling program, can be used to generate a predicted structure. The PROSPECT-PSPP suite of programs can be used (Guo, 2004).

[00172] In certain embodiments of the invention, the variant has substantially similar plasticity-modifying or proteolysis-enhancing activity as the polypeptide of which it is a variant. In certain embodiments of the invention, the variant does not have a substitution at an active site residue. Active site residues of serine proteases such as the proteases disclosed herein are well known in the art.

Methods of Preparing the Agents of the Invention

[00173] The agents disclosed herein are all known in the art, and it is believed that appropriate methods for their manufacture are well within the skill of those in the art and therefore need not be described here in detail. For example, and without limitation, many of the small molecules described herein can be chemically synthesized using known methods, as can siRNAs and antisense oligonucleotides, and peptides. Certain agents can be purified from natural sources.

[00174] Plasticity-modifying agent such as IGFl, IFN γ , and proteolysis-enhancing agents, *e.g.*, tPA, or other polypeptides such as plasmin, growth factors, *etc.*, for use in the present invention, may be purified from natural sources, manufactured using recombinant DNA technology (*e.g.*, recombinant tPA), synthesized using purely chemical synthesis (*i.e.*, synthesis not requiring the use of cells to produce the polypeptide), *etc.*

[00175] Methods for producing a polypeptide of interest using recombinant DNA technology are well known in the art. Briefly, such methods generally involve inserting a coding sequence for the polypeptide into an expression vector, operatively associated with expression signals such as a promoter, such that mRNA encoding the protein is transcribed when the expression vector is introduced into a suitable host cell. The host cell translates the mRNA to produce the polypeptide. The polypeptide can include a secretion signal sequence so that the polypeptide is secreted into the medium. The polypeptide may be harvested from the cells or from the medium. Transgenic animals and plants are commonly used to produce

polypeptides. Plants into which viral vectors have been introduced are also used to produce polypeptides.

[00176] Small molecules such as non-peptide neurotransmitters and analogs thereof, small peptides, neurally active metals, and other compounds disclosed herein are typically either purified from natural sources or chemically synthesized, as appropriate, according to standard methods.

[00177] Any of the agents disclosed herein can be provided as pharmaceutically acceptable salts, prodrugs, *etc.* Furthermore, any of the polypeptides disclosed herein can be modified using a variety of methods known in the art. For example, they can be modified by addition of polyethylene glycol (PEG) or variants thereof. Such modifications may increase the active half-life of the polypeptide (see, *e.g.*, Nektar Advanced Pegylation 2005-2006 Product Catalog, Nektar Therapeutics, San Carlos, CA, which describes a number of such modifying agents and provides details of appropriate conjugation procedures). For administration by injection or infusion, compositions of the invention will typically be mixed with pharmaceutically acceptable carriers or diluent such as sodium chloride (*e.g.*, 0.9%) or dextrose (*e.g.*, 5% dextrose) aqueous solutions. Agents can be provided for administration either in solution or in lyophilized or otherwise dried form. They can be reconstituted in water, saline, *etc.*, followed by dilution in an appropriate pharmaceutically acceptable carrier or diluent.

Polymer-Based Drug Delivery Devices

[00178] The invention provides a drug delivery device for implantation into the nervous system of a subject to promote recovery or reorganization, *e.g.*, following ischemic, hemorrhagic, neoplastic, traumatic, and/or neurodevelopmental damage to the nervous system. The drug delivery device comprises a release material, a plasticity-modifying agent, and, optionally, one or more additional active agents such as a proteolysis-enhancing agent. The term "release material" is used to refer to any matrix or material that releases incorporated molecules by diffusion or disintegration of the matrix. In certain embodiments of the invention the release material is a biocompatible polymer. The proteolysis-enhancing agent is released from the release material in an amount effective to promote reorganization and/or recovery of the nervous system. A drug delivery device in which an active agent is physically associated with a polymeric material such as those disclosed herein is referred to as a "polymer-based drug delivery device" in order to distinguish such devices from

mechanical drug delivery devices such as infusion pumps, which are used in various embodiments of this invention, though it should be recognized that materials other than polymers could also be used.

1001791 In certain embodiments of the invention, the plasticity-modifying agent and, optionally, the proteolysis-enhancing agent, is/are incorporated into or otherwise physically associated with a biocompatible polymeric matrix, which may be biodegradable or nonbiodegradable. Any form of physical association is acceptable provided that the association remains stable under conditions of storage and implantation and for sufficient time to release the active agent over a desired time period. For example, the active agent may be encapsulated within a polymeric matrix, entrapped or entangled within a polymeric matrix, adsorbed to the surface of a polymeric matrix, covalently attached to a polymeric matrix, *etc.* The matrix is delivered to or implanted into the body at the location of the target tissue or in the vicinity thereof. The agent is released from the polymeric matrix over a period of time, *e.g.* by diffusion out of the matrix or release into the extracellular environment as the matrix degrades or erodes. In some embodiments, the active agent is incorporated into liposomes.

[00180] The polymeric matrix may have a number of different shapes. For example, microparticles of various sizes (which may also be referred to as beads, microbeads, microspheres, nanoparticles, nanobeads, nanospheres, *etc.*) can be used. Polymeric microparticles and their use for drug delivery are well known in the art. Such particles are typically approximately spherical in shape but may have irregular shapes. Generally, a microparticle will have a diameter of less than 500 microns, more typically less than 100 microns, and a nanoparticle will have a diameter of 1 micron or less. If the shape of the particle is irregular, then the volume will typically correspond to that of microspheres or nanospheres. Methods for making microspheres are described in the literature, for example, in U.S. Patent 4,272,398; Mathiowitz and Langer, 1987; Mathiowitz *et al.*, 1987; Mathiowitz *et al.*, 1988; Mathiowitz *et al.*, 1990; Mathiowitz *et al.*, 1992; and Benita *et al.*, 1984. Solid nanoparticles or microparticles can be made using any method known in the art including, but not limited to, spray drying, nanoprecipitation, phase separation, single and double emulsion solvent evaporation, solvent extraction, and simple and complex coacervation. Preferred methods include spray drying and the double emulsion process. Solid agent-containing polymeric compositions can also be made using granulation, extrusion, and/or spheronization.

[00181) The conditions used in preparing the particles may be altered to yield particles of a desired size or property {*e.g.*, hydrophobicity, hydrophilicity, external morphology,

"stickiness," shape, *etc.*). The method of preparing the particle and the conditions (*e.g.*, solvent, temperature, concentration, air flow rate, *etc.*) used may also depend on the agent being encapsulated and/or the composition of the polymer matrix. If the particles prepared by any of the above methods have a size range outside of the desired range, the particles can be sized, for example, using a sieve.

[00182] Solid nanoparticles or microparticles can be suspended or dispersed in a pharmaceutically acceptable fluid such as physiological saline and focally administered by injection or infusion (*e.g.*, using a pump) to the nervous system.

[00183] Solid polymer-agent compositions (*e.g.*, discs, wafers, tubes, sheets, rods, *etc.*) can be prepared using any of a variety of methods that are well known in the art. For example, in the case of polymers that have a melting point below the temperature at which the agent is to be delivered and/or at which the polymer degrades or becomes undesirably reactive, a polymer can be melted, mixed with the agent to be delivered, and then solidified by cooling. A solid article can be prepared by solvent casting, in which the polymer is dissolved in a solvent, and the agent is dissolved or dispersed in the polymer solution. Following evaporation of the solvent, the substance is left in the polymeric matrix. This approach generally requires that the polymer is soluble in organic solvent(s) and that the agent is soluble or dispersible in the solvent. In still other methods, a powder of the polymer is mixed with the agent and then compressed to form an implant. Microparticles or nanoparticles comprising a polymeric matrix and a proteolysis-enhancing agent and optionally one or more other active agents can be compressed, optionally with the use of binders, to form an implant.

[00184] A polymeric matrix can be formed into various shapes such as wafers, tubes, discs, rods, sheets, *etc.*, which may have a range of different sizes and volumes. For example, prior to polymerization, a polymer solution may be poured into a mold having the appropriate shape and dimension. Following polymerization the material assumes the shape of the mold and is usable as an implant. The agent(s) may be present in the solution prior to polymerization, or the implant may be impregnated with the agent following its fabrication.

[00185] Suitable biocompatible polymers, a number of which are biodegradable include, for example, poly(lactides), poly(glycolides), poly(lactide-co-glycolides), poly(lactic acids), poly(glycolic acids), poly(lactic acid-co-glycolic acids), polycaprolactone, polycarbonates, polyesteramides, polyanhydrides, poly(amides), poly(amino acids), polyethylene glycol and derivatives thereof, polyorthoesters, polyacetals, polycyanoacrylates, polyetheresters, poly(dioxanones), poly(alkylene alkylates), copolymers of polyethylene glycol and

polyorthoesters, biodegradable polyurethanes. Other polymers include poly(ethers) such as poly(ethylene oxide), poly(ethylene glycol), and poly(tetramethylene oxide); vinyl polymers—poly(acrylates) and poly(methacrylates) such as methyl, ethyl, other alkyl, hydroxyethyl methacrylate, acrylic and methacrylic acids, and others such as poly(vinyl alcohol), poly(vinyl pyrrolidone), and poly(vinyl acetate); poly(urethanes); cellulose and its derivatives such as alkyl, hydroxyalkyl, ethers, esters, nitrocellulose, and various cellulose acetates; poly(siloxanes), *etc.* Other polymeric materials include those based on naturally occurring materials such as polysaccharides (*e.g.*, alginate), chitosan, agarose, hyaluronic acid, gelatin, collagen, and/or other proteins, and mixtures and/or modified forms thereof. Chemical derivatives of any of the polymers disclosed herein (*e.g.*, substitutions, additions of chemical groups, for example, alkyl, alkylene, hydroxylations, oxidations, and other modifications routinely made by those skilled in the art) are encompassed. Furthermore, blends, graft polymers, and copolymers, including block copolymers of any of these polymers can be used. It will be appreciated that a vast number of different polymer variations are available. It will be understood that certain of these polymers require use of appropriate initiators or cross-linking agents in order to polymerize.

[00186] One of skill in the art will understand that in choosing an appropriate polymer and method of manufacture, it is important to select materials and methods that are compatible with stability of the agent. For example, it may be desirable to avoid processing temperatures that are likely to result in substantial degradation or denaturation of the agent, which may result in loss of bioactivity. It will also be desirable to test the composition so as to ensure that the agent is released in significant amounts over the desired period of time.

[00187] In general, the following criteria are important for selection of a material to be used for delivery of the active agent(s): (1) minimal or no cytotoxicity, (2) minimal or no elicitation of immune responses and inflammation, (3) compatibility with aqueous solutions and physiological conditions, and (4) compatibility of the material and its processing methods with the stability of the agent to be incorporated. It may be desirable to utilize a material with a controlled rate of biodegradation. Features such as cross-linking and monomer concentration may be selected to provide a desired rate of degradation and release of the agent. It will be appreciated that a polymeric drug delivery device of the invention may include one or more pharmaceutically acceptable materials such as buffers, spheronizing agents, fillers, surfactants, disintegrants, binders, or coatings. Exemplary materials are described in U.S. Patent 5,846,565.

[00188] Methods for purifying or synthesizing the various polymers for use in drug delivery systems of the invention are known in the art. Methods for incorporating therapeutically active agents into polymeric matrices are likewise known in the art. For example, the active agent can be combined in solution with the polymer prior to polymerization or can be provided in solid form and encapsulated as the polymer polymerizes. A number of different agents have been delivered to the CNS using such polymer matrices. For example, chemotherapeutic agents have been delivered to tumors in the nervous system by encapsulating the agent in a polymeric matrix, which is made into a shaped form, and surgically implanting the matrix into the brain (see, *e.g.*, U.S. Patents 5,626,862; 5,651,986; and 5,846,565). Additional drug delivery devices in which an active agent is provided in a polymeric matrix are described (see, *e.g.*, U.S. Patents 4,346,709 and 5,330,768; Wu, 1994; Dang, 1996; Fleming, 2002; and Westphal, 2002).

[00189] Similar methods to those used in the afore-mentioned references are of use to focally deliver the agents of the invention. In certain embodiments of the invention, the drug delivery device provides controlled or sustained release, *i.e.*, the proteolysis-enhancing agent and any other agents contained in the device are released over a prolonged period of time, *e.g.*, hours to days, weeks, or months.

[00190] Preparation of polymer-agent drug delivery devices can be performed using standard methods known in the art. Briefly, drug delivery devices are typically prepared in one of several ways. For example, the polymer can be melted, mixed with the substance to be delivered, and then solidified by cooling. Such melt fabrication processes generally utilize polymers having a melting point that is below the temperature at which the substance to be delivered and the polymer itself degrade or become reactive. Alternatively or additionally, the device can be prepared by solvent casting, where the polymer is dissolved in a solvent, and the substance to be delivered dissolved or dispersed in the polymer solution. The solvent is then evaporated, leaving the substance in the polymeric matrix. Solvent casting typically utilizes a polymer that is soluble in organic solvents, and the drug to be encapsulated should be soluble or dispersible in the solvent. Similar devices can be made by phase separation or emulsification or even spray drying techniques. In still other methods, a powder of the polymer is mixed with the agent and then compressed to form an implant.

[00191] Methods of producing implants also include granulation, extrusion, and spheronization. A dry powder blend is produced including the desired excipients and microspheres. The dry powder is granulated with water or other non-solvents for microspheres such as oils and passed through an extruder forming "strings" or "fibers" of wet

massed material as it passes through the extruder screen. The extrudate strings are placed in a spheronizer which forms spherical particles by breakage of the strings and repeated contact between the particles, the spheronizer walls and the rotating spheroniter base plate. The implants are dried and screened to remove aggregates and fines.

[00192] These methods can be used to make microimplants (microparticles, microspheres, and microcapsules encapsulating drug to be released), slabs or sheets, films, tubes, and other structures. A preferred form for infusion or injection is microimplants, as described elsewhere herein.

[00193] Proteins and peptides have been successfully incorporated into polymeric matrices. For example, insulin has been incorporated into biodegradable polymeric microcapsules and retains essentially the same bioactivity as the free form (Takenaga 2004). Natural and synthetic collagenous matrices have been used as carriers of a variety of different growth factors (Kanematsu, 2004).

[00194] Of particular interest in the present invention are polymers that form hydrogels, *i.e.*, gels that contain a substantial proportion of water. Hydrogels may, for example contain 30%, 40%, 50%, 60%, 70%, 80%, 90%, or an even greater amount of water on a w/w basis. Polymeric materials can be formed into hydrogels either prior to or following administration to a subject. An exemplary material comprises hPLA-b-PEG-PLA macromers. The agent is mixed with the polymer solution prior to initiating polymerization. Other suitable hydrogel-forming polymers are known in the art. For example, a variety of polysaccharides, polypeptides, and derivatives thereof can be used. Exemplary polysaccharides include alginate, collagen, cellulose, hyaluronic acid, dextran, chitosan, derivatives of any of the foregoing, *etc.* Other materials that form hydrogels include synthetic polymers such as polyethylene oxide-polypropylene glycol block copolymers such as Pluronics™ or Tetronics™, poly(vinyl alcohol), silicones, polypeptides such as gelatin, polyethylene glycol and related molecules, polyethylene oxide and related molecules or derivatives, *etc.* The hydrogel precursor materials may contain or be modified to contain functional groups that become crosslinked to one another. Optionally, photopolymerization is employed. In some embodiments, a drug delivery device comprising biodegradable macromers such as those described in U.S. Patent 6,153,211 is used.

[00195] In some embodiments of the invention, a plasticity-modifying agent, a proteolysis-enhancing agent, or both, is covalently attached to the polymer, optionally via a moiety that is cleavable *in vivo*, such as an ester linkage or disulfide bond.

[00196] The polymer-based drug delivery devices of the invention may be implanted at any desired location within the CNS. For example, and without limitation, the polymer-based drug delivery device can be implanted either in the brain (*e.g.*, close to a site of damage such as an ischemic region following stroke, or in the opposite brain hemisphere), or in the base of the brain, in or near a CSF-filled space such as ventricle, *etc.* In the case of a device implanted into a CSF-filled space, the device releases the agent into the CSF, allowing it to diffuse to a region of the brain surround the space. Depending on the size of the device, it can also be implanted at or adjacent to a nerve, nerve tract, ganglion, *etc.*, of the PNS. For example, microimplants can be implanted within or internal to the epineurium or perineurium of a nerve.

Implantable Microchip-Based Delivery

[00197] In certain embodiments of the invention, one or more agent(s) is delivered to the nervous system using an external or implantable silicon or polymeric microchip, which contains from dozens to up to hundreds or thousands of microreservoirs, each of which can be filled with any combination of drugs, reagents, or other chemicals. Micro-reservoirs can be opened at predetermined times and/or on demand using preprogrammed microprocessors, remote control, or biosensors. If desired, complex chemical release patterns can be achieved using these approaches. In some embodiments, micro-reservoirs have "caps" that degrade over time. Release can be controlled by varying the thickness and/or composition of the cap, thereby allowing release to occur at predictable and substantially predetermined times. The cap material can be, *e.g.*, a degradable polymer. In some embodiments, the cap material is non-degradable and is permeable to the molecules to be delivered. The physical properties of the material used, its degree of crosslinking, and its thickness will determine the time necessary for the molecules to diffuse through the cap material. If diffusion out of the release system is limiting, the cap material delays release. If diffusion through the cap material is limiting, the cap material determines the release rate of the molecules in addition to delaying release time.

[00198] In some embodiments, the agent(s) to be delivered are inserted into the reservoirs in their pure form, as a liquid solution or gel, or they may be encapsulated within or by a release material. The release material may be, for example, a biodegradable or non-biodegradable polymer. Representative polymers include those mentioned above (see, *e.g.*, Santini *et al.*, 2000; U.S. Patents 5,797,898 and 6,808,522; and U.S. Patent Publications

2002/0072784, 2004/016614O₅ and 2005/0149000; for discussion of microchip-based delivery systems). Microchips can be implanted at any desired location in the CNS (as described above). Depending on the size of the device, it can also be implanted at or adjacent to a nerve, nerve tract, ganglion, *etc.*, of the PNS. For example, microchips can be implanted within or internal to the epineurium or perineurium of a nerve.

Methods for Focal Delivery

[00199] In certain embodiments of the invention, compositions comprising a plasticity-modifying agent and optionally a proteolysis enhancing agent are administered to a subject by focal delivery. Focal delivery may be accomplished in a number of different ways. Implantation of a polymer-based drug delivery device or microchip such as those described above at a site within the central nervous system or within or adjacent to a nerve, nerve tract, or ganglion within the peripheral nervous system is a suitable method to achieve focal delivery.

[00200] Internal (implantable) or external pumps can be employed for administering a substantially fluid composition of the invention. Such pumps typically include a drug reservoir from which continuous or intermittent release occurs into the target tissue or in the vicinity thereof via a catheter. In certain embodiments of the invention, treatment is carried out using an implantable pump and a catheter having a proximal end coupled to the pump and having a discharge portion for infusing therapeutic dosages of one or more agents described herein into a predetermined infusion site in brain tissue or into the spinal canal (intrathecal delivery).

[00201] Infusion (which term is used to refer to administration of a substantially fluid material to a location in the body by means other than injection) may be carried out in a continuous or nearly continuous manner, or may be intermittent. The pump may be programmed to release predetermined amounts of the agent at predetermined time intervals. U.S. Patent 4,692,147 (assigned to Medtronic, Inc., Minneapolis, MN) describes a suitable pump. In certain embodiments one or more of the infusion systems known as the Synchronmed[®] Infusion System (manufactured by Medtronic, Inc., Minneapolis, MN; see web site having URL www.medtronic.com) is used. However, it will be appreciated that the pump may take the form of any device used for moving fluid from a reservoir. Mechanical, pressure-based, osmotic, or electrokinetic means may be used.

[00202] In order to deliver an agent to the brain parenchyma, a catheter attached to the pump may be implanted so that the discharge portion lies in the brain parenchyma (see, *e.g.*, U.S. Patent 6,263,237 for description of a variety of suitable systems and methods for implanting them into the body of a subject and directing the administration of an active agent to a desired location in the brain). Continuous ICM is a relatively new technique of regional delivery of therapeutic agents directly into brain parenchyma, which establishes a bulk flow current that has the potential to homogeneously distribute even large molecules (see, *e.g.*, Laske, 1997 for an example of administration of an agent to a region within the brain).

[00203] In certain embodiments of the invention, the agent is delivered to one or more of the CSF-containing cavities or chambers of the central nervous system, *e.g.*, the ventricles or cisterna magna, which is located at the bottom of the skull. As is well known in the art, there are two lateral ventricles and midline third and fourth ventricles within the brain. To deliver an agent to a ventricle or the cisterna magna using an infusion pump, the catheter may be implanted so that the discharge portion lies in the ventricle or the cisterna. The agent diffuses out of the ventricle or cisterna magna. Delivery to these locations therefore allows delivery of the agent to a relatively wide area of the brain rather than localizing it more closely to a specific site. Intraventricular or intracisternal administration is considered to be administration to the nervous system. In certain embodiments of the invention delivery to a CSF-containing space, *e.g.*, a ventricle, is accomplished by surgically implanting a catheter through the skull so that the tip has access to the space. The other end of the catheter is then connected to a reservoir (*e.g.*, an Ommaya reservoir), which is placed beneath the scalp (*i.e.*, subcutaneously). This method is in use for delivery of chemotherapeutic agents (see, *e.g.*, Ommaya and Punjab, 1963; Galicich and Guido, 1974; Machado, 1985; Obbens, 1985; and Al-Anazi, 2000).

[00204] If the subject suffers from damage to the spinal cord, the catheter is implanted so that the discharge portion lies in an intrathecal space of the spinal cord while the other end is connected to the pump reservoir. Methods for administering agents to the spinal fluid (*i.e.*, intrathecally) are well known in the art. Such methods are commonly used in the treatment of chronic pain, and are routinely used to deliver analgesic agents over a period of months. Similar methods are of use in the present invention (see, *e.g.*, Lamer, 1994; Paice, 1996; Winkemuller, 1996; Tutak, 1996; and Roberts, 2001 for descriptions of the use of implantable pumps for delivery of a variety of different therapeutic agents for treatment of a number of different conditions).

[00205] For delivery to the PNS, suitable methods include injection or infiltration into a nerve or nerve trunk, *e.g.*, adjacent to a site of nerve damage, and implantation of a polymer-based delivery device or microchip either adjacent to a site of nerve damage. Methods for administering anesthetic agents to diverse nerves, nerve bundles, *etc.*, within the PNS are well known in the art, and any of these methods are applicable in the context of the present invention.

[00206] In certain embodiments of the invention, a solution comprising a polymer, a plasticity-modifying agent, and optionally one or more additional active agents is administered by injection or infusion using any of the means described above. The polymer assembles to form a gel upon administration, *e.g.*, following contact with physiological fluids. Such assembly may, for example, be triggered by exposure to monovalent or divalent cations. For example, U.S. Publication 2002/0160471 describes self-assembling peptides that form hydrogels. U.S. Patent 6,129,761 describes a variety of different self-assembling polymers and polymers that require a polymerizing agent or cross-linking agent to facilitate assembly. Certain of these polymers assemble to form hydrogel structures upon contact with physiological fluids following administration to a subject. In another embodiment a collagen-based system is used (see, *e.g.*, PCT Publication WO 00/47130, which describes injectable collagen-based systems for delivery of cells or therapeutic agents).

Delivery Location, Timing, Duration of Treatment, and Dose

[00207] The plasticity-modifying agent(s) can be administered using any route of administration, *e.g.*, oral, intravenous, intraperitoneal, intramuscular, intradermal, transdermal, subcutaneous, pulmonary (*e.g.*, by inhalation into the lungs), nasal, *etc.* The route and dose will be selected so as to achieve effective concentrations in the nervous system without undue side effects.

[00208] The location at which a composition of the invention is to be administered or implanted may be selected with relation to the particular condition being treated. For example, if the subject has suffered an injury or damage to the brain, *e.g.*, as a result of stroke, trauma, *etc.*, the composition may be delivered to the brain parenchyma or to one or more of the ventricles of the brain or to the cisterna magna. If the subject has suffered an injury or damage to the spinal cord, a composition of the invention may be delivered to the spinal cord, *e.g.*, by implanting or administering a composition within the spinal canal. If the plasticity-modifying agent or an inventive composition crosses the blood-brain barrier, it can

be delivered systemically, *e.g.*, by oral, intravenous, intraperitoneal, intramuscular, intradermal, transdermal, subcutaneous, pulmonary (*e.g.*, by inhalation into the lungs), nasal, *etc.* administration.

[00209] The area to which the agent is to be administered may be, for example, an area that has been damaged (*e.g.*, an ischemic lesion) or an area adjacent to an area that has been damaged. The agent(s) may be administered to any region, nucleus, or functional area within the brain including, but not limited to, any of the major subdivisions of the brain (cortex, hippocampus, cerebellum, thalamus, midbrain, brain stem), which include motor cortex, sensory cortex including visual cortex, auditory cortex, and somatosensory cortex, language areas of cortex, frontal cortex, internal capsule, basal ganglia, thalamus, and/or other area noted above, *etc.* As noted above, numerous specific areas within the brain have been defined based on anatomical and histological considerations. In addition, areas in the brain that are responsible for performing various tasks have been defined on functional grounds and are well known in the art (see, *e.g.*, Kandel, *supra*; and Victor and Ropper, *supra*).

[00210] In certain embodiments of the invention, the area that has been damaged is identified. The area that has been damaged can be identified using a variety of different imaging techniques known in the art. For example, and without limitation, suitable methods include imaging techniques such as magnetic resonance imaging (MRI), optionally imaging features associated with blood flow such as perfusion, diffusion, or both, computed tomography (CT), positron emission tomography (PET), ultrasound, *etc.* Imaging techniques that image structure and/or function are available. Functional studies can be performed, *e.g.*, using labeled substrates such as glucose to identify regions of the brain that are metabolically inactive and/or that do not respond to stimulation, suggesting that they are functionally inactive (see, *e.g.*, Grossman and Yousem, *supra*).

[00211] Clinical diagnosis can be used instead of, or in addition to, imaging techniques. For example, the area to which damage has occurred can be identified by performing a neurological examination. Deficits noted on the neurological examination can be correlated with damage to particular areas of the central and/or peripheral nervous system (Kandel, *supra*; and Victor and Ropper, *supra*). In certain conditions, such as neuropsychiatric disorders of developmental or adult origin, a genetic test may be used in addition to a clinical diagnosis.

[00212] Any of the foregoing methods can be utilized acutely (*e.g.*, within hours to a few days of a damaging event such as stroke or injury) or at later times (*e.g.*, several days to weeks, months, or years following the event). The characteristic evolution of the appearance

of nervous system lesions is well known in the art, so the practitioner can readily identify the location of damaged tissue at any desired time point relative to the time at which the event causing the damage occurred.

[00213] In certain embodiments of the invention, the agent is delivered at or adjacent to a site where tissue necrosis and/or scar tissue formation has occurred in the CNS. Areas of necrosis can be identified using various imaging techniques such as those mentioned above. Symptoms may also be used to guide selection of an appropriate location at which to implant the matrix. For example, if a subject experiences impairment of a particular function such as movement, sensation, speech, *etc.*, then the portion of the brain that is normally responsible for control or achievement of that function, or the corresponding area on the contralateral side of the subject's body, may be selected as a suitable site for implantation of a drug delivery device of the invention. Standard surgical techniques can be used.

[00214] In some embodiments of the invention the agent is administered to an area adjacent to a region that has been damaged by an infarct, *e.g.*, to the peri-infarct area. Without wishing to be bound by any theory, peri-infarct regions are likely to be sites of clinically relevant cortical remodeling following stroke. For example, the agent may be administered to a site that is located up to approximately 0.5 cm from the edge of an infarcted area, up to 1.0 cm from the edge of an infarcted area, or up to 2 cm from the edge of an infarcted area. In some embodiments the agent is administered to a site immediately adjacent to an infarcted area, *e.g.*, up to 0.5 cm from the edge of the infarcted area. In some embodiments of the invention the agent is administered to the ischemic penumbra adjacent to an area of severe ischemia following stroke (see, *e.g.*, Furlan *et al*, 1996). The ischemic penumbra is a region of brain tissue that experiences mild to moderate ischemia but remains viable for a period of time following a stroke (*e.g.*, up to several hours or longer) and may be salvageable if perfusion is re-established and/or through the use of neuroprotective agents. The ischemic penumbra may be operationally defined using, *e.g.*, diffusion and perfusion MRI (Schlaug *et al*, 1999; and Kidwell *et al* 2003). One of ordinary skill in the art will be able to select an appropriate definition and measurement technique.

[00215] In some embodiments of the invention, the agent is administered to a location on the opposite side of the brain from the side where damage has occurred. The site of administration may be substantially symmetrically located with respect to the region that has been damaged. Without wishing to be bound by any theory, it is possible that following damage to a particular region of the brain, the contralaterally located region reorganizes so as to assume responsibility for functions that were previously performed by the damaged region.

For example, a portion of the brain that normally (*e.g.* prior to injury) generates movement commands for the left hand only may reorganize so as to generate commands to both hands following damage to a portion of the brain that previously commanded the right hand.

[00216] As mentioned above, delivery by injection or infusion pump is suitable for compositions in which an agent of the invention is dissolved in a liquid and for compositions comprising microparticles of suitable dimensions. The polymer-based drug delivery devices of the invention will typically be implanted into the subject in an appropriate location in the nervous system so that they will release the active agent at a desired location. For example, they may be implanted into the brain parenchyma. They may also be implanted into a ventricle or into the spinal canal in various embodiments of the invention. The location for implantation is selected so as to achieve an effective concentration of the active agent at a desired location in the nervous system, *i.e.*, typically reasonably close to the location at which it is desired to achieve the effective concentration. Care is taken to avoid disrupting undamaged portions of the nervous system to the extent possible. Imaging may be used to guide administration or implantation of the compositions and drug delivery devices of the invention, *e.g.*, they may be administered or implanted under stereotactic guidance.

[00217] The agent(s) can be administered in a continuous or intermittent fashion. Intermittent or pulsatile delivery may be performed at times selected in accordance with the active half-life of the agent in order to maintain a therapeutically useful dose and/or may be performed in accordance with physiological patterns such as circadian rhythms, or during periods when the subject either is or is not engaged in particular activities. If the agent is administered using an implanted device such as a pump or microchip, an external controller may be used to trigger release at a desired time, or the device can be programmed to release the agent at particular times or intervals.

[00218] In some embodiments, compositions of the invention may be administered to a subject following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder for a finite period of time. For example, compositions of the invention may be administered to a subject for up to 1 week, up to 4 weeks, up to 2 months, up to 6 months, up to 12 months, up to 18 months, up to 2 years, up to 5 years, up to 10 years, up to 20 years, or even longer. In some embodiments, compositions of the invention may be administered to a subject following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder for the rest of the subject's life.

[00219J] In some embodiments, compositions of the invention are not administered immediately after an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder. To give but a few examples, administration may be initiated after certain other therapeutic strategies (*e.g.* behavioral therapies) have been performed; after the subject has reached a desired level of health; after the subject has reached a desired age; *etc.*. In some embodiments, compositions of the invention are administered at least 1 week, at least 4 weeks, at least 2 months, at least 6 months, at least 12 months, at least 18 months, at least 2 years, at least 5 years, at least 10 years, at least 20 years, or even longer, after an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.

[00220] In some embodiments, compositions of the invention may be administered for a period of time and may then be discontinued. For example, administration may be discontinued when the subject responds to the administration (*e.g.* if symptoms improve, if damage is reversed, if plasticity has been modified, if function has been restored to the nervous system, if neural development has been stimulated, *etc.*). To give another example, administration may be discontinued when the subject has reached at least one desired endpoint or treatment milestone. In some embodiments, compositions of the invention may be administered to a subject for up to 1 week, up to 4 weeks, up to 2 months, up to 6 months, up to 12 months, up to 18 months, up to 2 years, up to 5 years, up to 10 years, up to 20 years, or even longer, before being discontinued. In some embodiments, administration of compositions of the invention that has been discontinued may be resumed at any point in time after discontinuing the administration. To give but one hypothetical example, (i) a plasticity-modifying agent may be administered to a subject following diagnosis with a neurodevelopmental disorder; (ii) the subject's symptoms may disappear; (iii) administration of the plasticity-modifying agent may be discontinued; (iv) the symptoms may return; and (v) administration of the plasticity-modifying agent may be resumed. In some embodiments, administration may be discontinued for up to 4 weeks, up to 2 months, up to 6 months, up to 12 months, up to 18 months, up to 2 years, up to 5 years, up to 10 years, up to 20 years, or even longer, before administration is resumed.

[00221] In certain embodiments of the invention, the compositions of the invention are administered at times varying from immediately after to considerably after, *e.g.*, least 3 hours after, the onset or occurrence of a damaging event such as a stroke or injury. For example, the initial administration may be a few minutes to hours, *e.g.*, at least 6, 12, 24, 36, or 48 hours after the onset or occurrence of a damaging event. In certain embodiments of the

invention the initial administration is between 24 hours and 1 week after the onset or occurrence of a damaging event, between 1 week and 1 month after the onset or occurrence of a damaging event, or between 1 and 3 months, 3 and 6 months, 6 and 12 months after the onset or occurrence of a damaging event, *etc.* The initial administration may occur at times greater than 1 year following the onset or occurrence of a specific damaging event, *e.g.*, between 1-5 years, *etc.* In some embodiments of the invention the initial administration occurs after the subject has reached a plateau of functional recovery. For example, the subject may have failed to display improvement on one or more standardized tests, or may have failed to experience subjective improvement during the preceding 1-3 months, 3-6 months, or longer. For treatment of neuropsychiatric disorders, neurodegenerative diseases, nutrient deprivation, neoplastic diseases, and other conditions for which there is no specific identifiable damaging event, administration can occur at any time following diagnosis of the disease.

[00222] The total time period during which treatment occurs, and the number of treatments within such time period, can vary. The total duration of treatment (*i.e.*, the time interval between the first and the last treatment) can range from days to weeks, months, or years. For example, the total duration may be 1 day; 1 week; 4 weeks; 1, 3, 6, 9, or 12 months, between 1 and 2 years; 2 and 5 years; 2 and 10 years; 2 and 20 years; *etc.* If the agent is administered in discrete doses in addition to or instead of being administered continuously, subjects may receive anywhere from a single dose to dozens or even hundreds or thousands of doses. The time interval between doses can be varied. It may, for example, be desirable to administer the agent for a defined time period each day, *e.g.*, 10 minutes/day, 1 hr/day, *etc.*

[00223] The dose of the plasticity-modifying agent will be selected taking into account the particular agent, the condition being treated, the route of administration, and other relevant factors. The dose (or doses) may be, *e.g.*, an amount effective to promote growth or sprouting of axons, promote structural reorganization of synaptic connections, increase formation of new synaptic connections, increase dendritic spine motility, inhibit structural or functional degeneration (*e.g.*, degeneration that would otherwise be expected to take place) or any combination of the foregoing. The dose may range from about 0.001 to 100 mg/kg body weight, *e.g.* from about 0.01 to 25 mg/kg body weight. The dose may, for example, range between 1 µg/kg and 100 mg/kg, *e.g.*, between 10 µg/kg and 10 mg/kg. Exemplary doses range from 0.1 to 20 mg/kg body weight, *e.g.*, about 1 to 10 mg/kg.

[00224] The dose of the proteolysis-enhancing agent will be selected to enhance the effect of the plasticity-modifying agent. Typically the dose for each administration of the proteolysis-enhancing agent will be significantly lower than the dose that would be required to cause lysis of a significant blood clot when administered to the vascular system.

Exemplary, non-limiting doses ranges for a proteolysis-enhancing agent, *e.g.*, tPA, include one or more of the following: (i) a dose sufficient to achieve a concentration of between 10 and 100,000 IU/ml or between 100 and 10,000 IU/ml or between 100 and 1,000 IU/ml in the extracellular fluid or in a CSF-containing cavity such as a ventricle or the spinal canal; a dose between 1 µg/day and 10 mg/day; a dose between 1 µg/day and 1 mg/day; a dose 5 µg/day and 500 µg/day; a dose between 10 µg/day and 100 µg/day, *etc.*

[00225] Various dosing regimens may be used. For example, it may be desirable to give a relatively large "loading dose" initially and then administer smaller doses either continuously or intermittently so as to maintain an effective concentration in the region of the nervous system being treated. It will also be appreciated that, in general, the more focally directed the delivery, the lesser the total dose that may be required. Thus direct administration via a catheter to a specific brain region may require a lower total dose than delivery to a ventricle. Furthermore, the larger the area of damage and/or the greater the amount of reorganization and/or recovery required, the larger might be the dose.

[00226] If desired, the concentration of the plasticity-modifying agent (or any other agent whose administration is contemplated in the present invention) can be monitored, *e.g.*, in the CSF of the subject. The dose can be adjusted accordingly to obtain a desired concentration.

[00227] In certain embodiments of the invention the agent(s) is/are administered, *e.g.*, released, in a defined temporal relation to rehabilitative therapy, *e.g.*, during, prior to, or following engagement of the subject in one or more rehabilitative activities. The agent(s) may, for example, be administered up to 5 minutes to 12 hours prior to the activity, up to 5 minutes to 12 hours after the activity, during the activity, or immediately prior to or immediately following the start of a therapy session, *e.g.*, up to 5 minutes prior to the beginning of a therapy session or up to 5 minutes following the start of a therapy session. By "therapy session" is meant any period of time in which the subject is engaged in performing activities that have been suggested or prescribed by a health care provider for purposes of assisting the functional recovery of the subject following damage to the CNS or PNS or for improving the functioning of a subject suffering from a neurodevelopmental disorder. The health care provider need not be present during the therapy session, *e.g.*, the subject may

perform the activities independently or with the assistance of personnel other than a health care provider.

Administration of Additional Active Agent(s), Cells, and Gene Therapy

[00228] In various embodiments of the invention, one or more additional active agents is administered to the subject in conjunction with administration of the plasticity-modifying agent and, optionally, the proteolysis-enhancing agent. The additional active agents may be administered concurrently or sequentially. The additional active agent may be delivered focally but may alternatively be administered systemically using any suitable route of administration (*e.g.*, oral, intravenous, intramuscular, subcutaneous, transdermal, pulmonary, nasal, *etc.*). The additional active agent may be delivered in the same solution or dosage form as the proteolysis-enhancing agent. The additional active agent may be incorporated into a polymeric matrix together with the proteolysis-enhancing agent and delivered via a polymer-based drug delivery device or delivered using a pump or any other delivery system disclosed herein.

[00229] In some embodiments of the invention an agent other than a proteolytic agent is administered, wherein the agent cleaves one or more components of the extracellular matrix at a bond other than a peptide bond. For example, the agent may cleave a polysaccharide portion of an ECM component such as a proteoglycan or glycosaminoglycan. Examples of suitable agents include chondroitinases (which cleave chondroitin sulfate and hyaluronic acid), hyaluronidases, heparinases (which cleave heparin), heparanase (which cleaves heparan sulfate), *etc.*

[00230] In certain embodiments of the invention, the additional active agent is a neural growth enhancing agent. A neural growth enhancing agent is any molecule or cell that promotes, enhances, increases, *etc.*, one or more aspects of the growth or regeneration of neural tissue. For example, the molecule or cell may promote axon growth. A neural growth enhancing agent, as used herein, can be a neurally active growth factor, neurotransmitter or neurotransmitter analog, neurally active metal, modulator of a synaptic signaling molecule, or cell. It will be understood that typically "cell," as used in this context, refers to multiple cells. The term "neurally active" means that the agent exerts a biological effect on neural tissue. For example, the agent may exert an effect that enhances structural and/or functional nervous system reorganization or recovery.

[00231] The invention therefore provides compositions comprising a plasticity-modifying agent, a neural growth enhancing agent, and, optionally a proteolysis-enhancing agent. The invention provides drug delivery devices comprising the composition. The drug delivery device can be, for example, any of the drug delivery devices described herein.

[00232] The invention further provides methods for promoting recovery or reorganization in the nervous system of a subject comprising the step of: administering a plasticity-modifying agent, a neural growth enhancing agent, and, optionally a proteolysis-enhancing agent to a subject in need of enhancement of recovery or reorganization of the nervous system. The subject is typically in need of recovery or reorganization of the nervous system as a result of ischemic, hemorrhagic, neoplastic, degenerative, traumatic, and/or neurodevelopmental damage to the nervous system. The invention provides methods of treating a subject in need of enhancement of recovery or reorganization in the nervous system comprising the step of: administering a plasticity-modifying agent, a neural growth enhancing agent, and, optionally a proteolysis-enhancing agent to the subject. The subject is typically in need of enhancement of recovery or reorganization of the nervous system as a result of ischemic, hemorrhagic, neoplastic, degenerative, traumatic, and/or neurodevelopmental damage to the nervous system. Any of the agents in the aforementioned methods can be administered focally to the central or peripheral nervous system either individually or in combination using any of the methods described herein. Either or both of the agents can be administered by any alternate route of administration. Certain features of this aspect of the invention, *e.g.*, dose ranges, adjunct therapy, *etc.*, can be similar to those described for other aspects of the invention.

[00233] Neurally active growth factors include, but are not limited to, nerve growth factor (NGF), brain-derived neurotrophic factor (BDNF), neurotrophin-1 (NT-3), neurotrophin-4/5 (NT-4/5), ciliary neurotrophic factor (CNTF), leukemia inhibitory factor (LIF), glial cell derived growth factor (GDNF), neurturin, artemin, persephin, acidic or basic fibroblast growth factor (aFGF, bFGF), osteogenic protein-1 (OP-1), vascular endothelial growth factor (VEGF), erythropoietin (EPO), and granulocyte colony stimulating factor (G-CSF).

[00234] "Synaptic signaling molecules" refer to endogenous molecules that are activated downstream of calcium entry into cells through synaptic activation or following release of calcium from intracellular stores and that transduce electrical activity into structural changes in neurons. These include a variety of kinases such as calcium/calmodulin-dependent protein kinase II and IV, protein kinase C (PKC), protein kinase A (PKA), extracellular signal regulated kinase (ERK), cyclic AMP (cAMP) dependent kinase, along with molecules such

as cyclic AMP response element binding protein (CREB), activity regulated cytoskeletal associated protein (arc), troponin c-, and Rac and Rho pathways and their associated kinases. G protein coupled receptors transduce information from the extracellular space to intracellular signals (among other activities) and are also considered to be synaptic signaling molecules. Modulators (*i.e.*, agents that activate or inhibit) of a number of these signaling molecules are known in the art and are of use in the present invention. Molecules that can bind to G protein coupled receptors importantly include those that can activate or inhibit (a) PKA and cAMP; (b) cyclic GMP, and (c) PKC. Pathways downstream of GPCR activation importantly regulate CREB, BDNF, actin, reorganization of the dendritic and axonal cytoskeleton, *etc.* By way of example, activators of cAMP include Sp-cAMPS (Sigma), which may to be delivered into the brain at a typical dose of 0.02-0.5 $\mu\text{g}/\text{kg}/\text{day}$, and Rolipram[®] (Sigma), which can be given intramuscularly at a dose of 1-100 $\mu\text{g}/\text{kg}/\text{day}$ (Ramos *et al.*, Neuron 2003). Rolipram is a phosphodiesterase inhibitor, which prevents breakdown of cAMP. Inhibition of cAMP can also, under certain conditions, have a stimulatory effect on synapses and is of use in certain-embodiments of the invention. Inhibitors of cAMP include Rp-cAMPS (Sigma), which can be delivered into the brain at a typical dose of 0.02-0.5 $\mu\text{g}/\text{kg}/\text{day}$ (Ramos *et al.*, 2003).

[00235] An activator of cGMP is 8-Br-cGMP; an inhibitor is Rp-cGMPs. Both are typically delivered focally. Effective doses on neurite growth and dynamics in brain slices are about 10-100 μM (Nishiyama *et al.*, 2003). Another inhibitor is ODQ; an effective dose for influencing axon growth is about 10 μM (Leamey *et al.*, 2001). Activators of PKC include diacylglycerol and phosphatidylserine. An inhibitor is a drug called GF109203X (GFX). Effective doses in slices are approximately 10-100 μM (Nishiyama *et al.*, 2003).

[00236] It is noted that doses presented here should in no way be considered limiting. In general, the invention encompasses doses at least 10 to 100 fold lower than those described here, and doses up to the maximum tolerated dose of the agent, as consistent with sound medical judgment. Furthermore, dosage routes for specific agents are mentioned here by way of example and are not intended to be limiting. In general, any suitable route of administration can be used. In particular, any of these agents may be administered using the methods for focal administration described herein.

[00237] Neurally active small molecules include a number of the modulators and neurotransmitters described above as well as diverse compounds known in the art to influence nervous system function (see, *e.g.*, Goodman and Gilman, *supra*; and Kandel, *supra*).

[00238] Neurotransmitters are naturally occurring compounds that generally fall into the categories of small molecules (e.g., catecholamines) and peptides. A neurotransmitter for use in the present invention can be excitatory or inhibitory. Exemplary neurotransmitters include, but are not limited to, acetylcholine, dopamine, serotonin, glycine, glutamate, epinephrine, norepinephrine, and gamma aminobutyric acid (GABA). A neurotransmitter analog as used herein is a compound other than a naturally occurring neurotransmitter that exerts an excitatory or inhibitory effect on a neurotransmitter receptor. The analog will typically bear a structural resemblance to a naturally occurring neurotransmitter and will compete with it for binding to its receptor.

[00239] Neurally active metals include magnesium and zinc. The magnesium and/or zinc can be provided in any suitable form. Typically the metal will be provided in the form of a salt that contains a metal cation and an anion that serves as a counterion. The counterion can be an organic or inorganic substance. For example, the counterion can be phosphate, carbonate, gluconate, citrate, sulfate, acetate, malonate, oxalate, or any other pharmaceutically acceptable ion such as those mentioned below. In some embodiments the metal cation is provided as a chelate, in which the metal cation is complexed with an organic molecule such as a heterocyclic ring.

[00240] Gene therapy methods may be used to increase expression of genes that encode products, e.g., plasticity-enhancing agents, proteolysis-enhancing agents, and/or agents that promote nervous system functional and/or structural reorganization and/or recovery. Gene therapy encompasses delivery of nucleic acids comprising templates for synthesis of a molecule of interest to a cell of interest. The nucleic acid (or a nucleic acid derived from the nucleic acid as, for example, by reverse transcription) may be incorporated into the genome of the cell or remain permanently in the cell as an episome. Gene therapy also encompasses delivery of nucleic acids that do not integrate or remain permanently in the cell to which they are delivered. Such approaches permit temporary or transient synthesis of a molecule of interest. Methods and materials for performing gene therapy are well known in the art and will not be extensively reviewed here (see, e.g., Berry, 2001; Han, 2000; and Thomas and Klibanov, 2003).

[00241] Vectors and delivery vehicles (e.g., polymeric matrices) that provide nucleic acids comprising templates for synthesis of polypeptides may be incorporated into a composition of the invention or administered separately. Typically, the nucleic acid includes a coding sequence for a gene to be expressed in a cell of interest and also includes appropriate expression signals, e.g., promoters, terminators, etc., to ensure proper expression.

[00242] In general, either viral or non-viral vectors may be used. For example, herpes virus, adenovirus, adeno-associated virus, retroviruses, or lentiviruses may be used. It may be desirable to avoid the use of intact viruses in delivering templates to cells. Thus it may be desirable to deliver DNA vectors or linear DNA molecules. These vectors may, but need not, include viral sequences such as long terminal repeats, *etc.* Any of a wide variety of agents useful for transfection may be used to enhance uptake of nucleic acids by cells. Vectors are taken up by cells in the nervous system, and the polypeptide of interest is expressed and, usually secreted.

[00243] In some embodiments of the invention, cells are administered to a subject. In some embodiments of the invention, cells serve as a source for a plasticity-enhancing agent. For example, the cells may secrete IGF1 into the extracellular space. In certain embodiments of the invention, cells are genetically modified prior to their administration to increase their synthesis of a plasticity-enhancing agent. For example, cells may be stably transformed with a vector that comprises a template for transcription of an RNA that encodes the agent. Cells may be sequestered in a non-biodegradable reservoir or compartment that retains them at a particular location and prevents their integration with cells at the site of administration or their wider dispersal.

[00244] In some embodiments of the invention, cells are administered to a subject who may receive a composition comprising a plasticity-modifying agent and optionally a proteolysis-enhancing agent. In some embodiments cells contribute to structural and/or functional recovery of the nervous system. Cells can be neurons, glia, or non-neural cells. Suitable cells include, but are not limited to, Schwann cells and olfactory ensheathing glia (Bunge, 2003). Cells can be of a single cell type, or combinations of different cell types can be administered. Cells may replace or supplement neural tissue that has been irreversibly damaged and/or provide supportive functions. In some embodiments, neural stem cells are administered. Multipotent neural stem cells, capable of giving rise to both neurons and glia, line the cerebral ventricles of all adult animals, including humans. Distinct populations of nominally glial progenitor cells, which also have the capacity to generate several cell types, are dispersed throughout the subcortical white matter and cortex (Goldman 2005). In some embodiments, adult or embryonic stem cells are administered. Such cells can be derived from a location outside the nervous system, *e.g.*, the bone marrow, liver, umbilical cord, *etc.* Cells of any type can be used. Cells can be autologous or non-autologous. In certain embodiments, cells are from the same species as the subject.

[00245] In certain embodiments of the invention the cells are administered in a polymeric scaffold, made of certain of the materials such as those described above that provide a hospitable environment to maintain cell viability. The polymer material may be biodegradable. The matrix or scaffold may be formed prior to implantation into the nervous system of a subject or may form following administration, *e.g.*, upon contact with physiological fluids. Encapsulation of cells in a variety of different polymeric matrices or scaffolds is well known in the art (see, *e.g.*, U.S. Patents 6,129,761 and 6,858,229; U.S. Patent Publication 2002/0160471; and Teng, 2002).

[00246] In addition to or instead of the various active agents described above, which are selected primarily based on their useful properties for enhancing structural or functional recovery or reorganization in the nervous system, various other substances can be administered. Such substances include, but are not limited to, antibiotics or antifungal agents to treat or reduce the risk of infection, chemotherapeutic agents to treat tumors, *etc.*

[00247] It is to be understood that the invention explicitly includes compositions comprising each specific combination of any of the proteolysis-enhancing agents described herein, optionally in combination with any of the proteolysis-enhancing agents described herein and/or any of the the additional active agents described herein. Because it would not be practical to list each and every combination, only a few examples are provided here. For example, the invention includes a composition comprising IFN γ and tPA. The composition may further include a neurally active growth factor (*e.g.*, BDNF). The invention also includes a composition comprising tPA and a modulator of a synaptic signaling molecule (*e.g.*, tPA and Rolipram); a composition comprising tPA and a neurotransmitter (*e.g.*, tPA and serotonin); a composition comprising tPA and a neurally active metal (*e.g.*, tPA and magnesium); a composition comprising tPA and a neurally active small molecule; a composition comprising tPA and a cell (*e.g.*, tPA and a neural stem cell), *etc.* Similarly, the invention includes compositions comprising (i) plasmin and (ii) a neurally active growth factor, a synaptic signaling molecule, a neurotransmitter, a neurally active metal, and/or a cell. Compositions comprising 3, 4, 5, or more of the proteolysis-enhancing agents and/or additional agents are encompassed. The invention provides a polymer-based drug delivery device comprising any of these compositions and an implantable microchip comprising any of these compositions or designed to administer the agents individually.

[00248] The invention encompasses administration of one or more of any of the proteolysis-enhancing agents described herein in conjunction with one or more of any of the

additional agents described herein to a subject in need of reorganization and/or recovery of the nervous system. The subject has typically experienced ischemic, hemorrhagic, neoplastic, traumatic, degenerative, and/or neurodevelopmental damage to the central or peripheral nervous system. Agents can be administered together or separately. In some embodiments both the proteolysis-enhancing agent(s) and the additional agent(s) are administered focally. In some embodiments, the proteolysis-enhancing agent(s) are administered focally to the nervous system and the additional agent(s) are administered by an alternate route (*e.g.*, intravenously or orally).

Therapeutic Applications and Adjunct Therapy

[00249] The compositions and methods of the invention are of use in treating subjects who have experienced events such as stroke or injury (*e.g.*, due to accident or surgery). The compositions and methods of the invention find use for treating subjects suffering from a variety of other diseases and conditions including, but not limited to, neurodegenerative diseases such as multiple sclerosis, amyotrophic lateral sclerosis, subacute sclerosing panencephalitis, Parkinson's disease, Huntington's disease, muscular dystrophy, and conditions caused by nutrient deprivation or toxins (*e.g.*, neurotoxins, drugs of abuse). Certain of the compositions and methods are of use for treating neurodevelopmental diseases such as autism or dyslexia, *i.e.*, diseases in which at least a portion of the nervous system fails to develop normal structure and/or function. Certain of the compositions and methods are of use for treating neuropsychiatric diseases such as schizophrenia and bipolar disorders, *i.e.*, diseases in which at least a portion of the nervous system fails to achieve its typical level of cognitive function. Certain of the compositions and methods are of use for providing cognitive enhancement and/or for treating cognitive decline, *e.g.*, "benign senescent forgetfulness," "age-associated memory impairment," "age-associated cognitive decline," *etc.* (Petersen 2001; Bums 2002). These terms are intended to reflect the extremes associated with normal aging rather than a precursor to pathologic forms of memory impairment. Thus these conditions are distinct from Alzheimer's disease. Certain of the compositions and methods are of use for treating Alzheimer's disease. In certain embodiments of the invention, the subject does not have, *e.g.*, has not been diagnosed with, Alzheimer's disease. In certain embodiments of the invention the subject is not suspected of having Alzheimer's disease. In certain embodiments of the invention the subject has not been identified as having an increased risk for developing Alzheimer's disease. Methods for treating or preventing

Alzheimer's disease, to the extent that any such methods are described and/or enabled in PCT Publication WO 01/58476 are explicitly excluded from certain embodiments of the instant invention.

[00250] Any of a wide variety of functional impairments may be treated using the compositions and methods of the invention. In some embodiments, compositions are used to promote restoration of respiratory function after spinal cord injury (SCI). For this purpose, compositions are typically administered to the spinal cord, *e.g.*, intrathecally. If desired, administration can be localized to the region of the spinal cord injury, *e.g.*, the cervical region of the spinal cord. Respiratory disorders are the leading cause of morbidity and mortality after SCI, affecting nearly half of all patients with a neurological deficit after SCI. Respiratory impairments resulting from cervical SCI, the most common clinical case, frequently render survivors chronically or permanently ventilator dependent, a sequelae which can dramatically compromise quality of life. There are no drug treatments for breathing disorders associated with SCI. Studies have established that the breathing system possesses a highly dynamic system of neuroplasticity which manifests both at the developmental stage as well as at the adulthood. Work in the laboratory of one of the inventors has demonstrated that even with nearly 50% phrenic respiratory motor region loss in the adult rat spinal cord, respiratory function can recover spontaneously in 5-6 weeks after a mid-cervical spinal cord injury. While the ultimate outcome from this neuroplasticity-mediated event is encouraging, the required lengthy period imposes serious life or death challenges to SCI patients. The present invention may significantly stimulate post-SCI respiratory neural circuit reorganization, and thus may quickly restore respiratory function after incomplete spinal cord transection, which is a frequent clinical occurrence.

[00251] Surgery for various conditions can sometimes result in damage to nerves. In some embodiments of the invention, the compositions and methods are used to regenerate, repair or otherwise restore function after nerves of the PNS supplying muscles, organs, or other parts of the body, or carrying information from a part of the body, have been necessarily or accidentally disconnected or damaged during surgery. In some embodiments, the present invention is used to regenerate, repair or prevent degeneration of nerves, *e.g.*, nerves supplied by the spinal cord to the muscles, organs, or other parts of the body, or that enter the spinal cord from sensory receptors from the body. Some embodiments include regeneration or repair of damaged or degenerated nerves in the CNS, for example the optic nerve or the auditory nerve, or prevention of degeneration of axon tracts or fiber bundles in the CNS due to diseases, disorders, and/or damage. These embodiments include, but are not limited to, the

regrowth, recovery, repair or prevention of degeneration of ascending or descending fiber tracts and connections in the spinal cord, and of fiber tracts and connections in other structural and functional subdivisions of the CNS. Some embodiments include rewiring or reorganizing brain pathways so as to elicit novel functions from existing brain regions. An example of this embodiment is enhancement of brain function, particularly when coupled with practice regimens that engage specific brain regions.

[00252] In certain embodiments of the invention, the subject to whom a composition of the invention is administered is engaged in a program of rehabilitative therapy or training. Such programs typically ensue after injury or stroke, but also include programs of remediation and training in a variety of disorders of developmental or adult onset. Such programs are commonly employed in disorders such as dyslexia, autism, Asperger's Syndrome, Pervasive Developmental Disorders - Not Otherwise Specified, Tourette's Syndrome, Personality Disorders, Schizophrenia and related disorders (see, *e.g.*, Diagnostic and Statistical Manual of Mental Disorders, 4th Ed., DSM-IV, American Psychiatric Association, 1994, *Diagnostic and Statistical Manual*, Am. Psychiatric Assoc., Washington, DC for discussion of these disorders). Numerous rehabilitation programs for victims of stroke, spinal cord injury, and/or other forms of nervous system damage are known to those skilled in the art, and the subject can be engaged in any such program (see, *e.g.*, Gillen and Burkhardt, *supra*, for a discussion of suitable programs for victims of stroke). Similar programs may be used for victims of other forms of damage to the brain (see, *e.g.*, Somers, *supra*, for a discussion of suitable programs for victims of spinal cord damage). Suitable programs for individuals suffering from damage to the PNS are also known in the art. A rehabilitation program is typically designed and recommended by a health care provider with knowledge in the area of rehabilitative therapy. Therapy sessions may involve the participation of a health care provider. However, the subject may also engage in sessions or tasks associated with the program without the assistance or supervision of the health care provider.

[00253] The subject can be engaged in the program in a defined temporal relation with respect to the administration of the agent. For example, the subject can be engaged in the program during a time period in which the agent is being administered and/or during which the agent is present *in* effective amounts in the nervous system. In some embodiments, a dose of the agent is administered within a defined time period prior to engagement of the subject in a particular rehabilitative session or task. For example, the agent may be administered and/or may be present in an effective amount at any time up to 24 hours, 48 hours, or up to 1 week prior to the time at which the subject will be engaged in the session or

task, or the agent may be administered and/or may be present in an effective amount at any time up to 24 hours, 48 hours, or up to 1 week following completion of the session or task. Typically the subject will be engaged in the program over a period of weeks, months, or years, *i.e.*, the subject will participate in multiple therapy sessions over a period of time. The subject's participation in such sessions can be coordinated with administration of the agent so as to achieve an optimal effect. The beneficial effects of rehabilitative therapy may at least in part be due to structural and/or functional reorganization that occurs as a result of such therapy. Without wishing to be bound by any theory, the inventors propose that the proteolysis-enhancing activities and/or synaptic plasticity activities of the agents disclosed herein may facilitate this process. Thus an at least additive and potentially synergistic effect may result.

[00254] The methods and compositions of the invention may be tested using any of a variety of animal models for injury to the nervous system. Models that may be used include, but are not limited to, rodent, rabbit, cat, dog, or primate models for thromboembolic stroke (Krueger and Busch, 2001; Gupta, 2004), models for spinal cord injury (Webb *et al.*, 2004), *etc.* (see Examples 6 and 7 and references in Schmidt and Leach, 2003). The methods and compositions may also be tested in humans.

[00255] A variety of different methods, including standardized tests and scoring systems, are available for assessing recovery of motor, sensory, behavioral, and/or cognitive function in animals and humans. Any suitable method can be used. To give but one example, the American Spinal Injury Association score, which has become the principal instrument for measuring the recovery of sensory function in humans, could be used (see, *e.g.*, Martinez-Arizala A., 2004; Thomas and Noga, 2004; Kessler JP and Keirstead HS, 2003; for examples of various scoring systems and methods).

[00256J] Desirable dose ranges for use in humans may be established by testing the agent(s) in tissue culture systems and in animal models taking into account the efficacy of the agent(s) and also any observed toxicity.

Pharmaceutical Compositions

[00257] Suitable preparations, *e.g.*, substantially pure preparations of the proteolysis-enhancing agents, optionally together with one or more additional active agents, may be combined with pharmaceutically acceptable carriers, diluents, solvents, *etc.*, to produce an appropriate pharmaceutical composition. In general, methods and ingredients for producing

pharmaceutical compositions known to one of skill in the art are used. The description herein is for exemplary purposes and is not intended to be limiting. It is to be understood that the pharmaceutical compositions of the invention, when administered to a subject, are typically administered for a time and in an amount sufficient to treat the disease or condition for whose treatment they are administered. Suitable modes of administration and formulations are described herein.

[00258] Further provided are pharmaceutically acceptable compositions comprising a pharmaceutically acceptable derivative (*e.g.*, a prodrug) of any of the agents of the invention, by which is meant any non-toxic salt, ester, salt of an ester or other derivative of an agent of this invention that, upon administration to a recipient, is capable of providing, either directly or indirectly, an agent of this invention or an active metabolite or residue thereof. As used herein, the term "active metabolite or residue thereof" means that a metabolite or residue thereof also possesses similar activity to the parent agent. For example, rather than administering an active polypeptide, a zymogen (*i.e.*, an inactive or less active enzyme precursor that requires a biochemical change, such as a hydrolysis reaction revealing the active site, for it to become an active enzyme) could be administered.

[00259] The term "pharmaceutically acceptable carrier, adjuvant, or vehicle" refers to a non-toxic carrier, adjuvant, or vehicle that does not destroy the pharmacological activity of the agent with which it is formulated. Furthermore, it is recognized that preparation methods for the pharmaceutical compositions are typically selected so as to not substantially reduce the activity of the agent with which they are formulated.

[0001] Pharmaceutically acceptable salts of certain of the agents of this invention include those derived from pharmaceutically acceptable inorganic and organic acids and bases. Examples of suitable acid salts include acetate, adipate, alginate, aspartate, benzoate, benzenesulfonate, bisulfate, butyrate, citrate, camphorate, camphorsulfonate, cyclopentanepropionate, digluconate, dodecylsulfate, ethanesulfonate, formate, fumarate, glucoheptanoate, glycerophosphate, glycolate, hemisulfate, heptanoate, hexanoate, hydrochloride, hydrobromide, hydroiodide, 2-hydroxyethanesulfonate, lactate, maleate, malonate, methanesulfonate, 2-naphthalenesulfonate, nicotinate, nitrate, oxalate, palmoate, pectinate, persulfate, 3-phenylpropionate, phosphate, picrate, pivalate, propionate, salicylate, succinate, sulfate, tartrate, thiocyanate, tosylate and undecanoate. Other acids, such as oxalic, while not in themselves pharmaceutically acceptable, may be employed in the preparation of salts useful as intermediates. Salts derived from appropriate bases include alkali metal (*e.g.*, sodium and potassium), alkaline earth metal (*e.g.*, magnesium), ammonium and $N^+(Cl-4$

alkyl)4 salts. This invention also envisions the quaternization of any basic nitrogen-containing groups of the compounds disclosed herein. Water or oil-soluble or dispersible products may be obtained by such quaternization.

[00260] A pharmaceutical composition is formulated to be compatible with its intended route of administration. Pharmaceutical compositions suitable for injection or infusion typically include sterile aqueous solutions (where water soluble) or dispersions and sterile powders for the extemporaneous preparation of sterile injectable solutions or dispersion. Suitable carriers include physiological saline, bacteriostatic water, water for injection, dextrose solutions, phosphate buffered saline (PBS), or Ringer's solution. Antibacterial and/or antifungal agents; chelating agents, such as ethylenediaminetetraacetic acid; buffer, such as acetates, citrates, or phosphates; and agents for the adjustment of tonicity, such as sodium chloride or dextrose, can be included. pH can be adjusted with acids or bases, such as hydrochloric acid or sodium hydroxide. It may be advantageous to formulate the compositions in dosage unit form for ease of administration and uniformity of dosage. Dosage unit form as used herein refers to physically discrete units suited as unitary dosages for the subject to be treated; each unit containing a predetermined quantity of active agent(s) calculated to produce the desired therapeutic effect in association with the required pharmaceutical carrier. The preparation can, for example, be enclosed in ampoules, disposable syringes or multiple dose vials made of glass or plastic.

[00261] Sterile injectable or infusable solutions can be prepared by incorporating the active compound in the required amount in an appropriate solvent, optionally with one or a combination of ingredients enumerated above, followed by filtered sterilization. Typically solutions are free of endotoxin. Generally, dispersions are prepared by incorporating the active compound into a sterile vehicle which contains a basic dispersion medium and optionally other ingredients. In the case of sterile powders for the preparation of sterile solutions, the usual methods of preparation are vacuum drying and freeze-drying (*e.g.*, lyophilization) which yields a powder of the active ingredient plus any additional desired ingredient from a previously sterile-filtered solution thereof.

Examples

Example 1: Identification and Analysis of Genes that are Differentially Regulated Under Visual Deprivation Paradigms

Materials and Methods

RNA Preparation and Microarray Analysis

[00262] Studies were performed in mice (129/SvEv) at the peak of the critical period²⁸, postnatal day (P) 27. All animal protocols were approved by MIT's Committee on the Care and Use of Animals and followed NIH guidelines. For monocular deprivation (MD), animals were anesthetized with avertin (0.016 ml/g) and the eyelids of one eye sutured (at P 11-12 for 15-16 days for microarray analyses). For dark-reared (DR) animals (aged P27-30), the procedure was the same described above, with the exception that the animals were anesthetized in darkness and not exposed to light until deeply anaesthetized; in these mice only the binocular response was evaluated and compared to that in control animals.

[00263] In a first set of experiments we extracted total RNA from V1 of normally reared P27 mice (control, n=3 samples), from V1 of P27 mice born and reared in darkness (DR, n=3 samples), and from V1 contralateral to the deprived eye of P27 mice in which monocular deprivation was started at P 1-12, before eye-opening (MD, n=6 samples; three samples were done with deprivation of the right eye and 3 with deprivation of the left eye; these 6 samples were considered as a group because no significant differences were observed between right and left eye deprivation). For each sample, animals came from different litters and the tissue was derived from V1 of at least two different animals. In both groups of animals, monocular and binocular portions were included for analysis.

[00264] Mice were anesthetized with Nembutal (100 mg/kg), decapitated and the skull opened. A micro blade was used to remove a small core of tissue from the visual cortex of the appropriate hemisphere. Total RNA was extracted and purified, according to the instructions in the "Eukaryotic Target Preparation" manual available on the Affymetrix website. Fragmented, biotinylated cRNA was hybridized to the Affymetrix mouse genome U74v2 GeneChip set, which contains oligonucleotides that correspond to a total of 36,902 probes targeting genes and expressed sequence tags (ESTs) (Affymetrix). Array processing (hybridization, washing, staining and scanning) was performed by the Biopolymer Laboratory at MIT following standard Affymetrix protocols. A global scaling algorithm was used to normalize the expression level data from all samples.

[00265] In additional experiments in which the effects of short-term (4 days from P23-27) MD were investigated, as well the effects of IGF1 infusion concurrent with MD, a total of four experimental groups were analyzed: a new group of control animals (3 samples), the ipsilateral and the contralateral cortex of mice monocularly deprived for four days (3 samples

for the ipsilateral and 3 samples for the contralateral cortex), the contralateral cortex of mice that were monocularly deprived for four days and were injected IP daily with IGF1 solution (3 samples). Tissue was removed and the RNA extracted as described above, and labeled RNA was hybridized to the Affymetrix mouse genome 430.2 chip, which contains oligonucleotides that correspond to a total of 42,000 probes targeting genes and ESTs.

Data Analysis

[00266] *Significance analysis of microarrays*

[00267] A method for the Significance Analysis of Microarrays to assess changes in gene expression was used³¹, and the method was implemented in MATLAB (The Mathworks, Natick, MA). The method allows the comparison of the expression level of each gene under two conditions (*e.g.*, MD vs. control; or DR vs. control). Under the null hypothesis that there are no changes in expression, the output is a probability of observing the given differences by chance (obtained by shuffling the data from the two conditions). Results of this analysis were compared against those obtained by setting a fixed threshold on the minimum intensity of each gene and a minimum ratio of expression between the two conditions. Correlations between replicates were calculated as correlation coefficients (c.c.) for all conditions: control (c.c.= 0.99 ± 0.002), MD 16 days (c.c.= 0.9 ± 0.05), MD 4 days contralateral (cc.= 0.99 ± 0.001), MD 4 days ipsilateral (0.99 ± 0.005), MD 4 days contralateral plus IGF1 (c.c.= 0.99 ± 0.004).

[00268] *GO annotations*

[00269] For the first set of experiments, Gene Ontology (GO) annotations were retrieved for each of the genes (<http://www.geneontology.org/>). Mapping of each Affymetrix probe to gene names was done using the annotations from Affymetrix (<http://www.affymetrix.com/>). GO provides information about the molecular function of a given gene (*e.g.* nucleic acid binding, ion transporter activity, *etc.*), the biological processes in which is involved (*e.g.* cell growth, cell communication), and the cellular location (*e.g.* nucleus, cytoplasm, *etc.*). For each of these organizing principles, GO provides a list of different categories to which each gene may be assigned. FatiGO³² was used to identify categories for biological functions that are over- or under-represented in the different protocols of visual input deprivation.

Semi-quantitative RT-PCR

[00270] RNA was extracted as described above and cDNA was obtained with the Superscript First-Strand Synthesis System for RT-PCR (Invitrogen). PCR was performed according to the Invitrogen instruction manual. For each sample, PCR was run for the selected molecules and for Glycerol Phosphate Dehydrogenase (GPDH) as a control. PCR products were stained with ethidium bromide and run on an agarose gel. The intensity of each band was evaluated with ImageJ software (<http://rsb.info.nih.gov/ij/>) and normalized by the level of GPDH expression.

Results

[00271] DNA microarrays were used to examine large scale changes in gene expression in the V1 region of the cortex following dark-rearing (DR) and monocular deprivation (MD), using quantitative analyses of single genes as well as computational analyses of gene network activation (Fig. IA). Mice used for microarray analyses of long-term visual deprivation were: (a) DR animals reared in complete darkness from birth till P27, the peak of the critical period for ocular dominance plasticity in mice²⁸, (b) MD animals which had one eyelid sutured from before eye-opening (at P1 1-12) through P27, and (c) P27 control animals, reared in standard conditions (Fig. IA). The time course of the deprivation protocols was chosen to ensure as comparable periods of deprivation as possible in the DR and MD conditions—that is, starting at birth and continuing till P27. V1 was identified by stereotaxic coordinates and its location confirmed with both optical imaging of intrinsic signals²⁹ and by retrograde labeling of cells in the lateral geniculate nucleus (LGN) from injections of Alexa-CTB made in cortex³⁰. RNA was extracted from V1 and hybridized to microarrays (Affymetrix). First, the expression level of gene transcripts was compared between control and deprived animals using a procedure for the Significance Analysis of Microarrays³¹ (Fig. IB, C). Two lists of genes were obtained for each deprivation protocol: those that were up-regulated in the deprived conditions versus control (1930 genes: 1730 genes up-regulated after DR and 200 genes up-regulated after MD), and those which were down-regulated in the deprived conditions versus control (1381 genes: 950 genes down-regulated after DR and 431 genes down-regulated after MD; Fig. ID). The complete list of significantly ($P < 0.01$) up- and down-regulated genes is reported in tables for each experiment at (<http://ramonycajal.mit.edu/kreiman/resources/vlplasticity/>) and in Tables 4-9 herein (presented in the Appendix).

[00272] The Gene Ontology (*GO*) database³²¹³³ was used to group differentially expressed genes according to the biological processes in which they are involved. Of the 3311 differentially expressed genes in visually deprived groups, 1227 have known functions and have been reported in GO categories (level 3) for general biological processes. This analysis showed that some biological processes are common to both deprivation conditions, whereas others are differentially, or even exclusively, represented in one condition or the other.

[00273] For instance, genes implicated in "metabolism" and "cell communication" were upregulated in both conditions, with a stronger representation in DR cortex. At the same time, genes implicated in "cell motility" and "cell growth and maintenance" were primarily upregulated after DR. On the other hand, genes comprising "cellular physiological processes" and "organismal physiological processes" were primarily upregulated after MD. This overview suggested that while some similar mechanisms underlie the two forms of deprivation, distinct cellular processes may also be implicated in the two conditions.

[00274] To analyze the distinction further, a more detailed examination of genes encoding glutamatergic and GABA receptors was performed, including subunits of NMDA, AMPA and metabotropic glutamate receptors and subunits of GABA-A and GABA-B receptors. Table 1 shows changes in the expression of different subunits of GABA and glutamate receptors in MD and DR. "+" indicates a significant (two tailed t test $P < 0.05$) increase in the mRNA level in the deprived condition relative to control; "=" indicates no significant change. No gene was downregulated after deprivation relative to control.

Receptor	MD	DR
GluR1	=	+
GluR2	+	+
GluR3	+	+
NMDA1	=	+
NMDA2A	=	+
NMDA2B	=	+
NMDA2C	=	=
NMDA2D	=	=
mGluR3	=	=
mGluR5	=	=
mGluR8	=	=
GABAA α 1	=	+
GABAA α 2	+	+
GABAA α 3	+	+
GABAA α 4	=	+
GABAA α 6	+	=
GABAA β 1	+	+
GABAA β 2	=	+
GABAA β 3	+	+
GABAA γ 1	=	=
GABAA γ 2	=	+
GABAA γ 3	=	=
GABAA δ	=	=
GABAA ϵ	=	=
GABAB1	=	=
GABAC ρ 1	=	=
GABAC ρ 2	=	=

[00275] This comparison of the main forms of excitatory and inhibitory transmission in the cortex showed that a substantial set of excitatory and inhibitory receptor genes was upregulated after DR. MD also upregulated both sets, but a smaller subset than DR (Fig. 2A). None of these receptor genes was downregulated after either form of deprivation. Thus, expression of both excitatory and inhibitory receptor genes is broadly upregulated in response to visual deprivation, but the response is stronger in the case of DR₃ where there is complete absence of light, than in the case of MD, where there is still visual stimulation through the closed eyelid though not in patterned form³⁴.

[00276] Several studies have reported that DR induces a delay in the maturation of inhibition¹¹³⁵³⁶. No change in GAD65 expression was observed after DR or MD₅ but an

increase in GAD67 expression was observed after DR (Fig. 2B). More generally, a reduction was observed in expression of only one gene associated with cortical inhibitory neurons: all the probes associated with parvalbumin were downregulated after DR, whereas probes associated with other markers of inhibitory neurons^{37/38}, including calbindin, somatostatin, calretinin, cholecystokinin and neuropeptide Y, were either upregulated or did not change after DR (Fig. 2B). There was no change in any of these markers after MD (see also below, and Fig. 9). Thus, the functional reduction of inhibition and of inhibitory neurons after DR³⁶ is possibly mediated specifically by a reduction in the number of neurons expressing parvalbumin.

[00277] Next, the microarray expression levels of a subset of genes (Fig. 3A) were compared to an independent measure of gene expression using semi-quantitative RT-PCR performed on independent samples from those used for microarrays. The genes selected were significantly up-regulated (two-tailed t test $P < 0.05$) in DR or MD cortex versus control, with at least a 1.5-fold greater expression after one or other form of deprivation. Furthermore, selected genes were in the top 5% in a list of probes rank-ordered by change in expression after DR or MD, based on calculation of the signal to noise ratio of each gene (from the mean microarray expression levels and standard deviations in deprived and control conditions). Analysis of representative genes that were upregulated after DR alone, after MD alone, or after both, is shown in Fig 3B,C. Genes upregulated after DR (but not MD) in the microarray data included molecules associated with synaptic structure and function, such as those involved in synapse formation (Neurexin1 and Synapsin 2), synaptic transmission mechanisms such as exocytosis (Synaptotagmin 1), neurotransmitter receptors (GluR1), and calcium-activated signaling (CaMKIIa and CREB). Changes observed with RT-PCR were consistent with the observations from the microarray data. That is, an increase in the expression of these molecules in the DR cortex was observed, and there was a greater increase in the DR condition compared to MD for each of them.

[00278] Fewer genes were up-regulated after MD (but not DR) compared to control, and they included molecules that are usually implicated in cellular pathology, including carcinogenesis (the DEAD-box RNA helicase DDX6³⁹) and degeneration (Signal Transducers and Activators of Transcription 1, STAT1 —see below), or are activated by seizure (CaMKII δ ⁴⁰). These genes also showed greater expression in the RT-PCR analysis. Finally, genes that were upregulated after both DR and MD included molecules associated with synaptic activity (GluR3 and GABA-Acc2), as well as molecules associated with neuronal growth and reorganization of connections (Insulin-like Growth Factor Binding

Protein 5, IGFBP5 - see below), and aspects of brain development (Nuclear Factor IB, NfiB^{4 1-43}). In all of these instances, relative expression levels measured with RT-PCR were consistent with the microarray expression levels. Overall, these data suggest increased activation of a wide range of synaptic and neuronal mechanisms in VI of DR animals, and to a lesser extent in MD animals, compared to control animals. Conversely, they suggest an increased activation of neuronal growth and degeneration mechanisms in MD animals, and to a lesser extent in DR animals, compared to control animals.

[00279] While the effects of MD are pronounced in the long term, they are also significant in the short term¹⁴⁻¹⁷. To examine similarities and differences with the long (16 day) period of MD, a microarray analysis of a short (4 day) period of MD, from P23-27, was performed. Short-term MD led to changes in the expression of many more genes than long-term MD. About 50% of the genes that were up- or down-regulated after long-term MD were also altered in expression after short-term MD; the upregulated genes included DDX6, IGFBP5 and NFiB. Genes upregulated by long-term MD but not short-term MD included STAT1 and CaMKII δ . While some genes associated with synaptic transmission (such as GluR1, GluR3 and GABA-A α 2) did not change after short-term MD, more transmission-related genes (such as Synapsin 2 and Synaptotagmin 1) were up- or down-regulated after short-term compared to long-term MD.

Example 2: Identification of Gene Sets and Pathways Enriched In Genes that are Differentially Regulated in Visual Deprivation Paradigms

Materials and Methods

[00280] Gene Set Enrichment Analysis (GSEA) considers even small variations in all the mRNA probes of a group of genes, thereby assessing the enrichment of the whole gene set, and is relevant for detecting modest but coordinated changes in the expression of groups of functionally related genes. Such an analysis has particular value when an increase in the activity of several genes in a set could be more important than the strong activation of a single gene in a molecular cascade. Furthermore, the genes in the set typically share some functional or structural properties. Different gene sets have different sizes (for example, the gene set "Channel-passive-transporter" has 238 probes, while the "IGF1 pathway" has 46 probes), and all the probes corresponding to a single gene are reported in each gene set. A

recent description of the method⁸⁴ was followed here; a more detailed description has now appeared⁸⁵.

[00281] Let μ_i denote the mean expression level across samples of probe i ($J=1, \dots, N$ where N is the total number of probes) in condition S (where $S = DR, MD$ or *control*) and let σ_i denote the standard deviation across samples. For a given probe i , the signal to noise ratio (SNR) of the deprivation condition is defined with respect to the control. For example, for dark rearing, the SNR was defined as $SNR_i = \frac{DR \mu_i - control \mu_i}{DR \sigma_i - control \sigma_i}$. Probes were ranked according to the SNR value yielding an ordered list $L = \{g_1, \dots, g_N\}$.

[00282] Given a set G containing N_G probes it can be assessed whether *the set of probes* is significantly over- or under- represented in one of the deprivation conditions with respect to the control condition (irrespective of whether the expression of the individual probes changed significantly or not). A representative example illustrating the algorithm is shown in Figure 4A. The following two cumulative distribution functions are defined: $P_{hit}(i)$ = proportion of

genes in the set G that show a rank less than i ($P_{hit}(z) = \frac{\#\{g_{(j \leq i)} \in G\}}{N_G}$) and $P_{miss}(i) =$

proportion of genes *outside* the set G that show a rank less than i ($P_{miss}(i) = \frac{\#\{g_{(j \leq i)} \notin G\}}{N - N_G}$).

The running enrichment score is defined as $RES(i) = P_{hit}(i) - P_{miss}(i)$ (Figure 4A, top) and is derived from the position or rank of the genes in the set (Figure 4A, bottom). The enrichment score ES is the maximum deviation from 0 of $RES(i)$. If the genes in the set are highly enriched in the deprivation condition and appear first in the ordered list L , then P_{hit} will grow faster with i than P_{miss} for initial values of i and this will lead to a high positive ES value. Conversely, if the genes in the set are under-expressed in the deprivation condition and do not appear at the beginning of the list L , then P_{miss} will grow faster with i than P_{hit} and this will lead to a high negative ES score. If the genes in the set are randomly distributed, then the ES will show a value close to 0. The statistical significance of a particular value of ES is assessed by comparing it with the null distribution obtained by randomly shuffling the condition labels (deprivation and control) for each probe (using 1,000 permutations).

[00283] The procedure just described was repeated for each gene set, obtaining an enrichment score and an enrichment probability value for each set. It is possible to define a set of genes based on several different criteria. Here, sets of genes defined by common functional or structural properties in 3 specific biological databases were studied: BioCarta

(<http://www.biocarta.com/>), GenMapp (<http://www.genmapp.org/>), and GO (<http://www.geneontology.org/>). When a large number of gene sets is considered as in the present case, care should be taken because of the multiple comparisons involved and therefore the increased likelihood that one comparison will yield a significant result by chance. The multiple comparisons question was addressed here by controlling the Family Wise Error Rate⁶. To compare enrichment scores across gene sets, the enrichment scores are normalized by centering and scaling the ES using the mean and variance of each data, gene set pair. Throughout the text and in Tables 4 and 5, the normalized enrichment scores (NES) is shown for the gene sets enriched in dark rearing or monocular deprivation relative to control, or vice versa.

Results

[00284] Apart from the expression of individual genes, sets of genes that are linked together in specific functional pathways may be differentially expressed in DR and long-term MD and thereby lead to different cellular and molecular responses following the two forms of deprivation. To examine this possibility, a computational tool was used—Gene Set Enrichment Analysis (GSEA) - that considers the activation of sets of genes (such as cellular pathways, co-expressed genes, or genes in the same genomic locus) rather than the expression of a single transcript^{44,45}. Thus, the extent to which a set of genes or a pathway is enriched in the deprivation paradigms was able to be measured with respect to control (or vice versa). 1374 pathways and gene sets taken from the following databases were considered: BioCarta, GenMapp, and GO. An example of the computation of the running and normalized enrichment score (NES) is shown in Fig. 4A for the ADP Ribosylation Factor (ARF) Pathway. The expression levels for the 19 probes in this pathway are shown in Fig. 4B. Qualitatively, Fig 4B shows that most of these probes were more highly expressed after MD than in control. Quantitatively, Fig. 4A shows that many of these probes were highly ranked in the rank-ordered set of MD probes, leading to a high running enrichment score for the ARF pathway. The gene sets with the highest scores in the deprived conditions versus control are listed in Table 2, which is a representation of the top Gene Sets enriched in DR (left column) and MD (right column) versus control. The Gene Sets are ranked according to their Normalized Enrichment Score. Gene Sets that are enriched in both conditions are shown with light shading. A star indicates that at least one probe of the correspondent Gene Set has been confirmed with RT-PCR. The gene sets with the highest scores in the control

versus deprived conditions (*i.e.*, are downregulated after deprivation) are listed in Table 3. The Gene Sets are ranked according to their Normalized Enrichment Score.

Table 3

	↳DR	NES	↳MD	NES
1	Neuropeptide_hormone	-17.0	20S_core_proteasome_complex	-5.3
2	Gas_exchange	-14.3	Ribosome	-4.6
3	Scavenger_receptor	-13.1	Circulation	-4.0
4	Serine_type_endopeptidase	-12.8	NADH_dehydrogenase	-4.0
5	Enzyme_binding_activity	-12.6	NADH_dehydrogenase_ubiquinone_activity	-3.8
6	Spliceosomal_subunit	-10.1	Endopeptidase_activity	-3.6
7	chr4q21	-9.1	Structural_constituent_of_ribosome	-3.2

[00285] These pathways were all significantly enriched (permutation test, $P < 0.0001$) within the data set, based on a statistical comparison of enrichment scores obtained with 1000 randomly permuted gene sets. The GSEA method revealed quantitatively that different gene sets were preferentially activated after DR and MD. For example, the top enriched gene sets after DR included those involved in cellular activity, encompassing both metabolism related pathways (such as "metabolism" and "growth hormone pathway"), and synaptic activity related networks (such as "channel passive transporter," "vesicle-coat-protein," and "secretory vesicles"). After MD, however, the majority of the top enriched gene sets corresponded to pathways activated by growth factors ("epidermal growth factor," "insulin-like growth factor 1," and "platelet derived growth factor") and neuronal remodeling and degeneration ("nuclear factor of activated T cells," "JAK-STAT cascade," and "embryogenesis and morphogenesis"). Several gene sets were enriched in both conditions but were ranked in a different order confirming that common processes are also shared between the two conditions.

Table 2

	DR-C	NES	MD-C	NES		
1	Channel_passive_transporter	★	27.3	egfPathway	★	16.4
2	Metabolism		25.6	igf1Pathway	★	9.7
3	mapkPathway	★	22.6	EGF_receptor_signaling_pathway		9.5
4	Vesicle_coat_protein		21.6	pdgfPathway	★	8.7
5	chr14q31		21.0	Embryogenesis_and_morphogenesis		8.0
6	ghPathway		20.0	Helicase_activity	★	7.9
7	chr8p12		18.8	tpoPathway	★	7.6
8	Secretory_vesicles	★	18.6	nfatPathway	★	7.5
9	chr20p12		17.8	Monocyte_AD_pathway		7.0
10	Apoptosis_regulator_activity		17.6	arfPathway		6.8
11	Protein_amino_acid_phosphorylation		17.4	JAK_STAT_cascade	★	6.7
12	chr4q12		17.3	Differentiation_in_PC12	★	6.6
13	rarrxrPathway		17.1	Channel_passive_transporter	★	6.4
14	ATPase_activity		17.0	tcrPathway	★	6.2
15	chr5q33	★	16.8	Transmembrane_RTP		6.0
16	insulinPathway		16.8	ghPathway	★	5.8
17	Neurotransmitter_secretion	★	16.6	Inositolphosphatidylinositol_kinase_activity		5.6
18	edg1Pathway		16.6	keratinocytePathway		5.6
19	egfPathway		16.5	at1rPathway	★	5.6
20	RAS_protein_signal_transduction		16.5	gleevecPathway	★	5.6
21	Telomerase_dependent_telomere_maintenance		16.4	ngfPathway		5.5
22	Endoplasmic_reticulum	★	16.0	il2rbPathway		5.5
23	par1Pathway		15.6	Cancer_related_testis	★	5.5
24	ngfPathway		15.4	Adrenergic		5.4
25	at1rPathway	★	15.3	il7Pathway		5.3
26	Cancer_related_testis		15.3	il2Pathway	★	5.3
27	erk5Pathway	★	15.2	Dag1		5.3
28	JNK_MAPK_pathway		15.1	G_alpha_5_pathway	★	5.2
29	chr15q22		15.0	PTEN_pathway		5.2
30	Ngvm_c8		15.0	cblPathway		5.1
31	arenrf2Pathway	★	14.9	B_cell_receptor_complexes		5.0
32	Microtubule_binding_activity		14.9	p53_signalling		5.0
33	arfPathway		14.7	arenrf2Pathway	★	4.9
34	Potassium_ion_transport	★	14.5	chr20p12		4.8
35	mtorPathway		14.4	pitx2Pathway		4.8
36	crebPathway	★	14.3	igf1rPathway		4.8
37	gleevecPathway		14.3	hdacPathway	★	4.7
38	Protein_amino_acid_dephosphorylation		14.3	ccr5Pathway	★	4.7
39	myosinPathway		14.3	Insoluble_fraction		4.6
40	pdgfPathway		14.1	Granule_cell_survival	★	4.4
41	Ngvm_c32	★	14.0	35_cyclic_nucleotide_phosphodiesterase_activity		4.4
42	Microtubule_associated_complex		14.0	hivnefPathway		4.3
43	Neuronal_transmission	★	13.9	GPI_anchored_membrane_bound_receptor		4.2
44	erkPathway		13.6	Positive_regulation_of_transcription		4.2
45	CD40_pathway_map	★	13.6	tnfr1Pathway		4.2
46	Wnt_Signaling		13.6	Neuronal_transmission	★	4.2
47	Ion_transporter_activity		13.5	Transmembrane_RTK_signalling		4.1
48	Calm odulin_binding_activity	★	13.3	Synaptic_transmission	★	4.1
49	GPCR_pathway		13.1	spryPathway		4.1
50	chr2p22		13.1	Golgi		4.0

[00286] The genes previously identified with RT-PCR as highly expressed after DR or MD were also present in specific gene sets with high NES values (corresponding gene sets are marked), indicating that highly expressed genes together enrich specific pathways or networks of activation. The distribution of positive NES values for the DR versus control comparison is shown in Fig. 4C, which also shows the running enrichment scores for two pathways containing the molecules Creb and GIuRI, respectively. The NES distribution for the MD versus control comparison is shown in Fig. 4D, together with the running enrichment scores for two pathways containing the molecules STAT1 and IGFBP5/IGF1, respectively. Each of these genes appears early in the rank-ordered set of DR or MD genes (*i.e.*, is one of the top enriched genes in the set and contributes significantly to the running enrichment score shown in Fig. 4C, D). Indeed, individual pathways often contain a number of genes that are implicated in DR or MD. Conversely, individual genes are often included in multiple pathways enriched after DR or MD. Many genes are common between the two deprivation conditions, as expected, but several are different (cf. Fig. 3). Considering the 100 most enriched gene sets in deprivation conditions, 1928 probes are present in DR but not MD gene sets, 1590 probes are present in MD but not DR gene sets, and 2361 probes are present in both MD and DR gene sets.

Example 3; Expression of Selected Proteins Encoded by Differentially Expressed Genes

Materials and Methods

Immunohistochemistry

[002S7] Mice were anesthetized and transcardially perfused with a solution of 4% paraformaldehyde. The appropriate brain hemispheres were removed and equilibrated in 30% sucrose in PBS. Coronal sections containing visual cortex were cut using a freezing microtome. Immunohistochemistry for GIuRI (1:500, Upstate), IGFBP5 (1:500, USBiological), CaMK2alpha (1:500, Sigma), PhosphoCREB (1:500, Cell Signaling), activated Stat1(1:500, Abeam), parvalbumin (1:1000, Chemicon), calretinin (1:500, Chemicon), somatostatin (1:300, Chemicon), neuropeptideY (1:400, Chemicon), synapsin 1 (1: 500, Chemicon), IGF1 (1:250, Chemicon), GAD 67 (1:400, Chemicon), IGFIR (1:500, Upstate), PI3K - catalytic subunit 110 (1:400, Upstate), phosphorylated-Akt (1:250, Cell Signaling), was carried out as described elsewhere^{82/83}. For each staining, analysis was

repeated in parallel for control and deprived animals. Experiments were carried out at least on two animals for each group and repeated twice. The intensity of staining in sections from control and deprived animals was evaluated with ImageJ software (<http://rsb.info.nih.gov/ij/>). Counts of parvalbumin, calretinin, somatostatin and NPY-positive cells were performed as described elsewhere²⁹.

Results

[00288] The results described thus far represent information at the mRNA level. Given that multiple control mechanisms can exert their actions after the transcriptional stage, analysis of protein expression is can be used to confirm the functional activation of a pathway beyond RNA analyses. To further examine the regulation of the genes described above and their associated pathways, the expression of their proteins was analyzed using immunohistochemistry.

[00289] First, markers were examined for selected classes of interneurons. Since all the microarray probes for parvalbumin were downregulated after DR (Fig. 2B) while other interneuron markers remained unchanged or increased, it was determined whether a similar pattern were reflected in the number of neurons that were immuno-positive for these markers. A significant decrease (by 40%, $p < 0.01$) in the number of parvalbumin-positive neurons in DR relative to control animals (Fig. 5A) was observed, while calretinin-positive neurons remained unaltered and the number of neurons positive for somatostatin and neuropeptide Y increased ($P < 0.05$). For all the antibodies examined, there was no effect of MD on the number of stained neurons. Thus, the reported effect of DR as delaying inhibition is likely due to a delay in the development of neurons that express parvalbumin.

[00290] Following up the highly enriched gene sets after DR, the expression of GluR1 (Fig. 5B) phospho-CREB (Fig. 5C), and CaMKIIa were examined, present in the "CREB pathway" gene set. Each of these molecules was over-expressed in V1 of DR animals compared to control, consistent with previous reports of the involvement of CaMKIIa in DR⁴⁶, of GluR1 as a substrate for CaMKIIa expression⁴⁷, and of CREB-mediated gene expression as related to the maturation of the visual cortex⁴⁸. Similarly, following MD, two novel proteins were examined, activated STAT1 and IGFBP5, which are constituents of highly enriched gene sets, though neither has been previously implicated in the cortical effects of MD or any form of visual deprivation. STAT proteins are phosphorylated by Janus Kinases (JAK); the JAK-STAT cascade is usually activated in response to cytokine signaling,

but is also upregulated in response to nerve injury and ischemia⁴⁹⁻⁵¹. Immunostaining for the phosphorylated form of STAT1, indicating activation of the JAK-STAT cascade, showed that the molecule was significantly upregulated in V1 after MD (Fig. 5D). IGFBP5 is widely expressed in the brain⁵² and binds IGF1, a peptide that is genetically related to insulin^{53,54,55}. IGFBP5 expression was significantly upregulated in V1 after long-term MD (Fig. 5E).

Example 4: Administration of IGF1 Counteracts Effects of Monocular Deprivation

Materials and Methods

Monocular Deprivation

[00291] For monocular deprivation, animals were anesthetized with avertin (0.016 ml/g) and the eyelids of one eye were sutured (at P20-22 for 7 days for imaging experiments). Before imaging, the suture was removed and the deprived eye re-opened. Only animals in which the deprivation sutures were intact and the condition of the deprived eye appeared healthy were used for the imaging session. For DR animals (aged P27-30), the procedure was the same described above, with the exception that the animals were anesthetized in darkness and not exposed to light until deeply anaesthetized; in these mice only the binocular response was evaluated and compared to that in control animals.

Optical imaging of V1

[00292] Mice (129/SvEv and C57B1/6) aged P26-30 were anesthetized with urethane (1.5 g/Kg) and chlorprothixene (0.2 mg), as described⁸⁴. Skin was excised and the skull exposed over V1. A custom-made attachment was used to fix the head and minimize movements. The cortex was covered with agarose solution (1.5 %) and a glass cover slip. During the imaging session the animal's body temperature was kept constant with a heating blanket and the EKG monitored constantly. Eyes were periodically treated with silicone oil and the animal allowed to breathe pure oxygen. Red light (630 nm) was used to illuminate the cortical surface, and the change of luminance was captured by a CCD camera (Cascade 512B₅ Roper Scientific) during the presentation of visual stimuli (STIM, Optical Imaging). Custom software was developed to control the image acquisition and synchronization between the camera and stimuli. An elongated horizontal or vertical white bar (9° x 72°) over a uniformly gray background was drifted continuously through the up-down or peripheral-central

dimension of the visual field. After moving to the last position, the bar would jump back to the initial position and start another cycle of movement - thus, the chosen region of visual space ($72^\circ \times 72^\circ$) was stimulated in periodic fashion (9 sec/cycle). Images of visual cortex were continuously captured at the rate of 15 frames/sec during each stimulus session of 25 minutes. Four sets of stimuli (upward, downward, leftward, rightward) were randomly presented to either eye monocularly or both eyes simultaneously.

[00293] A temporal high pass filter (135 frames) was employed to remove slow noise components, after which the temporal Fast Fourier Transform (FFT) component at the stimulus frequency (9 sec^{-1}) was calculated pixel by pixel from the whole set of images. No spatial averaging was done. The amplitude of the FFT component was used to measure the strength of visually driven response for each eye, and the ocular dominance index was derived from each eye's response (R) at each pixel as $\text{ODI} = (\text{R}_{\text{contra}} - \text{R}_{\text{ipsi}}) / (\text{R}_{\text{contra}} + \text{R}_{\text{ipsi}})$. The binocular zone was defined as the region with equivalent driving from both eyes.

IGF1 Treatment

[00294] For IGF1 treatment, a solution containing GPE, the functional peptide of IGF1, was prepared as described⁵⁶: 300 μg of GPE was injected intra-peritoneally daily for the entire period of deprivation. This peptide is referred to as "IGF1" in the Results below.

Results

[00295] IGF1 is one of the most upregulated genes after MD, with one of the highest mRNA expression levels after RT-PCR, and the highest differential level of protein expression after MD or DR. Furthermore, the IGF1 pathway is one of the top enriched pathways after MD in the GSEA, and both IGF1 and IGF1R are constituents of several highly enriched pathways after MD. The present invention encompasses the recognition that the upregulation of IGF1 following MD could imply a competitive role for IGF1 in mediating ocular dominance plasticity after MD, and that exogenous application of IGF1 could then prevent the effect of MD (see, for example, ref. 56). The possible functional involvement of the IGF1/IGF1R system in experience-dependent plasticity in visual or any cortex has not been examined to date. Thus, the physiological effects of IGF1 administration on ocular dominance plasticity in V1 were determined *in vivo* (Fig. 6).

[00296] IGF1 is able to cross the blood brain barrier⁵⁶, thus, intra-peritoneal administration of IGF1 prevents the effects of ischemia in the CNS⁵⁷. Optical imaging of intrinsic signals was used to evaluate the strength of signals from each eye in the physiologically identified binocular portion of V1 (Fig. 6A). Imaging was performed on three age-matched groups of mice during the critical period: control animals (n=3), animals monocularly deprived for 7 days (n=4), and MD animals with IGF1 delivered intraperitoneally during the period of deprivation (n=3). Fig. 6B shows the ocular dominance distribution of pixels within the binocular zone in individual control, MD and MD + IGF1 animals. The pixel distribution in control mice favored the contralateral eye, as described previously with single unit recordings²⁸ and visual evoked potentials⁵⁸. Suturing the contralateral eye caused the ocular dominance distribution to shift towards the open, ipsilateral, eye. Simultaneous administration of IGF1 prevented the ocular dominance shift towards the open eye. A comparison of the mean ocular dominance index across the population of animals (Fig. 6C) showed that deprivation of the contralateral eye shifted the index significantly relative to control animals ($P < 0.05$, treating each animal as a single datum), whereas MD combined with administration of IGF1 prevented the shift ($P > 0.2$).

[00297] The mechanisms of IGF1/IGFBP5 action were investigated by asking if specific cell types and proteins were associated with the pathway. To clarify whether IGFBP5 is expressed in excitatory or inhibitory neurons, a double immunostaining for IGFBP5 and GAD67 was performed, and IGFBP5 was shown to be expressed in a range of neurons - not exclusively in inhibitory interneurons (Fig. 7A). Next the expression in V1 of several molecules involved in IGF1 signaling^{53,59} was assayed by immunostaining after MD alone and after MD with concurrent delivery of IGF1 (Fig. 7B). IGFBP5 immunostaining showed a significant increase after short-term MD, and no change from normal levels in short-term MD animals that also received IGF1 during the deprivation period (MD + IGF1). Expression of the IGF1 receptor (IGFIR), on the other hand, was significantly down-regulated after MD, and expression was partially restored in MD+IGF1 animals. Phosphatidylinositol 3-Kinase (PI3K), which is activated by IGF1, was significantly diminished in expression after MD but was fully restored after MD + IGF1 treatment ($P < 0.05$ for both comparisons; Fig. 7B).

[00298] Expression of one of the substrates of PI3K, phosphorylated-Akt, was significantly reduced by MD and restored by addition of IGF1. Because IGF1 and PI3K signaling have been related to neuronal transmission⁶⁰⁻⁶², changes in synaptic activity were screened for by immunostaining for synapsin 1. The level of synapsin expression did not change significantly in MD animals versus control, but MD + IGF1 animals showed a

significant increase ($JP < 0.05$). Finally, a microarray analysis of MD + IGF1 animals was performed for comparison with MD animals, to examine genes that might be differentially regulated by IGF1 and hence be associated specifically with IGF1 mechanisms. Expression of only a small fraction of genes was significantly altered in MD + IGF1 animals compared to MD animals (see Tables 10 and 11). Adding IGF1 significantly downregulated IGFBP5 and upregulated PI3K compared to MD alone ($JP < 0.01$). Thus, PI3K appears to be an important signal downstream of IGF1 in mediating ocular dominance plasticity.

Example 5: Release of a Plasticity-Modifying Agent from Hydrogel Discs

[00299] In order to demonstrate the release of a plasticity-modifying agent over time from a hydrogel matrix suitable for drug delivery, hydrogel discs containing various amounts of IGF1 are fabricated and subjected to incubation in a PBS solution, during which release of IGF1 is measured over time.

[00300] The hydrogel consists of a poly(ethylene glycol) (PEG) core with poly(lactic acid) (PLA) linkages (*i.e.*, it contains hPLA-b-PEG-PLA macromers) and has been previously described (Sawhney, *et al.*, 1993; and Burdick, *et al.*, 2002). In order to fabricate discs, the hydrogel macromer is combined with IFN γ and the photoinitiator 2-hydroxy-1-[4-(hydroxyethoxy)phenyl]-2-methyl-1-propanone, (Ciba-Geigy) in a PBS solution. The solution (50 μ l) is placed into a mold of the desired dimensions and then crosslinked under UV light for 10 minutes to cause polymerization, thereby resulting in discs of hydrogel with dimensions of approximately 5 mm by 1 mm.

[00301] The hydrogel discs are placed in 0.5 ml of PBS solution and release is monitored over 14 days using an ELISA kit according to the manufacturer's directions. Three hydrogel discs are tested for each of the conditions (2 different loading doses each for single-chain and two-chain tPA), and the amount of tPA released was averaged at each time point. Data are analyzed to determine the relationship between IGF1 release and the amount of IGF1 present in the disc. The relationship allows for the control of the amount of IGF1 released by changing the amount of IGF1 initially loaded into the gel. The total amount of IGF1 released can be calculated from the concentrations and the fact that the discs are incubated in 0.5 ml PBS solution. This information can be used to determine the amount of IGF1 and the amount of hydrogel needed to deliver a desired dose overtime.

Example 6: Effect of IGF1 on Recovery from Spinal Cord Injury

Materials and Methods

[00302] In a first set of experiments, 6 female Sprague-Dawley rats were anesthetized and spinal cord injury (SCI) was induced at T10 by using the New York University impactor with a 10 gm weight and a 12.5 mm weight drop. Behavioral tests were conducted on the first post-operative day and then weekly. The BBB (Basso, Beattie, Bresnahan) behavioral test was used to examine hind limb reflexes as well as coordinated use of the hind limbs (Basso *et al.*, 1995; and Basso, *et al.*, 1996). This "BBB" scale has been adopted by the Multicenter Animal Spinal Cord Injury Study and by other workers in the field. Therefore, use of the BBB as an outcome measure after experimental SCI supports easier interlaboratory comparison of results.

[00303] A second operation is conducted three days post-operatively at T8-T9 for a bolus micro-injection of 10 µg of IGF1 or GPE and, in some experiments, also 10 µg of tPA (human two-chain tissue plasminogen activator; American Diagnostica, Inc.) reconstituted from lyophilized powder to 10 µg/10 µL into three of the six rats. Following the bolus injection, an osmotic minipump (Alzet Model 2002: 14 day pump; Durect Corp., Cupertino, CA) loaded with IGF1 or GPE and, in some experiments, also tPA (200 µL total volume, delivering 0.5 µl/hour, 10 µg IGF1 or GPE, and, in some experiments, 10 µg tPA/day) is implanted at the side of injury and delivered tPA for 10 consecutive days. At the 6th post-operative week, BDA and Fluorogold injections are made in cortex to assess the extent of corticospinal tract regrowth and reconnection, and at the 10th post-operative week, animals are perfused and their spinal cords were removed for histological analysis. Implanted minipumps are saved for analysis of IGF1 activity (and in some experiments tPA activity) in the remaining solution.

[00304] A second set of experiments is performed on a larger group of animals using the same techniques as the first except that Alzet Model 1007B:7 day pumps holding a total volume of 90 µl, infusing 0.5 µl/hour are used, and delivery continues for 7 days rather than 10.

[00305] In a third set of experiments, GPE is administered intraperitoneally at a range of different doses (10 µg - 1 mg) daily.

[00306] In a fourth set of experiments, GPE is administered intraperitoneally at a range of different doses (10 µg - 1 mg) daily and a pump delivering tPA is implanted as described above.

[00307] In all experiments, the extent of corticospinal tract regrowth and reconnection is evaluated and histology is performed. Anatomical analysis with hematoxylin and eosin staining is performed to evaluate the contusion site. Sections are stained with solvent blue [SB] / hematoxylin and eosin as described in Teng and Wrathall, 1997. The integrity of the residual white matter is assessed. For example, high quality myelin stain in the spared white matter demonstrates existence of myelinated axons.

[00308] Functional parameters are assessed. Pre-operatively, animals performance on the BBB test is expected to have a baseline value of 21. On the first post-operative day, all animals are expected to be significantly impaired on the BBB test, and their scores reduced to 0. After 10 weeks of recovery, control animals typically achieve a final score of about 2.5 on the BBB test while treated animals are expected to achieve a higher score, *e.g.*, a final score close to 9, which is considered significant improvement.

Example 7: Effect of IGF1 with or without tPA in an Animal Model of Stroke

[00309] Thirty rats are trained on a battery of behavioral tasks until they achieved an asymptotic level of competence. Rats then receive occlusion of the middle cerebral artery (MCAO) according to standard procedures. After recovery from surgery, the rats are significantly impaired on all of the behavioral tasks. At the time of MCAO surgery, 20 of the 30 rats are also implanted with an osmotic mini-pump (Alzet model 2001: 7 day pump with 90 µl total volume and 1.0 µl/hour infusion) for intraventricular infusion contralateral to the site of the MCAO. For 10 of the 20 rats, the mini-pumps are filled with IGF1 at 10 µg/day. For the other 10 rats, the mini-pumps are filled with IGF1 at 10 µg/day and human two-chain tissue plasminogen activator (tPA; American Diagnostica, Inc.) at 10 µg/day. The other 10 rats receive daily intraperitoneal injections of GPE at a dose ranging from 10 µg to 10 mg, *e.g.*, 300 µg.

[00310] Treatment is initiated 2 days following MCAO and maintained for 7 days. Control and treated rats are subsequently tested weekly for behavioral recovery.

Equivalentents and Scope

[00311] Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific embodiments of the invention, described herein. The scope of the present invention is not intended to be limited to the above Description, but rather is as set forth in the appended claims.

[00312] Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific embodiments of the invention described herein. The scope of the present invention is not intended to be limited to the above Description, but rather is as set forth in the appended claims.

[00313] In the claims articles such as "a," "an," and "the" may mean one or more than one unless indicated to the contrary or otherwise evident from the context. Thus, for example, reference to "a nanoparticle" includes a plurality of such nanoparticle, and reference to "the cell" includes reference to one or more cells known to those skilled in the art, and so forth. Claims or descriptions that include "or" between one or more members of a group are considered satisfied if one, more than one, or all of the group members are present in, employed in, or otherwise relevant to a given product or process unless indicated to the contrary or otherwise evident from the context. The invention includes embodiments in which exactly one member of the group is present in, employed in, or otherwise relevant to a given product or process. The invention includes embodiments in which more than one, or all of the group members are present in, employed in, or otherwise relevant to a given product or process. Furthermore, it is to be understood that the invention encompasses all variations, combinations, and permutations in which one or more limitations, elements, clauses, descriptive terms, *etc.*, from one or more of the listed claims is introduced into another claim. For example, any claim that is dependent on another claim can be modified to include one or more limitations found in any other claim that is dependent on the same base claim.

Furthermore, where the claims recite a composition, it is to be understood that methods of using the composition for any of the purposes disclosed herein are included, and methods of making the composition according to any of the methods of making disclosed herein or other methods known in the art are included, unless otherwise indicated or unless it would be evident to one of ordinary skill in the art that a contradiction or inconsistency would arise.

[00314] Where elements are presented as lists, *e.g.*, in Markush group format, it is to be understood that each subgroup of the elements is also disclosed, and any element(s) can be removed from the group. It should be understood that, in general, where the invention, or aspects of the invention, is/are referred to as comprising particular elements, features, *etc.*, certain embodiments of the invention or aspects of the invention consist, or consist essentially

of, such elements, features, *etc.* For purposes of simplicity those embodiments have not been specifically set forth *in haec verba* herein. It is noted that the term "comprising" is intended to be open and permits the inclusion of additional elements or steps.

[00315] Where ranges are given, endpoints are included. Furthermore, it is to be understood that unless otherwise indicated or otherwise evident from the context and understanding of one of ordinary skill in the art, values that are expressed as ranges can assume any specific value or subrange within the stated ranges in different embodiments of the invention, to the tenth of the unit of the lower limit of the range, unless the context clearly dictates otherwise.

[00316] In addition, it is to be understood that any particular embodiment of the present invention that falls within the prior art may be explicitly excluded from any one or more of the claims. Since such embodiments are deemed to be known to one of ordinary skill in the art, they may be excluded even if the exclusion is not set forth explicitly herein. Any particular embodiment of the compositions of the invention (*e.g.*, plasticity-modifying condition, any plasticity-modifying agent, any proteolysis-enhancing agent, any active agent, any drug delivery system, any mode of administration, any dosage regimen, any therapeutic application, *etc.*) can be excluded from any one or more claims, for any reason, whether or not related to the existence of prior art.

[00317] The publications discussed above and throughout the text are provided solely for their disclosure prior to the filing date of the present application. Nothing herein is to be construed as an admission that the inventors are not entitled to antedate such disclosure by virtue of prior disclosure.

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Table 4

33	94875_at	0.000124	371.97	646.6	Mrp120	AI838915	NM_025570
34	165290_f_at	0.000127	203.73	398.97	---	AV229080	NM_021414
35	103910_at	0.000128	585.63	1028.43	---	AJ249987	NM_020024
36	114032_f_at	0.000129	4244.37	7428.33	Gcc11	AI843759	NM_133236
37	116058_at	0.000133	313.97	485.83	2900057K09R1k	AI854413	/// NM_178072
38	168299_f_at	0.000149	491.27	1205.07	---	AV090198	---
39	107599_at	0.000146	804.63	1145.87	---	AI121363	XM_148990
40	164029_at	0.000148	533.3	770.33	DXImk41e	AI891531	NM_173747
41	109727_at	0.000154	923.97	1367.5	Phf2	AI851684	NM_011078
42	93288_at	0.000166	2777.13	4956.27	Arpc2	AI835683	XM_129773
43	112908_at	0.000168	490.73	1025.87	Kxud1	AI849021	NM_153287
44	164429_f_at	0.000172	1055.9	1682.4	---	AV086748	NM_018819
45	161818_f_at	0.000174	279.57	467.5	Pdcd4	AV376445	NM_007607
46	161357_r_at	0.00019	509.57	987.2	---	AV207739	NM_008103
47	162702_at	0.000196	2757.77	3821.47	Dusp14	AI851272	NM_019819
48	139276_at	0.000196	1168.13	1923.77	---	AW046131	XM_127272
49	160235_at	0.000197	460.4	5033425B17R1k	AI843521	IM_027215	
50	160423_at	0.0002	243.13	356.23	Mpps2	AI853575	NM_080452
51	115269_at	0.000216	436.47	856.27	Bln3	AI155952	XM_358314
52	105832_at	0.000217	561.37	985	---	AI849717	NM_030743
53	163675_r_at	0.000219	88.13	191.97	Nr4a2	AW045923	---
54	94536_s_at	0.000222	3045.97	3845.37	2900073G15R1k	AI843417	NM_023402
55	169396_r_at	0.000226	1919.97	3561.6	---	AV101367	XM_132830
56	102870_at	0.000227	4815.7	10976.93	5930418K15R1k	AW125272	NM_001033178
57	111564_at	0.000244	422.17	650.93	---	AA067741	XM_484476
58	162762_at	0.000257	1108.8	1805.77	---	AW122369	NM_001001881
59	161073_at	0.000289	1949.23	2721.17	C630002B14R1k	AI846304	NM_175331
60	165219_s_at	0.000293	467.13	588.8	---	AV364901	IM_021890
61	162608_at	0.000294	136.8	247.8	---	AI844245	NM_025426
62	92981_at	0.000304	1245.53	1964.63	---	X68837	NM_009129
63	162486_f_at	0.000308	538.8	635.9	---	AV122030	NM_007834
64	165073_f_at	0.000317	307.4	592.13	---	AV335734	NM_153515
65	101101_at	0.000324	1740.1	2329.1	Ppp3cb	Z67746	NM_017374
66	170060_r_at	0.000324	4751.67	7112.73	Hokall1s	AV305600	NM_010450
67	98106_at	0.000327	420.03	537.5	Tim144	U69898	NM_011592
68	102773_at	0.000333	156.93	226.7	Car8	X61397	NM_007592
69	100084_at	0.000335	477.63	680.03	Vil2	X60671	NM_009510
70	161998_f_at	0.000335	1073.2	1751.13	---	AV329719	NM_145602

71	95044_at	0.000338	721.07	1096.03	1500003D12R1K 92J0 EA1844549	NM_025895			
72	103346_at	0.000347	509.33	675.77	C1K2 AF033564	NM_007712	455000.0	66066	O
73	160487_at	0.000362	268.33	601.85	800_WN14 50659J	xwNM_842858	155000.0		O
74	93686_s_at	0.000372	6.97	87.81	EQ_WN1A F086629CA V NM 007708	37.4301	475000.0		O
75	108512_at	0.000389	640.65	87.19	81.95.18	153.66.182	475000.0		O
76	114832_at	0.000391	376	829	840C1A V 96	191.9097C5L7 NM	935000.0		O
77	101947_at	0.000393	539.83	237.60	WN	153.66.182	565000.0		O
78	160442_at	0.000399	160442_at	494.43	429.81	153.66.182	565000.0		O
79	163701_at	0.000404	684.77	103.3	609800 WN	15000U72262ZLNK	115000.0		O
80	102134_f_at	0.000408	490.0	202.81	ATP502	A14617v2.49.102	40.215		O
81	102194_at	0.000411	510.17	655.02	020 WN	7.0.0.0	605000.0		O
82	110124_at	0.000417	275.3	452.60	MN 356.17	48852U	684000.0		O
83	171609_r_at	0.000417	14280.63	944.92	01 MN 93	944920 MN 93	484000.0		O
84	94915_at	0.000437	582.97	0.4	55E WX	10386T MN	484000.0		O
85	115131_at	0.000437	1635.73	10386T MN	211v2.7	656800 MN 7	994000.0		O
86	106830_at	0.000437	807.83	1624.13	10386T MN	211v2.7	994000.0		O
87	103531_f_at	0.000438	260.8	366.7	18810 WN	A104	294000.0		O
88	97274_at	0.000439	877.3	1346.67	59060.0 MN	120.0.0.2	454000.0		O
89	162928_f_at	0.000444	8255.73	803.83	1170.0	44901V	454000.0		O
90	99640_at	0.000452	96640_at	1360.6	667010 MN 329.9	18540W	254000.0		O
91	94796_at	0.000457	94796_at	1628.73	186900 MN 3	186900 MN 3	634000.0		O
92	114994_at	0.000457	524.7	691.9	95110 WN	AB0251	834000.0		O
93	98143_at	0.000458	3581.13	6639.93	48920 WN	A166279U1601V	434000.0		O
94	134405_at	0.000462	437.7	20410 MN	47650W	47650W	434000.0		O
95	161864_f_at	0.000466	286820 MN	302.3	302540W	98301.6	434000.0		O
96	95940_f_at	0.000473	813.27	641110 MN	47650W	47650W	434000.0		O
97	114093_at	0.000483	988.93	652.93	47650W	47650W	434000.0		O
98	103606_r_at	0.000484	988.93	652.93	47650W	47650W	434000.0		O
99	96060_at	0.000489	988.93	652.93	47650W	47650W	434000.0		O
100	93500_at	0.000493	988.93	652.93	47650W	47650W	434000.0		O
101	92724_at	0.000493	988.93	652.93	47650W	47650W	434000.0		O
102	113337_at	0.000511	429.20	586381W	M121	586381W	404000.0		O
103	170481_at	0.000535	1800.4	929.90	929.90	929.90	663000.0		O
104	112992_at	0.000536	509.9	947.0	4930.1	156820B V	663000.0		O
105	109389_at	0.000544	152.13	281.3	54551 WN	56648X	663000.0		O
106	110371_at	0.000547	507.83	858.9	95551 WN	47322A V	663000.0		O
107	161965_r_at	0.000551	712.77	1033.43	858.9	95551 WN	663000.0		O
108	99095_at	0.000557	376.67	880.10	880.10	880.10	663000.0		O

568520 MN 6545481A 3 of 26

641110 MN

K1R1D1D3000051

30.9601

70.172L

8383000.0

L1

Table 4

Table 4

147	167055_f_at	0.00081	2927.7	6142.57	MC11	AV3170182J05NM	008562																		
148	168944_i_at	0.000814	3227.33	4783.9		AV077500	NM	024432																	
149	165357_f_at	0.000821	424.3	862679.00	MN	AV0202885880NM	2J03748	687602																	
150	92794_f_at	0.000822	887.27	1350.2		Nme1	M35969962AV	NM	008704	096															
151	93589_at	0.000834	1398.57	669.1	10565670	MN	B0101815AV	53																	
152	135609_at	0.000838	669.1	539365	UJ01MN	L35528880	L7ZLN	pkS.67																	
153	96042_at	0.000857	359.77	1075.83		4633293	MN	02																	
154	160727_at	0.000857	1075.83	869509.1		6994799	2F	qupsLk																	
155	164148_at	0.000861	906.03	869509.1		6994799	2F	qupsLk																	
156	108029_at	0.000865	355.8	526.53		2280983	AV																		
157	95759_at	0.000885	420.2	541		2280983	AV																		
158	103959_at	0.000889	155	268.43		917908																			
159	114069_at	0.00089	477.37	927270.1		917908																			
160	109077_at	0.000897	943.67	1417.73		248600	MN	A1854550																	
161	108019_f_at	0.000902	581.7	878.47		469081	AV	A1850364																	
162	138517_at	0.000906	466.47	750.4		410080	MN	A17000																	
163	105580_at	0.000914	411.93	847921.43		410080	MN	A17000																	
164	95387_f_at	0.000918	77.23	236.89		991600	MN	A1850364																	
165	93048_at	0.000919	583.17	50610.3		50610.3	MN	A17000																	
166	92202_g_at	0.000927	1126.27	2324.87		09260	0	MN	A155	215191	AV	XM	134363	LE2											
167	171624_at	0.000928	77	237		928471	AV	AV16																	
168	164308_f_at	0.000934	643.03	66610.3		66610.3	MN	A17000																	
169	101078_at	0.000941	5107.2	6946		6946	MN	A1850364																	
170	108475_at	0.000943	42320	5667715		5667715	AV	A17000																	
171	109415_at	0.000945	67820	6527481		6527481	MN	A1850364																	
172	137185_i_at	0.000957	1184.1	479521.1		479521.1	MN	A1850364																	
173	97932_f_at	0.000966	570.9	714.3		560450	MN	D892																	
174	96236_at	0.000979	406.53	066310		066310	MN	A17000																	
175	115360_at	0.000988	1437.43	1783.27		5072	MH	Cu13																	
176	164885_f_at	0.000989	427	94742		94742	MN	A1850364																	
177	166582_i_at	0.000992	564.0	835.33		10852	AV																		
178	98472_at	0.001008	103.17	1547		1547	MN	A17000																	
179	95053_s_at	0.00102	08832	733990		733990	MN	A17000																	
180	99607_at	0.001022	2210.57	385		149510	MN	A17000																	
181	164502_r_at	0.001032	1298.77	226.0		555051	AV	A17000																	
182	115765_at	0.00104	815	61920	MN	1114		Shiprh																	
183	168820_at	0.00104	233.4	360.4		360.4	MN	A17000																	
184	93094_at	0.001087	109.83	203.83		203.83	MN	A17000																	

Table 4

Table 4

221	94767_at	0.001339	5897.67	9771.8	Rps11	U93864	NM_013725
222	162442_r_at	0.001345	255.37	366	---	AV349550	---
223	163513_f_at	0.001351	259	616.27	Tm9ef2	AV232877	NM_C80556
224	164317_f_at	0.001356	746.03	1241.27	---	AV232343	NM_145475
225	111352_at	0.001361	448.13	575.7	Shrf	AW215724	---
226	115414_at	0.001388	753.9	985.3	AW545589	AI849017	NM_01980E
227	100533_s_at	0.001396	116.4	166.9	Crem	M60285	NM_013498
228	130491_at	0.001417	3214.17	4305.13	Amm	AI853281	NM_C33603
229	94302_at	0.001423	1013.27	1664.4	Psmd4	AF013099	NM_008951
230	97366_at	0.001429	565.93	734.63	BC026588	AI851024	NM_146075
231	112886_f_at	0.001442	325.13	518.93	AA517739	AA968017	NM_489602
232	165458_r_at	0.001445	1828.7	3048.5	2610020H08Rik	AV214281	XM_622764
233	99535_at	0.001447	1197.17	1746.5	Ccrn41	AW04763C	NM_001004187
234	161889_f_at	0.001446	5258.7	6223.67	---	AV102160	---
235	115150_at	0.001446	234.33	415.23	---	AI846687	NM_024479
236	163370_at	0.001462	334.5	671.93	Osbp13	AI591488	NM_027881
237	167197_s_at	0.001469	746.93	1120.87	Sftpa	AV025377	NM_023134
238	135355_at	0.001473	2189.87	7430.73	---	AW228646	---
239	137241_f_at	0.001476	988.57	1528.23	---	AI835499	NM_007917
240	99185_at	0.001485	495.93	808.4	2810443J12Rik	AW047026	---
241	94194_s_at	0.00149	633.43	1178.5	Hgm2	AJ225122	NM_008226
242	170384_r_at	0.001492	663.93	1256.57	---	AV325109	NM_138744
243	110343_f_at	0.001493	379.87	630.67	Tubgcp5	AI448463	NM_146190
244	160395_at	0.001495	191.2	429.8	DlBrd603e	AW046672	NM_026023
245	104778_at	0.001501	363.13	619.57	4933426E21Rik	AI503C93	NM_001029912
246	107298_at	0.001509	2268.77	3566	---	AW050310	XM_489103
247	101989_at	0.001528	3640.67	4891.23	Ugcrc1	AW125380	NM_025407
248	162833_at	0.001543	1504.1	3256.33	4833436C18Rik	AI845772	XM_131380
249	106659_at	0.001552	299.5	480.2	6720484B16	AI851954	NM_172502
250	113524_at	0.001552	325.33	649.07	Pdhx	AI747428	NM_175094
251	101063_at	0.001555	238.33	742.23	Tncc	M29793	NM_009393
252	113656_at	0.001555	437.83	593.3	1110012M11Rik	AW050247	NM_028617
253	99656_at	0.001566	497.87	740.63	D8Ertdd812e	AI849027	NM_198020
254	93531_at	0.00157	1653.57	2121.43	Ndufa8	AI853855	NM_026703
255	164659_f_at	0.001581	619.03	835.57	---	AV356562	---
256	166258_at	0.001592	3038.4	3743.23	Dact2	AW208410	NM_172826
257	AFPX-MUR_b2_at	0.001611	2802.8	3968.13	---	X63136	---
258	160742_at	0.001623	355.63	446.33	Plod3	AI840146	NM_011962

Table 4

297	160832_at	0.001946	348.6	410.23	Idlr	Z19521	NM_010700						
298	162806_at	0.001946	2818.2	4602.03		2410004H02Rik	AI154996	NM_145954					
299	95565_at	0.001951	357.8	515.33	Mad211bp	AI852873	NM_025649						
300	106469_at	0.001961	631.77	1705.77	Rsn4	AI835918	NM_024226	///	NM_194051	///	NM_194052	///	NM_194053
	NM_194054												
301	108515_at	0.001963	533.17	780.77	Tpchl	AA866771	NM_145853						
302	163658_at	0.00198	600.87	669.47		6430704M03Rik	AI851180						
303	103420_at	0.001989	800.57	1031.17	Imd	U79753	NM_107927						
304	100527_at	0.002003	1567.77	2088.93	DIIEt199e	AW124744	NM_026518						
305	113626_at	0.00202	345.27	531.7	3110031B13Rik	AW050102	NM_026075						
306	100068_at	0.002041	973.33	1292.47	AlDh1a1	M74570	NM_013467						
307	94259_at	0.002048	789.43	1316.63		5730442A20Rik	AB024935						
308	164923_f_at	0.002048	359.2	538.07	---	AV091954	NM_026610						
309	100903_at	0.002049	365.73	513.63	Adprt12	AV307780	NM_009632						
310	166739_r_at	0.00205	3632.3	4280.57	---	AV331146	NM_145473						
311	99184_at	0.002054	333.87	443.2	Cisad	AW120896	NM_144942						
312	96212_at	0.002063	1209.27	1662.3		2310061104Rik	AI853918						
313	112740_at	0.002076	564.53	1163.37	Thra92	AA792120	NM_172424						
314	95707_at	0.00208	1030.1	1793.7		2900110M23Rik	AA615853						
315	113310_f_at	0.002085	2839.77	3625.27	Mjd	AA175228	---						
316	100828_at	0.002086	509.2	656.7	---	AI648350	NM_010858						
317	109416_at	0.002088	361.93	645.6	Pdgrfa	AI835646	NM_008808						
318	95529_at	0.002093	484.97	884.47	Dbnl	U58884	NM_013810						
319	96652_at	0.002096	868	1142	Mrp128	AI849911	NM_024227						
320	111038_at	0.002113	1566.8	2485.3	Clasp2	AW047327	NM_029633						
321	104651_at	0.002125	442.9	691.63	C330035N22Rik	AI839611	NM_172926						
322	161127_f_at	0.002125	327.33	495.13	Rp124	AV294412	NM_024216	///	NM_194389				
323	170932_at	0.00213	1413.43	1854.67	---	AV112105	NM_133964						
324	100534_at	0.002153	2422.17	2889.43	Tsnax	AI183109	NM_016909						
325	97929_r_at	0.002155	385.3	525.43	Psmc9	AW124782	NM_026000						
326	161763_r_at	0.002155	442.87	1719.63	Pip5k2c	AV303514	NM_054097						
327	167926_f_at	0.002184	660.93	992.07	---	AV255693	NM_013830						
328	95442_at	0.002205	1198	1512.2	MGC18837	AI835706	NM_178577						
329	98132_at	0.002211	505.13	825.77	---	X01756	NM_007808						
330	164491_at	0.002214	75.23	162.5	---	AV263513	---						
331	95696_at	0.002221	1354.7	2447.6	Txn12	AI840882	NM_023140						
332	93379_at	0.002227	571.03	759.1	Dpys14	Y09079	NM_011993						

Table 4

333	116074	at	0.002256	1697.63	2450.23	Pr11	AI83528.32	fo 01NM	021424						
334	115735	r	at 0.002276	739.93	1248.97	C6	AI326046	NM	016704						
335	166381	f	at 0.002284	128.7	237.03	493141	7E11	922256	VAV278586	905NM	025.47852				
336	94246	at	0.002285	444.47	818800	NMEts2	818300	AV	011.9762	NM	025.47852				
337	92191	at	0	85311	2MN	034	L1T581	V28104	Pr15K1000E	FA	5.37450				
338	96943	at	0.002293	1986.4	3339.73	---	AW125234	NM	145370						
340	140436	at	0.002305	4315.2	051E51	7MN7	659388	818	AWM060	1e52	01SM	5021632			
341	116858	at	0.002312	709.77	954	2402	IC	AWM184	8836	818	AVM	1100	0041674		
342	107028	s	at 0.002328	542.43	662816	MN7	335670	AW	55C04R1	29	144	AW	0.69712		
343	96232	at	0.00233	632	602E51	7MX	162816	AW	18	4E	32	C01	NM	029.4188	
344	162962	at	0.002355	906.07	945F7	7MN7	987903	AV	9K06R1k	35	7	86	9580		
345	164458	f	at 0.002356	457	840	808520	TN	---	NM	02.47	6522				
346	162094	f	at 0.002361	154.53	242.07	15512	W	AV	339425	32	1	90	1394		
347	111464	at	0.002364	86320	2MN	296021	W3	Pr1L	1D6100051k	40	1	30	5132		
348	112307	at	0.002366	897	120600	TN	306848	IA	38	1	3	43	57		
349	112388	at	0.002372	2933.57	632E7	0WV	Pr19	90d	4000E	32	69	35	7922178		
350	113255	at	0.002372	57.	16600	TN	1	2385	1W	A18444	1e7	1	CO	NM	145.49906
351	166313	r	at 0.002374	4058.83	695520	7MN7	847E	818	VA	3356	32	3	9	610	201
352	96258	at	0.002375	2020.57	102030	TN	23056	IA	1	4	3	48	4	8	9635569
353	101093	at	0.002376	369.07	906	95657	7	AW	014	5	47	81	AW	1	92
354	103695	f	at 0.002387	2023.33	81920	3MN3	690621	W	7P0	1	2	6	56	29	
355	116927	at	0.002398	608.17	164016	MX7	470158	1E	7	50	3	6	90	1	0
356	106620	at	0.002402	221987	7MX3	239048	IA	7	Pr1L	1K35101	42k	31	8	12	162
357	107154	f	at 0.002412	948.03	465E4	1	3MN3	52	6	3	6	3	4	3	4
358	111849	at	0.002414	1760.87	225.	539520	TN	---	92	05	1	AV	88	NM	0251.49048
359	168292	1	at 0.00243	426E7	7MN7	081E	818	3	388	2	0	6	20	6	20
360	116312	at	0.002448	188.67	388	20620	TN	OC2	182	4	81	AW	2	1	1
361	113691	at	0.002449	99E920	7MN	21E6	40	W	Pr	kab	4	0	6	4	0
362	94002	at	0.002454	1159	1319.4	491400	100	1	AW	184	4	0	4	0	6
363	94807	at	0.002465	908.33	232	2922	1	1	AW	1	2	4	9	4	5
364	137328	at	0.002467	259	479	382	7	MX	4366	5	0	2	5	5	1
NM_170704				0.002467	40357	1	1	1	1	1	1	1	1	1	1
365	111837	at	0.002475	342.8	906.53	729	6081	10	MN	---	1	30	1	0	7
366	170227	at	0.00248	3113.5	729	6081	10	MN	---	1	30	1	0	7	8
367	162457	f	at 0.002498	258	465	520	7	AW	06	98	5	8	2	AV	352
368	164560	at	0.002499	424	120	7	1	1	1	1	1	1	1	1	1

Table 4

369	116189_at	0.002509	275.4	395.13	2810409H07Rik	A3210Y187	NM_130864	NM_025942	///	NM_030091	647200	0	t	f	484191	404	
370	160482_at	0.00252	652.3	1181.6	Acaal A1841705	NM_130864	NM_130864	NM_130864	///	NM_130864	647200	0	t	f	12996	304	
371	161879_r_at	0.002533	1064.33	1535.27	245080AV AV366282	NM_130864	NM_130864	NM_130864	///	NM_130864	647200	0	t	f	12996	304	
372	106637_r_at	0.002539	1064.33	1535.27	809840AV AV366282	NM_130864	NM_130864	NM_130864	///	NM_130864	647200	0	t	f	12996	304	
373	106629_at	0.002541	253.5	370.07	459110_211B12_rnk	285540AV AV366282	NM_130864	NM_130864	///	NM_130864	647200	0	t	f	12996	304	
374	95010_at	0.002548	589.93	888	410200_WN	592581V	NM_011692	NM_011692	///	NM_011692	118200	0	t	f	12996	104	
375	116137_at	0.002548	1853.83	091900_WN	410200_WN	592581V	NM_011692	NM_011692	///	NM_011692	118200	0	t	f	12996	104	
376	96518_at	0.002559	177.47	302.2	165920_WN	BC03_V1421WAV001	4198200B_XM_109990	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
377	104120_at	0.002571	969871_WN	410200_WN	592581V	NM_011692	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
378	163241_at	0.002573	236.6	832.6	410200_WN	592581V	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
379	93102_f_at	0.002574	512.6	671.20	119981AV	U2036	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
380	109363_at	0.002576	1764.33	2606.4	Adar A1841705	NM_130864	NM_130864	NM_130864	///	NM_130864	647200	0	t	f	12996	663	
381	101787_f_at	0.002589	1369.57	448100_WN	410200_WN	592581V	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
382	160230_at	0.002593	184.6	569.80	2394.6	98651V	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
383	92394_f_at	0.002594	274.6	489.8	Creb11	189100_WN	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
384	162481_f_at	0.002603	835.9	103.9	918520_WN	482381V	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
385	160840_at	0.002604	222.37	610210_WN	410200_WN	592581V	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
386	101406_at	0.002611	151.67	222.43	Sult2b1	AF026072	NM_017465	NM_017465	///	NM_017465	568031	0	t	f	12996	688	
387	161436_s_at	0.002638	1017	141.55	2010_WN	410200_WN	592581V	NM_011692	///	NM_011692	647200	0	t	f	12996	688	
388	161436_s_at	0.002638	1017	141.55	2010_WN	410200_WN	592581V	NM_011692	///	NM_011692	647200	0	t	f	12996	688	
389	96858_at	0.002653	595.1	178.20	1072.1	9076581V	Pdcd8	33694V27	NM_011692	///	NM_011692	647200	0	t	f	12996	688
390	96873_at	0.002669	51.0	228.1	1072.1	9076581V	Pdcd8	33694V27	NM_011692	///	NM_011692	647200	0	t	f	12996	688
391	101079_at	0.002692	223.3	311.1	Nxf1	904710_WN	982010B813	NM_011692	///	NM_011692	647200	0	t	f	12996	688	
392	99669_at	0.002734	398.9	27	558.47	392581V	X15986	91662	NM_000000	///	NM_000000	647200	0	t	f	12996	688
393	98937_at	0.002737	847.27	1036229_WN	///	813029_WN	///	322619	0MX2	///	038687_WN	///	536987_WN	///	365887_WN	183	
394	115984_WX0	///	41484_WX	///	438600_WN	26910_WN	///	26910_WN	///	///	///	///	///	///	///	///	
395	101596_at	0.002755	109.83	599610_WN	26910_WN	///	///	///	///	///	///	///	///	///	///	///	
396	104117_at	0.002771	95.9	164.33	019600_WN	1107R1	593020A	A12304	6.66	NM_027115	647200	0	t	f	12996	636	
397	104562_at	0.002784	313.93	383.3	523410_WN	33M16	408540AV	AW0332	58.660174	NM_011692	///	///	///	///	///	///	
398	112003_at	0.00279	692.7	956601_WN	BC02_0161L10AV	AM12_1	900400B	NM_026521	56.203	NM_011692	///	///	///	///	///	///	
399	101067_at	0.002794	697.9	956601_WN	BC02_0161L10AV	AM12_1	900400B	NM_026521	56.203	NM_011692	///	///	///	///	///	///	
400	94132_at	0.00281	757.33	488210_WN	3688681V	X03920	NM_011692	NM_011692	///	NM_011692	647200	0	t	f	12996	663	
401	165671_f_at	0.002811	620.3	918.7	239110_WN	FN3k	050120	3frxL	NM_022014	6.888	NM_011692	///	///	///	///	///	
402	102308_at	0.002814	396.1	259271_WN	5218381V	AP045	///	///	7.0	0.7	5.352	///	///	///	///	///	
403	96621_at	0.002815	1396.0	1113	3667491V	///	///	///	7.9	7.281	NM_027115	///	///	///	///	///	
404	161487_f_at	0.002853	612.27	10991_WN	2828283AV	AV080542	7.2	0.351	33.4901	NM_011692	///	///	///	///	///	///	

4 e1tbl

T000E0_WN /// 24652CDMN 78902LWV KIRL0H6040182 31.563 4.572 6805005220000.0

Table 4

405	116103_at	0.002862	1239.6	1631.4	---	AW121392	---	NM_013640	32.066	842300.0	ta	S4586	274		
406	101486_at	0.002868	1160.53	1777.63	Psmbl0	Y10875			45.212	832300.0	ta	613101	144		
407	94830_at	0.002886	576.9	90866700	537	537	537	537	8.7481	422300.0	ta	947501	074		
408	161495_x_at	0.002889	136.73	1945285c	WX	AV0161640	NM_009376	65c	8.7481	422300.0	ta	947501	074		
409	103371_at	0.002898	1203.1	1593.7	141121	AW100956	385528202	63	39.8521	102300.0	ta	215101	634		
410	97374_at	0.002911	319.77	915181	333	517970	25M	7274	38.5061	581300.0	ta	TSYMT	834		
411	167190_x_at	0.002918	396271	908021	67	410	60	62327762	48.5061	411300.0	ta	1839391	434		
412	104954_at	0.002922	339.87	806820	333	600581	AW150	3181D304364	3.751	34.26	691300.0	ta	110401	934	
413	169799_x_at	0.002946	1089.77	063541	47	342581	1204	293	3235820560	1.7432	391300.0	ta	516211	534	
414	116178_at	0.002952	515.67	721.3	333	309900	AW125	3181D304364	2.645	4.743	391300.0	ta	516211	534	
415	95602_at	0.002976	2253.13	655081	9	309900	AW125	3181D304364	2.645	4.743	391300.0	ta	516211	534	
416	93511_at	0.00298	39815600	660.9	9	309900	AW125	3181D304364	2.645	4.743	391300.0	ta	516211	534	
417	115190_at	0.003001	811512	499.09	34271	3181D304364	3181D304364	3181D304364	2.645	4.743	391300.0	ta	516211	534	
418	95493_at	0.003023	811512	499.09	34271	3181D304364	3181D304364	3181D304364	2.645	4.743	391300.0	ta	516211	534	
419	113730_at	0.003034	458.8	725.33	80322	7	80322	7	4.8143	101300.0	ta	425291	134		
420	93257_at	0.00305	861.4	1083.17	Ddx	806391	AW187	13	6.42	160300.0	ta	1116	624		
421	103584_at	0.003055	4659.17	669400	0	493	2518700	AW124	74462	7.561	160300.0	ta	113401	824	
422	166464_x_at	0.003064	204.1	392.73	---	383600	AW1529	11985515	233	092	960300.0	ta	17666	424	
423	109705_s_at	0.003066	1611.2	227696	0	D2B	519631	2103	924	351401	47164	60300.0	ta	19366	924
424	94530_at	0.003071	501.67	628.8	0	007810	AW1840376	118335445	5.2832	240300.0	ta	19366	924		
425	165367_f_at	0.003072	2382.5	54541	1	963081	AW1018	174580	8.829	49.105	140300.0	ta	03546	424	
426	99339_x_at	0.003094	491868	332	118265	1	629602	AW19383	61.266	1.402	990300.0	ta	501601	324	
427	99947_at	0.003096	195.7	294	433	0	81179	AW124	79664	3.233	550300.0	ta	85301	124	
428	104371_at	0.003097	258.43	46040	1	82840	AW190	1190	41.6594	50300.0	ta	15236	024		
429	94113_at	0.003097	274.9	51	089820	AW145	532026	AW161	332	3.524	430300.0	ta	03311	614	
430	163126_at	0.0031	2277	51	089820	AW145	532026	AW161	332	3.524	430300.0	ta	03311	614	
431	162524_at	0.003101	341.87	45105	1	2099X	E2300	12910	47.5593	3178	320300.0	ta	3656	814	
432	103527_at	0.003106	235.57	361	604800	1	16831	AW124	79664	3.233	100300.0	ta	061511	414	
433	98862_at	0.003117	658286	10	905	561848	---	de4	603	67382	86200.0	ta	11536	914	
434	170223_f_at	0.003136	374.7	579.2	AW106	6R1k	527086	52664	6.124	49.515	256200.0	ta	20956	514	
435	112975_at	0.003163	2434.1	095020	23	36272	AW185	2433	47.895	5390	47.6801	946200.0	ta	66191	314
436	104071_at	0.003169	92.43	154.3	493340	361	168051	AW1835009	38.045	89908	226200.0	ta	56401	124	
437	163638_i_at	0.003173	1905.83	294731	WX03	90484	AW121	2117R1k	49198	806	40600.0	ta	061191	114	
438	114497_at	0.003185	1847.8	202800	3	956001	AW121	141	4.3651	1.3021	868200.0	ta	173301	604	
439	107572_at	0.003227	212.57	351686	00	AW0	847160	AW1358	2361	34.931	688200.0	ta	564191	804	
440	105746_at	0.003238	990.23	12374	20	AW1	003458	AW15	465500	377906	6.945	988200.0	ta	03846	404
441	107319_at	0.003248	049610	57801	12	06121	AW1	01	4.1391	9.6321	298200.0	ta	301511	504	
442	98575_at	0.003248	049610	57801	12	06121	AW1	01	4.1391	9.6321	298200.0	ta	301511	504	

Table 4

Table 4

443	98072_r_at	0.003266	35.63	83.47	Dck	X77731	NM_007892	10	ct			
444	110545_at	0.003283	209.97	409.97	---	A1593064	NM_029770					
445	106872_at	0.003284	116J59820	MN1426.058058	AVAW0463	J5TdM	AW04630	0981	NM_1735J2C1			
446	104299_at	0.0033	414.13	64656.MX	2128520V4	---	A18436	0567	NM_145J98Z1			
447	101179_at	0.003313	545620	MN7	2695381V3				kir9048750367	75.729	79.215	
448	97207_f_at	0.00333	269.87	495.17	---	---	---	---	---	---	---	
449	117311_at	0.003333	1865.8	2393.9	---	---	---	---	---	---	---	
450	103748_at	0.003336	443.4	1198.1	493	J9642J	MXK	328919J	27	---	9.582	8.721
451	100915_at	0.003336	122.964	382	MX1605	664064	AVAV350	---	NM_022L1	3394	/	NM_334395
452	164530_f_at	0.003358	569J31820	MN9021	L1440M	M1877	MTR3T1T8250	645838639	---	---	---	---
453	102431_at	0.003361	588.8	868.27	StxJ04800	MN16	66033AV829	RTN	7.715	8.022	---	---
454	96076_at	0.003371	16628J	MN7	019540W3	---	---	---	---	---	---	---
455	164407_f_at	0.003375	1.42318	.MNM	///	8014220	MH	---	---	---	---	---
456	160869_at	0.003391	532	060600	MNS1T3	666338990	---	---	---	---	---	---
457	164680_s_at	0.003418	727.6	1115.23	262	2991AV	A12	---	---	---	---	---
458	93033_at	0.003423	115.6	207.53	Ube2	---	---	---	---	---	---	---
459	96875_r_at	0.00343	49.6	12664	L10	MN	A159	089981V	A1841410	4.	M_141816	9.901
460	115631_at	0.00343	726.03	10309320	MN	---	---	---	---	---	---	---
461	112361_at	0.003434	1090.63	1411.63	Coq6	24921V	000	---	---	---	---	---
462	105343_at	0.003447	244.37	285261	MN	---	---	---	---	---	---	---
463	99620_at	0.003457	75	148	485821	MX	Stp	442054	Y46	---	NM_022L1	3394
464	163663_at	0.003472	1046.6	918520	MN7	014181V	A18494J	651V	NM_01749	2921	9.64	---
465	111845_at	0.003479	540.47	91339186J	MN	5105	S682T	EVAV1662792	32.5111	9.722	---	---
466	164112_at	0.003491	381.23	531.33	334220	MN	---	---	---	---	---	---
467	160146_f_at	0.003505	203.9	284504	610	MN	---	---	---	---	---	---
468	162573_at	0.003514	2720.87	266907.13	55J95X	OG	EMJDK	---	---	---	---	---
469	164266_at	0.003527	429.77	639	888010	MN	8113R1	5LL81M	AM3dp	417	T206	NM_022L1
470	107462_at	0.003531	1509598	MX	///	632386J	MN	7123	662053	AVAA17907995091	XM_2842	9221
471	109630_at	0.003536	5J3318J	MN	///	3014220	MN	---	---	---	---	---
472	112876_at	0.003539	122.8	285.6	---	---	---	---	---	---	---	---
473	111970_at	0.003553	4406.53	980J20J	MN	8844581V	AW060474	6.3632	---	---	---	---
474	116877_at	0.003555	118	998800	MN	1912	J665481V	---	---	---	---	---
475	168591_r_at	0.003569	512.67	642.57	J5J95Q	8	FOR1K	---	---	---	---	---
476	104242_f_at	0.003582	127	340971	MN	1495J	J2781V	---	---	---	---	---
477	170586_r_at	0.003583	132	938J	71	MN	1860	563940M	A1850665J	9271	NM_022L1	3394
478												
479												
480												

Table 4

13 of 238700 MN 13L44X KCD 47.438 39.53

Table 4

519	109715_at	0.004153	4005.7	4946.97	Cugbp1	AW046738	NM_017368	///	NM_198683
520	97356_at	0.004214	1687.1	2539.17	1810008021R1k	AI839653	NM_026938		
521	97273_at	0.004227	610.63	752.4	Ars2	AI845953	NM_031405		
522	92555_at	0.004249	199.5	295.7	Tmasf6	AF053454	NM_019656		
523	106911_at	0.004271	666.93	1027.8	Dnm	AK121763	NM_010065		
524	116577_at	0.004281	456.1	639.63	C230080120R1k	AI450355	XM_485838		
525	96021_at	0.004297	791.6	994.03	0710001005R1k	AI854264	XM_203592		
526	104106_at	0.0043	173	291.07	Shnol	AI837830	XM_355637		
527	104716_at	0.004306	136.53	180.77	Rbp1	X60367	NM_011254		
528	170945_f_at	0.004312	1386.03	1623.37	---	AV112101	NM_011573		
529	164746_f_at	0.004314	1786.03	3372.7	---	AV147912	---		
530	130033_at	0.004346	274.73	367.93	---	AV147912	---		
531	160964_at	0.004351	3197.3	3936.8	D16Bwg1494e	AI838494	XM_358773	///	XM_622611
532	164636_f_at	0.004356	118.9	217.4	---	NM_144806	///	XM_130282	
533	169766_r_at	0.004387	791.37	1128.17	---	AV101347	NM_026797		
534	135613_at	0.004389	198.87	650.13	Trim41	AI505867	XM_618865		
535	96291_f_at	0.004407	2425.8	3064.27	---	AI835847	NM_010888		
536	113200_at	0.004409	1147.3	1507.4	---	AW122883	NM_133700		
537	112719_at	0.00441	1932.7	3386.8	D6Hrtc349e	AW215036	NM_182784		
538	94835_f_at	0.004433	13640.1	16905.53	Tubb2	M28739	NM_009450		
539	164377_f_at	0.004443	2840.03	3954.67	---	AV322737	NM_001013256	///	NM_026889
540	164725_f_at	0.004451	86.83	238.37	---	AV083420	---		
541	164305_at	0.004453	93.47	237	---	AV237879	---		
542	103875_at	0.004457	529.27	651.2	AM5520C1	AA967717	NM_031375		
543	100515_at	0.004485	543.1	867.03	Furin	X54056	NM_011046		
544	136224_at	0.004491	537.7	724.8	MGC39058	AI836305	NM_138949		
545	164090_i_at	0.004511	117.33	276.4	---	AI462901	---		
546	164301_f_at	0.004516	151.63	273.7	---	AV235519	NM_026501	///	NM_028933
547	101959_r_at	0.004537	777.2	1213.1	Tfdp1	X72310	NM_009361		
548	169465_s_at	0.004537	1052.07	1840.7	---	AV156900	NM_028454		
549	161808_f_at	0.004539	229.4	388.07	---	AV371846	NM_007965		
550	100576_at	0.004561	219.23	309.87	Pafah1b3	U57746	NM_008776		
551	115965_at	0.004586	1052.27	1364.13	---	AI851716	---		
552	163920_at	0.004602	154.57	252.77	E330005K07R1k	AI592356	NM_027777		
553	113145_at	0.00461	752.8	1021.1	Xpos	AI838163	NM_028198		
554	93559_at	0.004637	784.5	1034.2	Apex1	D9C374	NM_009687		
555	166527_f_at	0.004649	462.7	675.3	---	AV303385	NM_133248		
556	161494_f_at	0.004658	395.9	580.27	---	AV050776	NM_025313		

Table 4

595	94929_at	0.005094	723.7	1177.63	Ptpr1	M97590	NM_011201		
596	164717_f_at	0.005113	266.63	427.63	---	AV053535	---		
597	106615_at	0.005114	1033.63	1447	Ankrd17	AM208385	NM_030886	///	NM_198010
598	163015_at	0.005122	838.77	1249.63	Amn	AA929443	NM_033603		
599	169773_r_at	0.005123	2021.23	3037.5	---	AV102460	NM_010094		
600	171283_r_at	0.005124	4466.87	6316.77	AV216498	---			
601	94062_at	0.005126	2633	3822.07	Ndufv2	AI847609	XM_128725		
602	160170_at	0.005127	4356.4	5230	Stmn3	AF069708	NM_009133		
603	107581_at	0.005134	2021.43	2974.73	Cdc42bpb	AI843686	NM_183016		
604	165757_l_at	0.005137	2443.2	3305.23	---	AI844065	XM_620310		
605	101499_at	0.005146	478.1	634.5	Ilk	U94479	NM_010562		
606	160263_r_at	0.005161	391.5	552.6	Ndfip2	AI840981	NM_029561		
607	94238_at	0.005163	35.43	104.4	2310046G15Rik	AW228316	NM_029614		
608	115402_at	0.005166	699.7	915.97	2700087I09Rik	AW120513	NM_198161		
609	107130_at	0.005171	149.03	188.4	493142BF02Rik	AW214372	NM_027642		
610	AFRX-MUR_b2_at	0.005177	1440.33	2060.63	---	X63136	---		
611	115129_at	0.005195	494.63	771.17	AW907654	AW123461	NM_199322		
612	160661_at	0.005202	500.6	633.6	5730472N09Rik	AI840615	NM_175392		
613	100628_at	0.005234	1079.7	2766.13	---	AI840263	NM_025523		
614	109157_at	0.005246	277.37	438	Mrps30	AI847000	NM_021556		
615	113618_r_at	0.005281	178.43	315	2810002N01Rik	AI663283	NM_027404		
616	104725_at	0.005293	175.63	262.87	Arhq	AW060401	NM_145491		
617	114752_at	0.005294	38.5	115.4	D930038M13Rik	AI843572	NM_001014399	///	NM_001014422
618	NM_001014424	///	NM_178790					///	NM_001014423
619	96296_at	0.0053	296.43	439.03	Mrpl15	AI843685	NM_025300		
620	160801_at	0.005308	776.63	947.27	2310009N05Rik	AW061073	NM_C25861		
621	110763_at	0.00531	3386.87	4491.6	Hdac11	AI835406	NM_144915		
622	104605_at	0.005329	577.43	739.57	1110001I14Rik	AW047554	NM_197985		
623	94818_at	0.00534	600.33	798.93	Ogt	AW047223	NM_139144		
624	112900_at	0.005343	1006.13	1554.6	Mrp63	AA682034	NM_026401		
625	102137_f_at	0.005359	1423.37	1746.3	---	AI845856	---		
626	111894_at	0.005369	448.23	688.53	Mrpl32	AA734460	NM_029271		
627	98557_f_at	0.005373	3316.07	4184.43	Psmb4	U65636	NM_008945		
628	137556_r_at	0.005373	818.17	1541.17	---	AI606152	---		
629	165178_f_at	0.005381	478.17	649.97	---	AV378746	NM_011573		
630	168187_at	0.005393	237.3	393.53	Smarcal	AV301607	NM_053123		
631	138052_g_at	0.005404	3397.03	5305.33	---	AI836889	NM_201371		
	100964_at	0.005417	1625.2	2146.67	Vc11b	AF035208	NM_016800		

Table 4

632	115251_at	0.005417	1177.47	1492.83	Katnbl1	AA795996	NM_028805	699	620001	tw
633	93319_at	0.005421	396.47	602.23	Rasa3	U20238	NM_009025	899	6156	tw_7
634	162971_r_at	0.005424	134	271320	WNT24	S55881V33FLIK1	66q jnpnAW124r	899	508500	tw_7
635	104345_at	0.005471	907331	5862581V	KIR2T1	I4T0018161	I7E67857	899	408500	tw_00L201
636	98029_at	0.005483	369.6	531	226600	WNT311005	152690k	899	661500	tw_199711
637	165329_r_at	0.005485	1185.37	150920	WNT3	2561481VAV313	KIR3CD280002765	899	281500	tw_14076
638	111966_at	0.005492	300020	56221W	KIR90L	I300190A18367C	L581NM_030076	899	441500	tw_s_508091
639	98884_r_at	0.005501	414.7	751	006110	WNT183	4535208AVN	899	891500	tw_68296
640	103732_at	0.005519	115	132320	WNT478	782190MW	P1D5pa	899	251500	tw_16636
641	129210_at	0.005523	541.27	179800	WNT	4478	782190MW	899	541500	tw_009291
642	105115_at	0	545620	WNT130	5673581V	K	2xqf5L29	899	241500	tw_r_922591
643	160129_at	0.005546	90421	WNT40	3015151VAV	Refid	KIR1010463L4NM_023112921	899	531500	tw_f_52586
644	95131_f_at	0.005553	516	29333	WNT5840	606100JAV	Ndu	899	411500	tw_f_119801
645	13	543820	WNT	0	011420	WNT	0	899	699500	tw_f_46491
646	164838_f_at	0.005599	122.67	285	496910	WNTAV34	51542AVN	899	589500	tw_x_294101
647	101081_at	0.005623	2832.8	991420	WNT	62093AV	AV1010483	899	415201	tw_f_88691
648	164621_i_at	0.005626	4209.67	461110	WNT3	26129AV	AV1573	899	589500	tw_r_83901
649	166118_i_at	0.005628	1599.1	38800	WNT	44690	NP1	899	819500	tw_f_19491
650	162771_at	0.00564	406819	WNT	0	1920	WNT	899	519500	tw_f_19491
651	112913_at	0.005648	84120	WNT	9210481V	KIR2N2	00132A18368	899	99500	tw_18056
652	95081_at	0.00566	249	139861	WNT34	8889381V	231	899	849500	tw_116211
653	164461_f_at	0.005675	419920	WNT	06621W	KIR2L2	000190	899	549500	tw_14291
654	101462_r_at	0.005678	122	310600	WNT24	83511AV	Pja1	899	829500	tw_i_811991
655	106631	535984	WNT	0	591484	WNT	0	899	929500	tw_i_129491
656	164988_f_at	0.005685	1025.77	205610	WNT	752350	WNT	899	329500	tw_180101
657	167794_f_at	0.005696	293.8	394.03	506420	WNTAV27	09824AV	899	665500	tw_f_88891
658	108614_f_at	0.005717	291	130231	WNT3270	329194V	---	899	275500	tw_f_90241
659	98525_f_at	0.005735	246	219920	WNT3947	2652581V	D14WSu	899	355500	tw_f_13156
660	165276_r_at	0.005742	41	399620	WNT	042320	WNT4733	899	945500	tw_621091
661	162600_at	0.005745	415.27	093484	WNT	093484	WNT	899	935500	tw_511501
662	93991_at	0.005752	6583.7	7901.33	419920	WNT	06621W	899	325500	tw_01261
663	96289_at	0.005768	920	63421	WNT226	6100581V	Stom12	899	615500	tw_232301
664	160805_s_at	0.005777	510.33	626.67	899320	WNTAB02	113381V	899	105500	tw_r_48886
665	94047_at	0.005782	816	2800	30	WNT185	5919381V	899	264500	tw_r_99611
666	114671_at	0.005796	439.8	570	501610	WNT2D03	80231E	899	584500	tw_r_623591
667	102700_at	0.005804	340	56151	WNT4645	654090W	Tbr1	899	384500	tw_r_62086
668	95137_at	0.005805	566.57	458910	WNT	194710	FA	899	144500	tw_543401
669	100079_at	0.005807	263	35981	WNT3370	298821W	Ndu	899	424500	tw_r_146291
			508820	WNT	25	508820	WNT	899	124500	tw_152511
			900567	WNT	832020	WNT	832020	899	474500	tw_152511

Table 4

Table 4

821	93190_at	0.008006	195.73	260.2	---	AW209179	XM_620267		
822	166274_f_at	0.008032	2952.2	3558.3		1110061L23R1k	AV280207	NM_029406	
823	98350_at	0.008045	327.07	449.6	Sstr2	AA008914	NM_009217		
824	103467_g_at	0.008048	536.7	778.53	---	AA790056	NM_019396	///	NM_180962
825	94348_f_at	0.008055	1991.2	2457.5		Pcmt1	AW124044	NM_008786	
826	94420_f_at	0.008055	467.1	600.87	Cry1	AB000777	NM_007771		
827	99126_at	0.008066	155.43	504.5	---	IC4961	NR_001463	///	NR_001570
828	109728_at	0.008078	1079.1	1483.8		Rch3	AI848741	NM_175381	
829	103960_at	0.008103	2047.27	2965.63		Rap2ip	U73941	NM_016759	
830	165145_s_at	0.008103	1109.57	1577.57	---	AV358817	NM_007563		
831	162549_at	0.008104	1146.93	1487.17		503140CM07R1k	AI464691	NM_020586	
832	95123_at	0.008123	195.63	289.6		AI844003	NM_029468		
833	109016_at	0.008171	1068.33	1299.3	---	AI891634	XM_622387		
834	170475_r_at	0.008181	511.23	837.6	---	AV211425	NM_008558		
835	98975_at	0.008197	75.97	119.83		2410008G02R1k	AI019999	NM_172410	
836	164045_at	0.008253	492.67	664.1	---	AV342167	NM_001013792		
837	102807_at	0.008254	853	1059.87		9230112005R1k	AW048054	NM_173347	
838	104386_f_at	0.00827	3210.9	4422.4		Itgav	AI843901	NM_008402	
839	111826_at	0.008272	2454.3	3225.7		Wasbp	AW047181	NM_030729	
840	99444_at	0.008292	326.47	450.93		Ramp2	AJ250490	NM_019444	
841	95963_at	0.008326	172.63	271.17		C77370	C77386	XM_205178	
842	162938_at	0.008346	1029.97	1192.9		AI836810	AI836810	NM_172938	
843	97277_at	0.008358	205.13	308.4		1810015W01R1k	AI844179	NM_026933	
844	116642_f_at	0.008359	236.07	359.43		2310036D22R1k	AI852563	NM_027992	
845	161243_f_at	0.00836	1456	1732.67	---	AV284333	NM_022419		
846	129278_at	0.008361	414.2	1038.1		Pnkp	AI049061	NM_028398	
847	116942_at	0.008416	1771.9	3067.77		Picalm	AI838939	NM_146194	
848	97358_at	0.008422	5096.27	5992.47		Iphr1	AI851356	NM_181039	
849	96322_at	0.008437	1120.57	1305.37		Edf1	AI836001	NM_021519	
850	100042_at	0.008444	842.1	1056.7		Hagh	AI837921	NM_024284	
851	113070_at	0.008457	830.7	1495.5	---	AA959975	NM_019775		
852	163418_at	0.008473	378.2	511.47	---	AI121731	NM_011365		
853	113451_at	0.00848	1197.43	1665.5		Dnmt31	AA919800	NM_019448	
854	95109_at	0.008519	552.03	703.33		No15a	AW121447	NM_024193	
855	166210_i_at	0.008529	5310.4	5994		AI447711	AV26897	NM_207214	
856	97296_at	0.008534	180.83	234.9		Mrpl44	AW124918	XM_357108	
857	92291_f_at	0.008546	66.43	168.37		Cfh11	M29008	NM_015780	
858	104135_at	0.008562	720.73	839.43		Ar13	AW045474	NM_019718	

Table 4

859	115883_g_at	0.008563	489.87	664.2	Mapk11	AW060873	2cjo74	NM_011161	74.705	22600	0	ta	f	600591	968
860	167732_r_at	0.008574	862.8	1477.57	906600	WN	AV20742	511000AV	8.022	22600	0	ta	f	600591	968
861	164228_at	0.008584	1816.87	2483.87	212631AV	823	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
862	163666_at	0.008594	410.53	015110	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
863	92603_at	0.008621	4782.57	40547	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
864	95412_at	0.008648	562.83	61311E	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
865	106837_at	0.00865	269.92	889920	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
866	101542_f_at	0.008655	1074.8	435.6	208621AV	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
867	105815_at	0.008655	804.5	820481AV	NR190193	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
868	106255_at	0.008656	62920	61520	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
869	94907_f_at	0.008674	236.6	3059	23	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
870	164797_f_at	0.008708	2473.3	68441	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
871	167054_at	0.00872	547.73	284.2	820481AV	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
872	116009_at	0.008749	241.13	50902E	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
873	112356_at	0.008774	363	847920	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
874	130799_at	0.008775	2158.87	155800	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
875	162125_f_at	0.008796	1052.97	144.7	415181	WN	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
876	94400_at	0.008826	1139.27	1353	216121AV	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
877	116105_at	0.008874	1330.13	409841	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
878	101694_f_at	0.008877	144.13	619411	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
879	96113_at	0.008886	924.9	1327	NR190193	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
880	113294_at	0.008917	11521	636367AV	NR190193	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
881	164341_f_at	0.008918	121.67	604812	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
882	95721_at	0.008921	984619	906	Mapk11	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
883	112824_at	0.008924	953.2	1254.37	1110015X	K06	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
884	161396_f_at	0.008934	649.3	1046.87	AV271976	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
885	135744_at	0.008938	8318.3	421920	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
886	99925_f_at	0.008952	612.97	302920	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
887	94032_at	0.008976	395320	7	3320	53	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
888	112313_at	0.008981	283	106521	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
889	115844_at	0.008994	813.57	1038.47	NR190193	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
890	164832_f_at	0.009059	1533.47	820010	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
891	96899_at	0.009063	2941.93	3665.73	NR190193	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
892	98936_at	0.009088	705.13	100.7	NR190193	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
893	164325_f_at	0.009116	488	474310	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
894	103273_s_at	0.009181	96920	990	21	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
895	170984_at	0.009196	9192.43	954120	WN	NR190193	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568
896	165009_f_at	0.00922	507.47	720.8	Cln2	AV00115	NR190193	NR190193	6.19011	961600	0	ta	f	866021	568

Table 4

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Table 4

897	94531_at	0.009239	669.77	960.67	231000501ARIK_923052	AW124582	NM_026452	174600.0	te	L1991T	466
898	101042_f_at	0.009278	184.17	296.67	5137210	U51014	NM_008920	174600.0	te	L1991T	466
899	116303_at	0.00933	924541 MN	186.07	924541 MN	272.83	2203780	174600.0	te	L1991T	466
900	94043_at	0.009332	2996.47	3961.57	554331 MN	1573	NM_022000	174600.0	te	L1991T	466
901	115741_at	0.009363	554331 MN	471.95	471.95	1573	NM_022000	174600.0	te	L1991T	466
902	96610_at	0.009392	1896.07	430820 MN	2472.12	196116	NM_133355	174600.0	te	L1991T	466
903	105402_at	0.009394	756.95	1083.52	924541 MN	1573	NM_022000	174600.0	te	L1991T	466
904	105802_at	0.009397	210.77	356.67	554331 MN	1573	NM_022000	174600.0	te	L1991T	466
905	113837_f_at	0.00941	600.00	600.00	600.00	600.00	NM_022000	174600.0	te	L1991T	466
906	163690_at	0.00943	424331 MN	820.27	820.27	1573	NM_022000	174600.0	te	L1991T	466
907	98129_at	0.009437	285520 MN	424331 MN	820.27	1573	NM_022000	174600.0	te	L1991T	466
908	APFX-PyruCarbMur/L09192_f_at	0.009453	258.00	258.00	258.00	258.00	NM_022000	174600.0	te	L1991T	466
909	94367_at	0.009456	1165.97	1321.02	1321.02	1573	NM_022000	174600.0	te	L1991T	466
910	99101_at	0.009475	494.67	600.00	600.00	600.00	NM_022000	174600.0	te	L1991T	466
911	112445_at	0.009478	646941 MN	266700 MN	408.00	7	NM_022000	174600.0	te	L1991T	466
912	93581_at	0.009497	3145.37	527861 MN	428.81	1084.87	NM_022000	174600.0	te	L1991T	466
913	105276_f_at	0.009499	694.1	1444.9	1444.9	1573	NM_022000	174600.0	te	L1991T	466
914	103964_at	0.009507	775.3	1002.7	1002.7	1573	NM_022000	174600.0	te	L1991T	466
915	100225_f_at	0.009507	269.7	438	438	1573	NM_022000	174600.0	te	L1991T	466
916	171221_at	0.009507	870.27	870.27	870.27	1573	NM_022000	174600.0	te	L1991T	466
917	100009_f_at	0.009511	1413.53	1890.81	1890.81	1573	NM_022000	174600.0	te	L1991T	466
918	164990_f_at	0.009529	147.57	288.84	288.84	1573	NM_022000	174600.0	te	L1991T	466
919	103247_at	0.009533	480.9	632	632	1573	NM_022000	174600.0	te	L1991T	466
920	112703_at	0.009548	319.00	4296.82	4296.82	1573	NM_022000	174600.0	te	L1991T	466
921	133820_at	0.009558	652	808.41	808.41	1573	NM_022000	174600.0	te	L1991T	466
922	93008_at	0.009569	663	647.810	647.810	1573	NM_022000	174600.0	te	L1991T	466
923	94876_f_at	0.00958	1617.8	4270.00	4270.00	1573	NM_022000	174600.0	te	L1991T	466
924	92925_at	0.00958	292.43	261601	261601	1573	NM_022000	174600.0	te	L1991T	466
925	109175_at	0.009654	1062.9	482.50	482.50	1573	NM_022000	174600.0	te	L1991T	466
926	113552_at	0.009656	1887.6	236701	236701	1573	NM_022000	174600.0	te	L1991T	466
927	111532_at	0.009657	1111.03	236701	236701	1573	NM_022000	174600.0	te	L1991T	466
928	164992_f_at	0.009671	1619.11	458980	458980	1573	NM_022000	174600.0	te	L1991T	466
929	111491_at	0.009693	363.37	595.3	595.3	1573	NM_022000	174600.0	te	L1991T	466
930	109424_at	0.009697	750	923.81	923.81	1573	NM_022000	174600.0	te	L1991T	466
931	163512_at	0.009725	658	466.620	466.620	1573	NM_022000	174600.0	te	L1991T	466
932	164012_at	0.009752	117	49.4810	49.4810	1573	NM_022000	174600.0	te	L1991T	466
933	93975_at	0.009771	708	0.00260	0.00260	1573	NM_022000	174600.0	te	L1991T	466
934	116671_at	0.009771	899	028800	028800	1573	NM_022000	174600.0	te	L1991T	466

Table 4

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Table 4

935	101525_at	0.009777	2043.47	2642.67	Ndufb10	Atg21afg21	NM_026684									
936	161997_f_at	0.009783	81.37	137.07	---	AV329607	---									
937	108908_at	0.009803	1631.87	1808.87	Arnt	AA222032	NM_009709									
938	112850_at	0.009821	873.23	1278.03	2900002H16R1k	AW121352	NM_021430									
939	168810_r_at	0.009829	562.83	744	---	AV269742	NM_138677									
940	160690_at	0.009851	487.03	726.4	Csnk2a1	AW050240	NM_007788									
941	167787_at	0.009858	809.13	1173.4	---	AV265048	---									
942	134726_f_at	0.009859	479.03	773.57	S1c1a7	AA182154	NM_009201									
943	135755_at	0.009871	524.9	832.77	2400009B08R1k	AI851656	XM_358687									
944	167641_r_at	0.009908	540.07	915.6	0610012D17R1k	AV266358	NM_025329									
945	161913_r_at	0.009927	7689.57	10294.83	---	AV378014	---									
946	116400_at	0.009935	107.17	165.3	4632415D10R1k	AI842937	NM_030165									
947	102364_at	0.009966	7584.37	11474.5	Jundi	J04509	NM_010592									
948	109103_f_at	0.009981	324	466.2	1110038B12R1k	AI841088	XM_358504	/// XM_359415								
949	169645_r_at	0.009984	244.33	449.73	---	AV305445	---									
950	92790_at	0.01	149.83	229.73	Kpna2	D55720	NM_010655									

	51453_c_mx	///	405853_c_mx	102755D	02755D	2pudk		32.744	32.744	33.442	38.641	10.0	te	06726	056
	51453_c_mx	///	405853_c_mx	544503AV	544503AV	544503AV		32.744	32.744	33.442	38.641	10.0	te	06726	056
	51453_c_mx	///	405853_c_mx	88	88	88		32.744	32.744	33.442	38.641	10.0	te	06726	056
	51453_c_mx	///	405853_c_mx	88	88	88		32.744	32.744	33.442	38.641	10.0	te	06726	056
	51453_c_mx	///	405853_c_mx	88	88	88		32.744	32.744	33.442	38.641	10.0	te	06726	056
	51453_c_mx	///	405853_c_mx	88	88	88		32.744	32.744	33.442	38.641	10.0	te	06726	056

Table 4

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Table 5

%I	affyid	p	DR	52731 MN	8602581V	51A01E	31.951T	46.214Z	520000.0	ta_96736	23
1	109431_at	0.000001	1015.026910_MN	8.03	93831D_	12050M3	2.182	4.51581	420000.0	ta_283391	13
2	130667_at	0.000001	1551.97	474800_MN	41R20D2041E1F	4.3102	5.9952	420000.0	ta_692701	03	
3	96496_g_at	0.000002	473610_MN	0831E0FV	1_41R101T8300190	4.01291	4.01292	420000.0	ta_010831	62	
4	104248_at	0.000003	1794.9	884700_MN	0_44939GQ12111V	8.1193	8.1193	420000.0	ta_512301	82	
5	95978_at	0.000003	181.37	582520_MN	2_60481V4_21111V	4.26101	4.26101	420000.0	ta_852631	42	
6	112702_at	0.000003	690.83	172.67	0161581V	1_35145110	0.06955	0.06955	420000.0	ta_01626	52
7	115299_at	0.000004	1334.374110	MN24.4	268640MWS1	1_35145110	0.06955	0.06955	420000.0	ta_099956	42
8	109408_at	0.000005	1019.33	201110_MN	AI_014127	018.32162E	5.61T	5.61T	420000.0	ta_968901	22
9	99076_at	0.000006	911620_MN	924121M	1_530821M	1_51457	4.31654	4.31654	420000.0	ta_84936	12
10	129234_at	0.000007	306.83	21.67	0660581V403	1_321090234	32.9455	32.9455	420000.0	ta_28131	02
11	114445_at	0.000007	969571_MN	8213481V	1_41R120820035012515	1_74711	0.091053	0.091053	420000.0	ta_952931	61
12	94740_g_at	0.000008	180.57	372.17	152121M	3_78131	5.0913	5.0913	420000.0	ta_216911	81
13	101362_at	0.000009	1765.1	1511103_MN	M_14012M3_24111V	1_39017692	9.1T	9.1T	420000.0	ta_25501	71
14	168095_at	0.00001	1387.73	1714.544800	MN9.1	926854E2	0.00874	0.00874	420000.0	ta_548101	51
15	101837_g_at	0.000011	269102_MN	196910_MN	499500B2	6_341M	3.78831	3.78831	420000.0	ta_560891	41
16	97760_at	0.000011	3160.5	349110_MN	1_52934M	1_341	4.5081	4.5081	420000.0	ta_293101	31
17	107527_at	0.000011	3500.424600	MN74.1	151521M	3_00281	1_311	1.54596	420000.0	ta_544411	11
18	116912_at	0.000011	5546.23	485110_MN	0_40560M	2_2111V	1.9215	1.9215	420000.0	ta_462621	01
19	136256_at	0.000014	4591.37	1818.67	966940M	2_8035-	3.36101	3.36101	420000.0	ta_92066	6
20	131832_at	0.000015	1755	495100_MN	4_69241V	1_351	3.8069	3.8069	420000.0	ta_804601	8
21	93648_at	0.000016	3294.094810	MN16.1	143581V	2_1840972	0.111	0.111	420000.0	ta_662511	7
22	106896_at	0.000017	559229_MN	000871_MX	496414V	1_840972	4.3181	4.3181	420000.0	ta_202711	9
23	136760_at	0.000017	551920_MN	059122M	1_41R10D8300190	1_41R138	6.4641	6.4641	420000.0		
24	95669_g_at	0.000019	1019.27	999803E1M	0_83398M	1_134M	1_41R137	1_41R137	420000.0		
25	92910_at	0.000021	1333.318310	MN207.1	9608481V	1_51	4.61551	4.61551	420000.0		
26	97104_g_at	0.000021	3618.8	1179.57	531521M	1_13836	1_30881M	0.1692	420000.0		
27	139258_at	0.000021	26107.07	16220.37	5_421M	1_13836	1_30881M	0.1692	420000.0		
28	103275_at	0.000023	2566.5	2013.4	MN1 AB026806	NM_016908			420000.0		
29	138070_at	0.000023	1851.57	281.2	4121402D02R1K	AA791958	NM_028710		420000.0		
30	104269_at	0.000024	2412.97	1456.13	E10V15	AI852098	NM_134255		420000.0		
31	163382_at	0.000024									
32	93496_at	0.000025									

1 of 47

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Table 5

71	92659_at	0.000057	847.03	278.5	5730402K07Rik	AF115480	NM_019688
72	163972_at	0.000058	1187.83	894.93	Prmp4	AI648762	NM_021534
73	129436_at	0.000059	668.17	152	2900057D21Rik	C88264	NM_145221
74	92508_s_at	0.000063	400.97	115.73	Utrn	X83506	NM_011682
75	115455_at	0.000063	1287.07	372.73	---	AI875522	NM_010243
76	112680_at	0.000063	2211.8	492.23	Ssbp3	AI835469	NM_023672
77	114065_at	0.000064	8150.07	3030.8	Scrg3	AW046758	XM_193795
78	93188_at	0.000065	2628.27	1197.6	Dkk3	AJ243964	NM_015814
79	97184_at	0.000065	367.07	268.5	BC023106	AI528219	NM_145476
80	163408_at	0.000065	839.8	263.27	Apc	AW121617	NM_007462
81	164243_at	0.000065	820.93	290.43	4930515K21Rik	AI597519	NM_133817
82	103434_at	0.000066	269.07	30.73	Pscd3	AF001871	NM_011182
83	160098_s_at	0.000068	515.23	298.6	Cryab	AI842724	NM_007983
84	108893_at	0.000069	1749.83	419.23	Mef2a	AI060854	NM_001033713
85	164225_at	0.000069	805.9	201.03	Claspl	AI616095	---
86	98890_at	0.000073	600.33	306.87	1700012G19Rik	AI848173	NM_025954
87	107928_at	0.000073	588.77	277.33	Sck2	AI874509	NM_009289
88	AFFX-TransRecMur/X57349_3_at	0.000074	0.000074	1374.33	399.7	Ttfr	X57349
89	99511_at	0.000075	1485.03	896.9	Pikcb	X53532	NM_008855
90	116697_at	0.000075	2504.77	813.07	4930415T21Rik	AA427047	NM_177767
91	100320_at	0.000076	186.93	33.4	Kpna4	AF020771	NM_008467
92	114801_at	0.000077	1230.87	610.93	---	AT846867	---
93	105584_at	0.000083	827.97	383.83	2410014A08Rik	AI604793	NM_175403
94	140851_at	0.000084	1372.9	897.97	---	AW213569	---
95	114569_at	0.000085	280.37	80.3	C630029K18Rik	AW123047	NM_144871
96	97017_f_at	0.000086	503.73	437.13	---	AW214439	---
97	166833_at	0.000088	97625.93	43465.37	Nrgn	AI837453	NM_022029
98	168346_r_at	0.000088	10192.43	3403.9	Sytl1	AV283445	NM_018804
99	105742_at	0.00009	2116.5	1097.83	Sdccag8	AI835291	NM_011785
100	103092_at	0.000091	3206.5	1120.93	Trim37	AW124316	NM_197987
101	166658_at	0.000091	2373.83	1415.47	---	AI047433	NM_010636
102	134288_at	0.000093	439.2	22.83	Mafk1	AI551319	XM_110503
103	109781_at	0.000094	2038.87	951.67	D030063F01Rik	AW121178	NM_133766
104	114683_at	0.000094	2627.37	2266.83	C330002T19Rik	AW125126	XM_126866
105	107453_at	0.000094	2768.77	1875	Ube2n	AW122034	NM_080560
106	139227_at	0.000095	1845.73	852.03	1810055P05Rik	AW048554	NM_011560
107	114139_at	0.000096	586.97	157.97	---	AI843123	NM_010274
108	113045_at	0.000096	653.37	115.17	Was1	AW210253	NM_028459

Table 5

254	163845_i_at	0.000255	906.73	378.67	9130403P13R_L7308	AA387607	NM_026345	426000	ta	181901	162
255	104449_at	0.00026	5166.73	2857.3	GLrb_X81202	NM_010298		426000	ta	181901	162
256	107277_at	0.00026	1198.83					426000	ta	181901	162
257	108306_at	0.00026						426000	ta	181901	162
258	131850_at	0.000266						426000	ta	181901	162
259	92947_s_at	0.000267						426000	ta	181901	162
260	102927_s_at	0.000268						426000	ta	181901	162
261	163922_at	0.000269						426000	ta	181901	162
262	104609_at	0.000271						426000	ta	181901	162
263	116515_at	0.000271						426000	ta	181901	162
264	137692_at	0.000275						426000	ta	181901	162
265	115477_at	0.000276						426000	ta	181901	162
266	134102_at	0.000277						426000	ta	181901	162
267	94913_at	0.000279						426000	ta	181901	162
268	114896_at	0.000279						426000	ta	181901	162
269	162765_at	0.000281						426000	ta	181901	162
270	95664_at	0.000281						426000	ta	181901	162
271	96539_at	0.000281						426000	ta	181901	162
272	93700_at	0.000285						426000	ta	181901	162
273	112345_at	830661NM2:///						426000	ta	181901	162
274	166510_r_at	0.000285						426000	ta	181901	162
275	131873_at	0.000294						426000	ta	181901	162
276	111232_at	0.000297						426000	ta	181901	162
277	97793_at	0.000298						426000	ta	181901	162
278	100365_at	0.000298						426000	ta	181901	162
279	138199_l_at	0.000298						426000	ta	181901	162
280	131405_at	0.000299						426000	ta	181901	162
281	105423_at	0.000306						426000	ta	181901	162
282	160344_at	0.000307						426000	ta	181901	162
283	137987_at	0.000308						426000	ta	181901	162
284	137611_at	0.00031						426000	ta	181901	162
285	112432_at	0.000312						426000	ta	181901	162
286	136221_at	0.000312						426000	ta	181901	162
287	138565_at	0.000313						426000	ta	181901	162
288	98004_at	0.000319						426000	ta	181901	162
289	167218_at	0.000321						426000	ta	181901	162
290	112817_at	0.000322						426000	ta	181901	162
291	106181_at	0.000324						426000	ta	181901	162

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Table 5

368	94645_at	0.000448	281.6	52.8	Gabra3	M86568	NM_008067	AI839453	NM_172458	45.1564	6.3411	66.3411	215000.0	ta_i_18836	863
369	105841_at	0.000448	618.57	135.77	135.77	9030612M13R1K	47301-1	AI839453	NM_172458	45.1564	6.3411	66.3411	215000.0	ta_i_18836	863
370	112695_at	0.00045	1011.3	629920	629920	815648IV2529265	19186482	1391023953	7.35621	30.4312	30.4312	225000.0	ta_v09231	609	
371	98915_at	0.000452	715.1	436387	436387	666387	476658IV8552443	1391023953	7.35621	30.4312	30.4312	225000.0	ta_v09231	609	
373	104031_at	0.000458	398.53	226700	226700	6716009	926478IV401610009922	91230157	30.4312	30.4312	30.4312	1448125000.0	ta_i_690011	109	
374	116868_at	0.000459	394.4	212571	212571	6716009	926478IV401610009922	91230157	30.4312	30.4312	30.4312	1448125000.0	ta_i_690011	109	
375	105223_at	0.000459	433.43	671600	671600	6716009	926478IV401610009922	91230157	30.4312	30.4312	30.4312	1448125000.0	ta_i_690011	109	
376	111103_at	0.000459	1173.03	049610	049610	6716009	926478IV401610009922	91230157	30.4312	30.4312	30.4312	1448125000.0	ta_i_690011	109	
377	98307_at	0.000461	981952	474717	474717	474717	474717	474717	474717	474717	474717	474717	474717	474717	474717
378	93360_at	0.000466	444600	444600	444600	444600	444600	444600	444600	444600	444600	444600	444600	444600	444600
379	105205_at	0.000467	964.07	82731	82731	82731	82731	82731	82731	82731	82731	82731	82731	82731	82731
380	111628_at	0.000472	1339.67	653984	653984	653984	653984	653984	653984	653984	653984	653984	653984	653984	653984
381	117024_g_at	0.000473	976621	427258	427258	427258	427258	427258	427258	427258	427258	427258	427258	427258	427258
382	107784_at	0.000482	548.47	244010	244010	244010	244010	244010	244010	244010	244010	244010	244010	244010	244010
383	115657_at	0.000482	671382	224291	224291	224291	224291	224291	224291	224291	224291	224291	224291	224291	224291
384	138970_at	0.000482	571.5	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1
385	104222_f_at	0.000486	353.1	839110	839110	839110	839110	839110	839110	839110	839110	839110	839110	839110	839110
386	112244_at	0.000487	1018.03	019400	019400	019400	019400	019400	019400	019400	019400	019400	019400	019400	019400
387	168022_at	0.000489	566.43	566.43	566.43	566.43	566.43	566.43	566.43	566.43	566.43	566.43	566.43	566.43	566.43
388	99049_at	0.00049	362.37	520092	520092	520092	520092	520092	520092	520092	520092	520092	520092	520092	520092
389	APFX-TransRechnr/X57349_3_at	0.000496	393.6	51.73	6330567H211	282010	NM184864	012640	tsdb53	9.132	5.175	984000.0	ta_f_226701	583	
390	136666_at	0.000498	832.57	470231	470231	470231	470231	470231	470231	470231	470231	470231	470231	470231	470231
391	136535_at	0.000498	2123.5	479320	479320	479320	479320	479320	479320	479320	479320	479320	479320	479320	479320
392	134758_at	0.000499	1979.7	866610	866610	866610	866610	866610	866610	866610	866610	866610	866610	866610	866610
393	162527_s_at	0.000499	1979.7	866610	866610	866610	866610	866610	866610	866610	866610	866610	866610	866610	866610
394	96191_at	0.0005	893.1	106521	106521	106521	106521	106521	106521	106521	106521	106521	106521	106521	106521
395	112350_at	0.000501	5974	882720	882720	882720	882720	882720	882720	882720	882720	882720	882720	882720	882720
396	165462_at	0.000509	232.33	228210	228210	228210	228210	228210	228210	228210	228210	228210	228210	228210	228210
397	93881_i_at	0.000511	1143.9	942110	942110	942110	942110	942110	942110	942110	942110	942110	942110	942110	942110
398	92243_at	0.000512	1372.63	1371	546621	546621	546621	546621	546621	546621	546621	546621	546621	546621	546621
399	104557_at	0.000513	1371	546621	546621	546621	546621	546621	546621	546621	546621	546621	546621	546621	546621
400	94364_at	0.000519	603520	603520	603520	603520	603520	603520	603520	603520	603520	603520	603520	603520	603520
401	110069_at	0.000558	2134.03	456800	456800	456800	456800	456800	456800	456800	456800	456800	456800	456800	456800
402	137360_at	0.000522	12953.4	354600	354600	354600	354600	354600	354600	354600	354600	354600	354600	354600	354600
403	136206_at	0.000522	542.43	280681	280681	280681	280681	280681	280681	280681	280681	280681	280681	280681	280681
404	102936_at	0.000523	1123.13	582652	582652	582652	582652	582652	582652	582652	582652	582652	582652	582652	582652
405	108560_at	0.000524	4351.57	3112.8	3112.8	3112.8	3112.8	3112.8	3112.8	3112.8	3112.8	3112.8	3112.8	3112.8	3112.8

Table 5

406	163628_at	0.000528	1164.2	784.03	2810019K23Rik	AW124915	NM_027268	te	062031	674	O
407	93806_at	0.000531	1185.23	904.67	Sh3bgr1	L4f02T	NM_019989	te	19196	274	O
408	115808_at	0.000531	1183.9	532.53	NM_02046655	NM_02046655	NM_02046655	te	19196	274	O
409	116963_at	0.000531	3139.9	401110100	NM_02046655	NM_02046655	NM_02046655	te	19196	274	O
410	163692_at	0.000534	109200_at	225651200	NM_133197	L4f203	NM_133197	te	031331	174	H
411	109200_at	0.000546	1391.97	814800	NM_133197	L4f203	NM_133197	te	36326	074	H
412	109475_at	0.000546	1412.17	6967610	NM_133197	L4f203	NM_133197	te	10996	637	O
413	112822_s_at	0.000547	557.4	9278715	NM_133197	L4f203	NM_133197	te	889331	837	O
414	160859_s_at	0.000549	991.27	565181	NM_133197	L4f203	NM_133197	te	025291	137	O
415	117023_at	0.000552	4066.17	2857.57	NM_133197	L4f203	NM_133197	te	23261	937	O
416	166012_at	0.000558	3476.63	424500100	NM_133197	L4f203	NM_133197	te	39276	537	O
417	117048_at	0.000564	948.27	882420	NM_133197	L4f203	NM_133197	te	23261	537	O
418	110305_at	0.000565	134135_r_at	0.000572	NM_133197	L4f203	NM_133197	te	161011	337	O
419	166904_at	0.000573	114861_at	0.000574	NM_133197	L4f203	NM_133197	te	52901	137	O
420	109946_at	0.000578	12452.33	12452.33	NM_133197	L4f203	NM_133197	te	52901	137	O
421	165766_at	0.000587	962.4	481110	NM_133197	L4f203	NM_133197	te	5476	927	O
422	163507_at	0.000589	1245.43	518941	NM_133197	L4f203	NM_133197	te	5476	927	O
423	94454_at	0.000591	1245.43	518941	NM_133197	L4f203	NM_133197	te	5476	927	O
424	138075_at	0.000591	446.4	019861	NM_133197	L4f203	NM_133197	te	92591	327	O
425	107900_at	0.000592	1196.5	326.0	NM_133197	L4f203	NM_133197	te	92591	327	O
426	97998_at	0.000596	326.0	298310	NM_133197	L4f203	NM_133197	te	92591	327	O
427	101294_g_at	0.000597	110191_at	0.000603	NM_133197	L4f203	NM_133197	te	53191	127	O
428	106250_at	0.000603	894.47	093120	NM_133197	L4f203	NM_133197	te	53191	127	O
429	110753_at	0.000603	549.5	206.77	NM_133197	L4f203	NM_133197	te	53191	127	O
430	110191_at	0.000604	549.5	206.77	NM_133197	L4f203	NM_133197	te	53191	127	O
431	139232_at	0.000604	549.5	206.77	NM_133197	L4f203	NM_133197	te	53191	127	O
432	92763_at	0.000607	94.6	121511	NM_133197	L4f203	NM_133197	te	21091	917	O
433	113425_at	0.000609	4291.87	86610	NM_133197	L4f203	NM_133197	te	21091	917	O
434	162520_at	0.000615	2740.3	1036.	NM_133197	L4f203	NM_133197	te	21091	917	O
435	136688_at	0.000616	1600.77	1537.97	NM_133197	L4f203	NM_133197	te	21091	917	O
436	96607_at	0.000618	312.67	155600	NM_133197	L4f203	NM_133197	te	21091	917	O
437	133130_at	0.000619	1051.8	302.4	NM_133197	L4f203	NM_133197	te	269391	017	O
438	94161_at	0.000627	1653.67	189610	NM_133197	L4f203	NM_133197	te	39631	607	O
439	130290_at	0.000627	2324.93	016800	NM_133197	L4f203	NM_133197	te	80831	807	O
440	866610	1798481	120147	120147	120147	120147	120147	te	825000	907	O

Table 5

444	92946_f	at	0.00063	1884.43	1070.27	---	I32374fjocf	NM_013540	
445	112835	at	0.000632	1733.27	1165.37	Cog4	AI840978	NM_133973	
446	95138	at	0.000633	797.53	341400100	008521W	22d8NI836561	30.205M	178: 45.0621
447	140490	at	0.000634	7291.1	9582LT	W	5981581WQ	sseqT8	1 42.384592
448	92449	at	0.000636	363.27	130.2	Gfraz	LE92511W	NM_0081	4.4002
449	AFFX-GsdhMur/M32599_5	at	0.001	0.001	0.001	0.001	0.001	0.001	0.001
NM_001029931	///	NM_008084	///	NM_199472	///	XI_2838LT	NM_///	///	///
NM_484345	///	NM_48436	///	NM_484732	///	5662818	NM43	///	///
NM_486720	///	NM_487067	///	NM_618821	///	NM_6	TL910/W	NM_XM	1 1243581W/
NM_619956	///	NM_619966	///	3E5E4LT	///	6E0619VW23	///	///	///
450	139220	at	0.000637	66086LT	W	///	882080	W	944081YK
451	162862	at	0.000638	24881T	W	///	5901E2AV	///	///
452	106168	at	0.000639	8151.4	934110	W	///	///	///
453	95924	at	0.00064	370.67	179.5	598940W	B15R1	///	///
454	96211	at	0.000643	1611.37	106521	W	///	///	///
455	135242	at	0.000646	2448.87	317.	647800	W	///	///
456	99515	at	0.000647	994.	59881T	W	///	///	///
457	160766	at	0.000647	289.07	196.07	425600	W	///	///
458	101977	at	0.00065	6199	08354LT	W	///	///	///
459	117036	at	0.000653	4438.63	154600	W	///	///	///
460	101419	at	0.000656	12958.4	478200	W	///	///	///
461	115771	at	0.000656	831.7	213.	483610	W	///	///
462	166303	at	0.000657	467.	4	63E420	W	///	///
463	104503	at	0.000661	204.17	51620	W	///	///	///
464	92433	at	0.000661	731.57	46647	W	///	///	///
465	99338	at	0.000661	498.7	255.63	622E4W	W	///	///
466	107374	at	0.000663	915.	964820	W	///	///	///
467	112362	at	0.000667	1471.97	946600	W	///	///	///
468	164295	at	0.000667	42820	W	///	///	///	///
469	109368	at	0.00067	42820	W	///	///	///	///
470	162632	at	0.000674	14000	W	///	///	///	///
471	528619	at	0.000674	05619	W	///	///	///	///
472	322998	at	0.000674	05619	W	///	///	///	///
473	92488	at	0.000674	05619	W	///	///	///	///
474	846100	at	0.00069	2856.9	2004	511800	W	///	///
475	168159	at	0.000691	5784.83	264800	W	///	///	///
476	138476	at	0.000693	1290	86381T	W	///	///	///
477	97960	at	0.000693	1290	86381T	W	///	///	///

Table 5

514	95457_at	0.000774	2823.77	1775.3	1110001C20P1h	A1854214	NM_177730	te_b_266311	155		
515	161171_at	0.000778	369.33	236.17	---	AV226788	NM_008748	te_b_045391	055		
516	129017_at	0.000779	1884.93	408321_WN	L29032M0J01727L656VAV	M_78659	39.5671	te_b_266311	155		
517	133499_at	0.000783	21521_WN	992668V	KRR2TQ8340663	X3278806	33.4081	te_i_045391	055		
518	115891_at	0.000785	487820_WN	8395L9V93040	KRR4TQ4E000L1I4816910	39TM_029430.004	158000.0	te_956601	675		
519	97198_at	0.000786	267.97	43.37	3737LT_WN7592552281M	JAN52_606	32.3102	te_028511	875		
520	92477_at	0.000787	1397.83	931800_WNp1n	A9205932	Tsr_vb62	//457031607661	te_30786	475		
521	108747_at	0.000789	792.27	620220_WN	60L181V0	u6m	2.2554	te_31296	975		
522	97471_at	0.000796	9483LT_WN17	11L100_WN	27488LXMRP	u6m	32.74952	te_004740	575		
523	99035_at	0.000800	10542T_WX52.27	30252T_WX52.27	cyf1a	KRR2TQ8340663	M_78659	te_i_356501	775		
524	107774_at	0.000800	622.62	9010_WN	L29305D	A3eafix8	M_7195251	//3275835771	375		
525	117012_g_at	0.000802	2978	L168LT_WN095	9632481Vpb4	443054T_W10574	25.3274	te_76_839	275		
526	110239_at	0.000804	472.45	L1600_WN52.67	0181T1210402	442dew	A799470	77.45716	175		
527	110790_at	0.000806	1221.87	521.73	328881V	AW1218738	642M_02183	30.918	938000.0	075	
528	117120_at	0.000806	1386	826610_WNp0	951602AV	TKmacd5	M_2021197	48.6674	138000.0	635	
529	116376_at	0.000807	5438	L0803_WNp51	527681VCC00349	3dqqeB184607	2.2555M_03076	1239	428000.0	835	
530	138003_at	0.000808	2847.7	892910_WN	661020AFV18	3Xqd8	M_7033199	42.242	428000.0	435	
531	105458_at	0.000809	747.53	88110_WN	90230FA33	3Tjfr	A3T_6457	34.303T43	28000.0	935	
532	99477_at	0.00081	416	T49920_WNp6.77	323050T_WNp12	KRR2TQ8340663	M_78659	te_i_356501	535		
533	129856_at	0.000814	5379.7	2278	596520_WNp52.6	861090W148	1rdvaxpM_02577	822	418000.0	335	
534	137565_at	0.000819	225.77	82520_WNp215	832781V	216uJ105037	77.951M_026638	914	18000.0	235	
535	111105_at	0.00082	6321	392030_WNp52.6	320981Vabdrp	867800CB18494	32.1503M_00805	835	408000.0	625	
536	101966_s_at	0.000824	272.27	66130_WN	8718481V	T3an9	70.920268	4.7482	808000.0	035	
537	96580_at	0.000827	4499.87	78727_WN	541421M	3Tjqw36	009M_01997	9831	908000.0	825	
538	114389_at	0.000831	816	968120_WNp49.87	648121M	3Tjqw36	32.125	48.1221	908000.0	725	
539	168147_s_at	0.000831	91547T_WN	01942T_W	KRR2TQ8340663	M_78659	M_00911	31.247	408000.0	525	
540	138466_at	0.000836	816	968120_WNp49.87	648121M	3Tjqw36	32.125	48.1221	908000.0	725	
541	99960_at	0.000838	638	318310_WNp3.57	347501M	1450.311	49.291M_17833	37.862	208000.0	525	
542	111405_at	0.00084	111405_at	0.00084	111405_at	0.00084	111405_at	0.00084	111405_at	0.00084	525
543	100113_s_at	0.000843	100113_s_at	0.000843	100113_s_at	0.000843	100113_s_at	0.000843	100113_s_at	0.000843	525
544	106953_i_at	0.000843	1034.37	186600_WN	8249381V	P12Rik	vrlyadM12530	32.297M_128201	//862000	09147	625
545	94463_at	0.000844	078820_WN	2748781V	KRR50N91001E2	NL_240711	//415451	33876	962000.0	625	
546	96273_at	0.000847	8334.53	4552.2	Nrgn	0293551V9	MM4748329	42.266	682000.0	125	
547	98403_at	0.000848	193709fT0_WNp7	294110T_WN	298189V	urdsM5	21636	38.4631	482000.0	025	
548	115820_at	0.000848	2013.23	909	454310_WN185225	9265LX	teqv373	33	46.792	615	
549	107956_at	0.000851	400	334620_WNp3.0	169181V170003	KRR4TQ4E000L1I4816910	39TM_029430.004	675	582000.0	815	
550	163540_i_at	0.000856	1807.33	90023T2_WX	355647VpD	T3shM	A2792316	34.630312	382000.0	415	
551	113932_g_at	0.000863	1495.63	698453_WXp959	3381T0NW230677	N3I	55807	36.7881	622000.0	915	
			842800_WN	1589492AV			41.932	33.693	822000.0	515	
			4127581V	1589492AV			41.932	33.693	822000.0	515	
			03LLLT_WN	4127581V			3.5441	47.3282	422000.0	415	

Table 5

Table 5

552	117192_at	0.000868	403.47	104.67	2610204M12R1K	AW048378	NM_019426
553	166724_at	0.000869	2342.3	1496.2	RW0X AI847CJ99T	NM_019573	
554	103318_at	0.000872	05782_MX	100	AI11115550664	AI74516	AI010247
555	171396_at	0.000872	850820_MN3.3	1555818	AI11115550664	AI13375	AI010247
556	11887_at	0.000874	2380.57	1899	Uae2j	AI726802	AI010247
557	99001_at	0.000877	478.13	10004.8	AI11115550664	AI1788	AI010247
558	98905_at	0.000879	10004.8	6854	AI11115550664	AI1788	AI010247
559	131856_at	0.000879	1269	37.47	AI11115550664	AI1788	AI010247
560	133703_at	0.000881	1269	37.47	AI11115550664	AI1788	AI010247
561	116564_at	0.000882	621.97	512.2	AI11115550664	AI1788	AI010247
562	99800_at	0.000883	512.2	512.2	AI11115550664	AI1788	AI010247
563	93861_f_at	0.000886	552.0	552.0	AI11115550664	AI1788	AI010247
564	114359_at	0.000888	1902	1902	AI11115550664	AI1788	AI010247
565	107399_at	0.000888	1267.3	902.73	AI11115550664	AI1788	AI010247
566	104673_at	0.000889	902.73	485.43	AI11115550664	AI1788	AI010247
567	112159_at	0.00089	485.43	1313	AI11115550664	AI1788	AI010247
568	137045_at	0.00089	1668.43	1123.93	AI11115550664	AI1788	AI010247
569	138798_at	0.00089	1668.43	1123.93	AI11115550664	AI1788	AI010247
570	93664_at	0.000901	1123.93	724.5	AI11115550664	AI1788	AI010247
571	104373_at	0.000902	724.5	228.13	AI11115550664	AI1788	AI010247
572	160603_at	0.000903	251.93	3143	AI11115550664	AI1788	AI010247
573	110650_at	0.000903	251.93	3143	AI11115550664	AI1788	AI010247
574	94719_at	0.000904	251.93	3143	AI11115550664	AI1788	AI010247
575	015310_MN	0.000916	2361	1342.83	AI11115550664	AI1788	AI010247
576	101385_at	0.000916	2361	1342.83	AI11115550664	AI1788	AI010247
577	113908_at	0.000918	1342.83	4555	AI11115550664	AI1788	AI010247
578	164227_at	0.000919	4555	515.63	AI11115550664	AI1788	AI010247
579	112918_at	0.000924	515.63	3076.83	AI11115550664	AI1788	AI010247
580	93212_at	0.000925	3076.83	383.5	AI11115550664	AI1788	AI010247
581	133141_at	0.000929	383.5	1627.1	AI11115550664	AI1788	AI010247
582	103264_at	0.000932	1627.1	76.97	AI11115550664	AI1788	AI010247
583	102305_at	0.000933	76.97	2434.2	AI11115550664	AI1788	AI010247
584	111940_at	0.000934	2434.2	831.1	AI11115550664	AI1788	AI010247
585	97368_at	0.00094	831.1	1550	AI11115550664	AI1788	AI010247
586	95731_at	0.000943	1550	1923.9	AI11115550664	AI1788	AI010247
587	104260_at	0.000944	1923.9	1672.13	AI11115550664	AI1788	AI010247
588	162961_at	0.00097	1672.13	0.0	AI11115550664	AI1788	AI010247
589	160393_at	0.0	0.0	0.0	AI11115550664	AI1788	AI010247

5 Table

Table 5

741	116425_at	0.001483	3913.93	2116.03	Ntkrk2	AW125471	NM_001025074	///	NM_008745	119100.0	1.116	61116	844										
742	101456_at	0.001501	1558.77	799	Zfp106	AF060245	NM_011743			609100.0	1.041	041511	444										
743	112389_at	0.001503	3261.37	62110.0	V	g6665018	desd1			609100.0	1.829	999184	444										
744	167062_at	0.001503	1538	51381	MNM160	61421M9000	1888200B			909100.0	1.692	909100	944										
745	93326_at	0.001504	20792.93	1148	24010	MNM4sf	4821500A264	qdh		609100.0	1.833	61001	544										
746	138004_at	0.001504	682.27	528.	941920	MNM492	650801M181	10p36		609100.0	1.034	09100	444										
747	163773_at	0.165063	748720	MNM057	6829481	apgy	A	pkp506		609100.0	1.662	195	444										
748	104612_g_at	0.00151	786.	5283	MNM60.9	1694861	edr	229p3r108		609100.0	1.134	61881	444										
749	102698_at	0.001517	523.	857600	MNM9.3	5153991	tpasi	A	vr4m0	609100.0	1.222	209100	444										
750	97935_at	0.001521	1290.1	327600	MNM	52600	Rirk	2q2d41	8172690	9100.0	1.032	11222	444										
751	103957_at	0.001527	29094	MNM7.5	380449	VV	57349	kr161	VR2200091	38	191362	69105	044										
752	106917_at	0.001527	1391.23	515080	MNM	545080	T18	A	125005	NT	112635	5144	694										
753	103070_at	0.001539	2755.27	91535	MNM	6873581	V			665100.0	1.788	686	894										
754	92448_s_at	0.001543	856.63	482.2	Gfra2	AF079	77	26521	MNM_00811	21241	6013423	60186	694										
755	92802_s_at	0.001548	12974.27	91180.0	MNM	282520	M	552306	X	1.836312	6168	635100	594										
756	138139_at	0.001552	2293.03	282520	MNM	282520	M	552306	X	1.836312	6168	635100	594										
757	166855_at	0.001557	370.	497420	MNM2303	0600581	V			65100.0	1.244	65100	494										
758	106847_at	0.001558	1522.37	558.	942110	MNM3301	329391	V		65100.0	1.17	52101	694										
759	114222_at	0.001559	1146.13	270600	MNM	270600	5	M	1132554	1.327	10182	60162	554										
760	97559_at	0.001561	7491.37	66521	MNM	180026	V	3934	pp34	10179	61261	5144	194										
761	112973_at	0.001564	454.5	192.	406400	MNM14	481	d	1191	MNM9	2133	601	094										
762	98504_at	0.001564	874080	MNM	96322	V				65100.0	1.941	65100	554										
763	104121	6704	628300	100	MNM74.6	3832	681	2		65100.0	1.85	62951	854										
764	96634_at	0.001579	742.37	533.6	57304					65100.0	1.911	65100	654										
765	114712_at	0.001583	8919.5	271887	MNM	914887	1	M	1132554	1.327	10182	60162	554										
766	115120_at	0.001585	769.33	321110	MNM	321110	7			65100.0	1.284	65100	554										
767	108264_at	0.001587	565.77	172.	511800	MNM125	77	2016	0FV	2e3d	21284	39198	454										
768	97284_at	0.001589	938.	745400	MNM17.1	461810	EV			65100.0	1.6	0681	654										
769	160921_at	0.001592	476.	552400	MNM	5609381	V			65100.0	1.71	2801	754										
770	113234_at	0.001594	504.67	293.67	83911	EV	MNM19	Rirk	643	65100.0	1.862	62	154										
771	95324_at	0.0016	227820	MNM	026281	V	22	b2		125100.0	1.062	125100	054										
772	115356_s_at	0.001602	227.27	421010	MNM	091540	V	1	66351	112625	425	415100	644										
773	111172_at	0.001602	1389.3	743.17	8005481	2	92	3pM1	98769	66	095M	1338	391984	844									
774	97263_s_at	0.001603	2443.07	56055	MNM	912054	V			65100.0	1.442	65100	474										
775	109607_at	0.001603	1004	241	EV	MNM3.1	951	64	1M108	3322	64M	0261	33825	494									
776	100954_at	0.001606	269.	4396	10	MNM	H	3849	26	F05728	2	354M	01	12	98411	66	26402	494					
777	115140_at	0.001609	4882	1	MNM	866851	V	3			41	20	92	0006	2	1247	47	091	1833	2	851	444	
778	97114_at	0.001611	10846.03	908610	MNM	908610	1	292	481	57	qda	4	3022	79	43	192	605100	0	68	321	434	0	
				347110	MNM	21	64	7		4720	90	43	664	44	8551	105100	0	954	101	244	0		
				547800	MNM	///	4705	20100	MNM	2424	30	9112	661163	684100	0	524	911	144	0	0	0	0	0

5 eptat

Table 5

779	112722_at	0.001622	1057.4	459.17	D6B7C4253e	AW124381	NM_178608	154100.0	518
780	106605_at	0.001623	791.67	230.53	B230106124k	AW045971	NM_178772	64100.0	518
781	93087_r_at	0.001626	663.7	80.17	Tyk-V8	IKP005	AW26710e	3.0322	518
782	137614_at	0.001626	2302.33	54.6	421861	292600	NM_178337	8.5366	518
783	166773_at	0.001627	094717	516348	AW121944	AM121944	NM_178337	1.2688	518
784	96193_at	0.001628	1263.7	1804.3	050912	NM_178337	NM_178337	4.5328	518
785	100307_at	0.001634	1804.3	594120	639200	NM_178337	4.2501	518	
786	100933_at	0.00164	6969.67	3641	066581	NM_178337	4.822	518	
787	130532_at	0.001644	2457.53	412.7	691800	NM_178337	3.292	518	
788	107811_at	0.00165	412.7	112.17	515471	NM_178337	3.9529	518	
789	138395_at	0.00165	3773.93	2003	AW121944	AM121944	3.9529	518	
790	101370_at	0.001659	982.5	352.47	L78520	NM_178337	3.9791	518	
791	117176_at	0.001676	5944.5	3670	096800	NM_178337	6.209	518	
792	92801_at	0.001677	5462.87	4864	4864	NM_178337	6.141	518	
793	133140_at	0.001677	4864	561.7	4864	NM_178337	6.141	518	
794	169344_r_at	0.001681	135.7	661920	661920	NM_178337	3.6292	518	
795	99834_at	0.001684	2718.03	218.03	871631	NM_178337	4.6589	518	
796	134260_at	0.001686	512.8	237.	512.8	NM_178337	2.6252	518	
797	105883_at	0.001688	411.6	161.	411.6	NM_178337	8.215	518	
798	109064_at	0.00169	2529.2	103.33	103.33	NM_178337	8.6021	518	
799	117267_at	0.001701	812.47	267.77	812.47	NM_178337	50.8122	518	
800	114734_at	0.001703	2529.2	103.33	103.33	NM_178337	8.6021	518	
801	106857_at	0.001703	812.47	267.77	812.47	NM_178337	50.8122	518	
802	107753_at	0.001703	812.47	267.77	812.47	NM_178337	50.8122	518	
803	138087_at	0.001719	5413.77	421861	292600	NM_178337	4.9581	518	
804	116436_at	0.00172	844.37	590010	NM_178337	NM_178337	189100.0	518	
805	104467_at	0.001722	598.17	321110	NM_178337	NM_178337	4.9984	518	
806	163933_at	0.001722	598.17	321110	NM_178337	NM_178337	4.9984	518	
807	106249_at	0.001725	1167.63	180.	891401	NM_178337	5.1455	518	
808	105896_at	0.001727	755.73	461612	NM_178337	NM_178337	5.286	518	
809	104685_g_at	0.001736	762.33	461612	NM_178337	NM_178337	5.286	518	
810	95431_at	0.001737	728.4	339.	728.4	NM_178337	3.5752	518	
811	92513_at	0.001745	1052.27	8243.57	8243.57	NM_178337	4.9100.0	518	
812	113139_at	0.001746	8243.57	409420	NM_178337	NM_178337	3.7081	518	
813	164134_at	0.001746	3892.1	3935	3892.1	NM_178337	3.9321	518	
814	113766_at	0.001749	3935	493817	NM_178337	NM_178337	3.2032	518	
815	161054_at	0.001751	2230	816131	NM_178337	NM_178337	2.5399	518	

5 eblat

Table 5

816	110507_at	0.001757	1301.63	546.6	AU067726	AW121504	NM_177762	NM_178398	26100.0	te_62826	58
817	95139_at	0.001765	506.93	339.73	1110018008	AW122075	NM_178398	26100.0	te_62826	58	
818	97211_at	0.00177	1534.13	926.41	222040110023	AW122075	NM_178398	26100.0	te_62826	58	
819	114641_at	0.001775	1857.0	1098.51	18966000000000	AW122075	NM_178398	26100.0	te_62826	58	
820	111713_at	0.001775	1857.0	1098.51	18966000000000	AW122075	NM_178398	26100.0	te_62826	58	
821	160181_at	0.001803	3382.17	1712.34	43091000000000	AW122075	NM_178398	26100.0	te_62826	58	
822	94564_at	0.001808	2183.1	640600	5111441	AW122075	NM_178398	26100.0	te_62826	58	
823	135691_at	0.001815	673.63	418.4	865581	AW122075	NM_178398	26100.0	te_62826	58	
824	116112_at	0.001816	305	164.33	18966000000000	AW122075	NM_178398	26100.0	te_62826	58	
825	160806_at	0.001824	669.7	391.57	18966000000000	AW122075	NM_178398	26100.0	te_62826	58	
826	107874_at	0.001826	921.13	460.53	695542	AW122075	NM_178398	26100.0	te_62826	58	
827	95613_at	0.001829	3323.13	569520	481500	AW122075	NM_178398	26100.0	te_62826	58	
828	93958_at	0.001833	1701.73	481500	481500	AW122075	NM_178398	26100.0	te_62826	58	
829	99038_at	0.001834	1717	901010	901010	AW122075	NM_178398	26100.0	te_62826	58	
830	130840_at	0.001835	2767.47	1473.63	93301	AW122075	NM_178398	26100.0	te_62826	58	
831	139173_at	0.001842	787.43	338.47	595330	AW122075	NM_178398	26100.0	te_62826	58	
832	104270_at	0.001843	1560.93	910.4	548800	AW122075	NM_178398	26100.0	te_62826	58	
833	139200_at	0.001852	226.73	69.7	90790	AW122075	NM_178398	26100.0	te_62826	58	
834	97130_at	0.001853	1722	91904	91904	AW122075	NM_178398	26100.0	te_62826	58	
835	94003_at	0.001858	891.67	466808	466808	AW122075	NM_178398	26100.0	te_62826	58	
836	108996_at	0.001858	557.4	302861	302861	AW122075	NM_178398	26100.0	te_62826	58	
837	129304_at	0.001858	663.03	338.64	338.64	AW122075	NM_178398	26100.0	te_62826	58	
838	101865_at	0.001861	386.7	197.8	197.8	AW122075	NM_178398	26100.0	te_62826	58	
839	95888_at	0.001863	118.7	59803	59803	AW122075	NM_178398	26100.0	te_62826	58	
840	116241_at	0.001872	1297.57	672.7	672.7	AW122075	NM_178398	26100.0	te_62826	58	
841	168497_at	0.00188	8847	40281	40281	AW122075	NM_178398	26100.0	te_62826	58	
842	94766_at	0.001888	23137.27	12000	12000	AW122075	NM_178398	26100.0	te_62826	58	
843	129028_at	0.001893	6683.4	21000	21000	AW122075	NM_178398	26100.0	te_62826	58	
844	100887_at	0.001894	296.7	8133	8133	AW122075	NM_178398	26100.0	te_62826	58	
845	92287_at	0.001898	2098.53	1048	1048	AW122075	NM_178398	26100.0	te_62826	58	
846	104108_at	0.001902	885.23	649.5	649.5	AW122075	NM_178398	26100.0	te_62826	58	
847	109545_at	0.001902	7611	6138.93	6138.93	AW122075	NM_178398	26100.0	te_62826	58	
848	138458_at	0.001902	2601.7	519.9	519.9	AW122075	NM_178398	26100.0	te_62826	58	
849	137709_at	0.001909	727.4	423.2	423.2	AW122075	NM_178398	26100.0	te_62826	58	
850	92857_at	0.001911	827.2	503600	503600	AW122075	NM_178398	26100.0	te_62826	58	
851	167474_at	0.001918	48920	2314	2314	AW122075	NM_178398	26100.0	te_62826	58	
852	134131_at	0.001921	631920	447474	447474	AW122075	NM_178398	26100.0	te_62826	58	
853	97823_g_at	0.001922	86387	57022	57022	AW122075	NM_178398	26100.0	te_62826	58	

Table 5

Table 5

854	92995_at	0.001922	17564.13	9488.1	Vsn11	D2117	1979	0.1281	211200.0	ta_474601	168
855	115070_at	0.001922	2892.73	1859.2	---	AA711252	NM_009700	0.0156	11200.0	ta_0_6261	068
856	138969_at	0.00193						0.0156	960200.0	ta_158211	688
857	113069_at	0.001937	419.	602600	WR85.3	5659681	AKO1R1	0.0156	680200.0	ta_556911	888
858	168332_f_2545LT_WN9_///		916620_WN	412581V	6419P0AW	---	AB8522	0.0156	580200.0	ta_038401	888
859	160786_f_at	0.001944	690.23	919612_WN	5094781V	AI84342	0.0196	0.9026	480200.0	ta_521111	988
860	92465_at	0.00195	489.	425330	WN22	4070631	85713	0.0156	880200.0	ta_f_315891	988
861	104364_at	0.001958	528.	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
862	137130_at	0.001961	3177.5	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
863	114829_at	0.001969	2036	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
864	140484_at	0.00197	286.87	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
865	129311_at	0.001977	4804	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
866	110604_at	0.00198	882.23	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
867	163686_at	0.001981	155.	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
868	114639_at	0.001983	453.	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
869	167174_at	0.001984	66800	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
870	99178_at	0.001986	3013.7	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
871	100529_at	0.001994	635220	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
872	104681_at	0.002011	771.	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
873	112462_at	0.002012	1109.1	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
874	108465_at	0.002012	939.2	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
875	113055_at	0.002012	2365.37	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
876	107592_at	0.002016	1425.6	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
877	96126_at	0.002023	365.4	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
878	AFEX-PyruCarbMur/L09192	0.002025	285920	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
879	131386_at	0.002048	8132.57	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
880	99494_at	0.002063	48133T_WX	402121W	6641	10252	17W	0.0156	46100.0	ta_690311	458
881	160265_at	0.002067	1474.03	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
882	112854_s_at	0.00207	1361.93	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
883	102827_at	0.002077	376.27	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
884	135082_at	0.002079		425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
885	168513_f_at	0.002083	3718	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
886	111125_at	0.002084	2145.13	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
887	107830_at	0.002085	3206	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
888	116955_at	0.002089	4093.27	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
889	112851_at	0.002096	3510	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
890	139230_at	0.00211	1821	425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988
891	109747_at	0.002112		425330	WN29	489	0.0156	0.0156	680200.0	ta_f_315891	988

Table 5

892	106980_at	0.002113	1346.53	880.5	EYR11	AI847001	NM_021424							
893	116432_at	0.00212	1093.7	405.43	Epb4_112	AF037437	NM_013511							
894	106977_at	0.002121	5761.47	4343.80										
895	97560_at	0.002145	1110.43	384.17										
896														
897														
898														
899														
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924	136232_at	0.002297	2482.27	1011.3	Dock3	A1849717	NM_153413		
925	100707_at	0.002301	260.7	119.67	Sh3md2	A19092	NM_021506	///	NM_198678
926	105835_at	0.002301	2920.97	2394	94T68T	WX4100	24T60MVA	--	A1852259
927	136732_at	0.002308	1367.37		8391T0	WNTdtkk	8T59F8T8	--	XM_131072281
928	114602_at	0.002319	372.	95688T	WX	T5T54T	KZ0Rj		K1H4T10200076E
929	164142_at	0.002332	3658	8T18LT	WM	938.	2T1096VWYtL3	A	2a34d1
930	166667_x_at	0.002339	1498.47	1253	4924LT	WM	r161	f1942T	WM
931	95803_at	0.002349			L0F420	FM	883.	T42E82VA	tpms1
932	116557_at	0.002349	1401.33		62F800	WM		L	098T1T7E
933	163501_at	0.002351	780.67		L680T0	WM			95E58VV
934	93859_at	0.002357	498.1T	WM	615T2TM				K1E20T9000068
935	96252_at	0.002359	1077.	27	107029	WM			02T140X
936	104005_at	0.002359	1767.93		0910T0	WM			E
937	116203_at	0.00236	1546.6	1025	289600	WM			A
938	164020_at	0.00236	473.8	258.2	---	4T1E20	WM	3	78091EIV
939	105507_at	0.002366	1147	5T02E1	WX	77.8	E56540M	I642	2T1L600M
940	101148_at	0.002377	247.	4T36T	WX	14.2	2T186T	V22857	0T3C8W
941	113027_at	0.002383	585.23	332.	L79600	WM			330441
942	105086_at	0.002396	703.47		95T229.	WM			2T8E820
943	101430_at	0.002409	9070.87		83E600	WM			51T2T
944	167597_at	0.002413	1528.9	650.	E29920	WM			8E884T
945	116311_at	0.002416	1966.83	1188	L58800	WM			ANAP3K1C
946	92288_at	0.002417	1200.53	101E	T3E102	WM			C0377
947	115233_at	0.002422	200.97	98.23	Monc	994E3E1	WM		7
948	112402_at	0.002428	370.53	589.	L4E3LT0	WM			66.4
949	93831_at	0.002433	2164	250T10	WM				31.57
950	111644_at	0.002433	2794.97	730.17	20E920	WM			4943076
951	93892_at	0.002448	2511	259420	WM				398.
952	93909_f_at	0.002448	779.67	4E5400	WM				1
953	117250_at	0.002459	3073.73	524030	WM				T1T4F8IV
954	114841_at	0.002468	815.87	388.3	9E882M	WM			AI14RJ
955	98332_at	0.002483	514.87	182.	T20T1T	WM			406058IV
956	129113_at	0.002519		650E58IV	---	K180I8T00T2	WM		489
957	109909_at	0.002519	84986T	WM	///	905T20	WM		2
958	129906_at	0.002508							
959	115640_at	0.002514							
960	139035_at	0.002515							
961	103369_at	0.002519							

Table 5

Table 5

962	98863_at	0.002521	196.93	59.1	GTK2	X66117	NM_010349	8.71E	621200.0	te_63271T	866
963	110208_at	0.002524	1504.83	944	SRN4	AA727401	L7101233789	8.16E	921200.0	te_95047T	666
964	101834_at	0.002528	536.93	306.7	Mapk3	714240	NM_011053	8.71E	621200.0	te_63271T	866
965	115236_at	0.002538	824.9	551.	L4983T	WIP15	NM_011053	8.71E	621200.0	te_95047T	666
966	99662_at	0.00254	310.93	310.93	24619	WIP15	NM_011053	8.71E	621200.0	te_95047T	666
967	111948_at	0.002547	1390.7	907.47	29654T	WIP15	NM_011053	8.71E	621200.0	te_95047T	666
968	105577_g_at	0.002547	1210.07	557.8	557.8	557.8	NM_011053	8.71E	621200.0	te_95047T	666
969	100970_at	0.002548	961420	866112M	866112M	866112M	NM_011053	8.71E	621200.0	te_95047T	666
970	114782_at	0.00255	951420	464082AV	464082AV	464082AV	NM_011053	8.71E	621200.0	te_95047T	666
971	92280_at	0.002563	499.87	322.62	322.62	322.62	NM_011053	8.71E	621200.0	te_95047T	666
972	105610_at	0.002563	499.87	322.62	322.62	322.62	NM_011053	8.71E	621200.0	te_95047T	666
973	160681_at	0.002568	223.2	108.4	Bap1	113173	NM_011053	8.71E	621200.0	te_95047T	666
974	163248_at	0.002574	3939.27	1876.51	1876.51	1876.51	NM_011053	8.71E	621200.0	te_95047T	666
975	101034_at	0.002575	1198.2	1876.51	1876.51	1876.51	NM_011053	8.71E	621200.0	te_95047T	666
976	140489_f_at	0.002577	166212	485.73	485.73	485.73	NM_011053	8.71E	621200.0	te_95047T	666
977	166212_i_at	0.002591	4581.	594.67	594.67	594.67	NM_011053	8.71E	621200.0	te_95047T	666
978	96115_at	0.002594	868.6	406.67	406.67	406.67	NM_011053	8.71E	621200.0	te_95047T	666
979	113093_at	0.002603	398.53	960.73	960.73	960.73	NM_011053	8.71E	621200.0	te_95047T	666
980	113575_at	0.002608	1218.07	960.73	960.73	960.73	NM_011053	8.71E	621200.0	te_95047T	666
981	96936_at	0.00261	4813.73	1092.61	1092.61	1092.61	NM_011053	8.71E	621200.0	te_95047T	666
982	163090_at	0.002626	4813.73	1092.61	1092.61	1092.61	NM_011053	8.71E	621200.0	te_95047T	666
983	135090_at	0.002643	4813.73	1092.61	1092.61	1092.61	NM_011053	8.71E	621200.0	te_95047T	666
984	97195_at	0.002644	549.1	287.4	287.4	287.4	NM_011053	8.71E	621200.0	te_95047T	666
985	109007_at	0.002644	399.8	103.3	103.3	103.3	NM_011053	8.71E	621200.0	te_95047T	666
986	105981_at	0.002651	4813.73	1092.61	1092.61	1092.61	NM_011053	8.71E	621200.0	te_95047T	666
987	114117_f_at	0.002664	4813.73	1092.61	1092.61	1092.61	NM_011053	8.71E	621200.0	te_95047T	666
XM_485126	XM_619853	XM_619854	4813.73	1092.61	1092.61	1092.61	NM_011053	8.71E	621200.0	te_95047T	666
988	97489_at	0.002667	483.93	195.6	195.6	195.6	NM_011053	8.71E	621200.0	te_95047T	666
989	116161_at	0.002668	290.67	195.6	195.6	195.6	NM_011053	8.71E	621200.0	te_95047T	666
990	103543_at	0.002669	1182.53	1293.47	1293.47	1293.47	NM_011053	8.71E	621200.0	te_95047T	666
991	103800_at	0.002679	1293.47	807.600	807.600	807.600	NM_011053	8.71E	621200.0	te_95047T	666
992	168255_at	0.002688	844.87	58.5	58.5	58.5	NM_011053	8.71E	621200.0	te_95047T	666
993	105431_at	0.002692	110.63	47324	47324	47324	NM_011053	8.71E	621200.0	te_95047T	666
994	108760_at	0.002694	583.83	27.7	27.7	27.7	NM_011053	8.71E	621200.0	te_95047T	666
995	136065_at	0.002725	191.2	91.43	91.43	91.43	NM_011053	8.71E	621200.0	te_95047T	666
996	112414_at	0.002726	769.87	314.	314.	314.	NM_011053	8.71E	621200.0	te_95047T	666
997	114056_at	0.002729	683.17	10442	10442	10442	NM_011053	8.71E	621200.0	te_95047T	666
998	117239_at	0.002729	683.17	10442	10442	10442	NM_011053	8.71E	621200.0	te_95047T	666

Table 5

6833T_MN 104422AV 444S 446 68.4051 125200.0
 646010_MN 47 71199X 2444G 1.65 66.961

Table 5

999	101305_at	0.00273	658.07	249.17	---	M88299	NM_008900
1000	105718_at	0.00273	721.47	390.97	Pldn	AM125033	NM_019788
1001	167383_f_at	0.002764	755.03	436.3	0610041E09Rik	AV300355	NM_025335
1002	585330_tmn	7.777	68885	53530	---	---	---
1003	115015_at	0.002853	758.73	219.27	5000150001	M185290R	NM_029573
1004	100951_at	0.002783	387.2	200.0	F01401	L28827	NM_028661
1005	94619_at	0.002796	875.73	128820	---	---	---
1006	100093_at	0.002809	1364.5	936682	---	---	---
1007	95446_at	0.002817	15782.03	91.7	55.3	---	---
1008	168114_f_at	0.002819	876.07	68885	---	---	---
1009	93460_at	0.002822	107274_a	0.002822	---	---	---
1010	107367_at	0.002822	107274_a	0.002822	---	---	---
1011	107274_a	0.002822	107274_a	0.002822	---	---	---
1012	109662_at	0.002844	109662_at	0.002844	---	---	---
1013	98946_at	0.002848	109662_at	0.002844	---	---	---
1014	115015_at	0.002853	1926	16881	---	---	---
1015	112182_at	0.002858	3521.03	642.47	---	---	---
1016	104611_at	0.002861	642.47	333.3	---	---	---
1017	166819_at	0.002874	4231	48027	---	---	---
1018	130649_at	0.002877	2949.37	881010	---	---	---
1019	99465_at	0.002879	1193.9	52117	---	---	---
1020	133686_at	0.002883	484.6	176.0	---	---	---
1021	166531_at	0.002889	965.1	315.43	---	---	---
1022	97544_at	0.0029	8606.87	0.0029	---	---	---
1023	108889_at	0.002914	390.0	0.002914	---	---	---
1024	114398_at	0.002916	359610	48.2	---	---	---
1025	116982_at	0.002916	2618	59194	---	---	---
1026	108070_s_at	0.002917	2618	59194	---	---	---
1027	96351_at	0.002921	85321	---	---	---	---
1028	162538_at	0.002922	3060.37	1823.23	---	---	---
1029	163457_f_at	0.002931	533.17	806600	---	---	---
1030	162853_r_at	0.002934	449320	26.9	---	---	---
1031	112844_at	0.00294	1324.83	640110	---	---	---
1032	106087_at	0.002948	1784.93	991800	---	---	---
1033	102928_at	0.00296	2365.6	2069.8	---	---	---
1034	94449_at	0.002968	5425.9	669610	---	---	---
1035	033577	0.003578	53520	55500	---	---	---

Table 5

NM_033586	113005_at	0.002997	22720	74781	311000	6091R1K	606	2981	52300.0	ta	681091	0.01	
NM_033587	97462_at	0.002974	1134.3	667.5	311000	6091R1K	606	2981	44200.0	ta	111901	0.01	
NM_033588	92629_f_at	0.002982	5398.17	52700	702781	76	612AS	606	24200.0	ta	268011	0.01	
NM_033589	129282_at	0.002997	18654	8595	88288	4M4SF	5554581	12	24200.0	ta	102931	0.01	
NM_033590	134511_at	0.002992	762.87	98081	702781	76	612AS	606	24200.0	ta	102931	0.01	
NM_033591	163474_at	0.002998	2666.37	1280	76670	9957761	0394581	54	26100.0	ta	611191	0.01	
NM_033592	140704_at	0.003012	2837.8	645	76670	9957761	0394581	54	29100.0	ta	2126	0.01	
NM_033593	112103_at	0.003013	651	8144	76670	9957761	0394581	54	65100.0	ta	51591	0.01	
NM_033594	164183_at	0.003014	222	98610	76670	9957761	0394581	54	5100.0	ta	51591	0.01	
NM_033595	162740_at	0.003018	1918.17	85421	76670	9957761	0394581	54	4100.0	ta	4591	0.01	
NM_033596	105826_at	0.00302	1922	2654	76670	9957761	0394581	54	4100.0	ta	4591	0.01	
NM_033597	92938_at	0.003053	278.73	317	44800	9957761	0394581	54	23100.0	ta	10891	0.01	
NM_033598	100751_at	0.003058	317	44800	9957761	0394581	54	23100.0	23100.0	ta	58261	0.01	
NM_033599	110578_at	0.003077	713	311000	6091R1K	606	2981	52300.0	23100.0	ta	881931	0.01	
NM_033600	97463_g_at	0.003086	333.57	280	12110	9957761	0394581	54	4100.0	ta	1111	0.01	
NM_033601	97220_at	0.00309	660.2	400.77	12110	9957761	0394581	54	4600.0	ta	99291	0.01	
NM_033602	108375_at	0.003092	883.2	635	88288	4M4SF	5554581	12	2600.0	ta	51281	0.01	
NM_033603	16266_l_at	0.003097	545.2	386.67	46610	9957761	0394581	54	6000.0	ta	0226	0.01	
NM_033604	113110_at	0.003113	4176	12920	1143	88288	4M4SF	5554581	12	6000.0	ta	0226	0.01
NM_033605	136188_at	0.003125	8380.17	84720	9957761	0394581	54	23100.0	9800.0	ta	63946	0.01	
NM_033606	109785_at	0.003126	2338	66370	9957761	0394581	54	23100.0	4700.0	ta	85011	0.01	
NM_033607	164801_at	0.003132	633.23	2022.93	052010	9957761	0394581	54	8500.0	ta	15401	0.01	
NM_033608	116943_at	0.00314	628.8	411	052010	9957761	0394581	54	3500.0	ta	83626	0.01	
NM_033609	116834_at	0.003141	2022.93	628.8	411	052010	9957761	0394581	2000.0	ta	92851	0.01	
NM_033610	111547_at	0.003143	628.8	411	052010	9957761	0394581	54	8100.0	ta	04251	0.01	
NM_033611	165449_f_at	0.003148	3556	82661	88288	4M4SF	5554581	12	4100.0	ta	81291	0.01	
NM_033612	165615_at	0.003155	1568.53	517.73	88288	4M4SF	5554581	12	4100.0	ta	81291	0.01	
NM_033613	167515_at	0.003159	517.73	123.4	67.6	1854	76670	9957761	2100.0	ta	40491	0.01	
NM_033614	92312_at	0.003162	123.4	67.6	1854	76670	9957761	0394581	1000.0	ta	23966	0.01	
NM_033615	161119_at	0.003192	327.3	248.73	1899	252920	9957761	0394581	8620.0	ta	44391	0.01	
NM_033616	112838_at	0.0032	2452.03	4633.07	1899	252920	9957761	0394581	6620.0	ta	11561	0.01	
NM_033617	136210_at	0.003223	4633.07	2793.73	1899	252920	9957761	0394581	2620.0	ta	28261	0.01	
NM_033618	110829_at	0.003242	2793.73	418	125920	9957761	0394581	54	2862.0	ta	62926	0.01	
NM_033619	106113_at	0.003244	418	125920	9957761	0394581	54	2862.0	4620.0	ta	29446	0.01	
NM_033620	160189_at	0.003253	1862.07	20.47	93570	9957761	0394581	54	4620.0	ta	50011	0.01	

Table 5

1071	115102_at	0.003259	588.67	490.8	AI987944	AM060550	NM_183167	115300.0	ta	08526	8011
1072	116898_at	0.003275	2754.27	1884.47	Dip5k2b	L4f00E15380	NM_054051	115300.0	ta	196011	7011
1073	96570_at	0.003285	76.2	40.17	RCN027756	AV381276	NM_145991	115300.0	ta	99391	9011
1074	112376_at	0.003287	940.13	417800	D548634	starH412E	AM124165	69.566	NM_134095	35.844	115300.0
1075	109656_at	0.003291	695.3	101	8P5800100	AW117P	AW123015	62.933	NM_012909	3.6945	115300.0
1076	94985_at	0.003298	301.13	2210	AW123015	AW123015	200	NM_019605	322	NM_019605	322
1077	133139_at	0.003301	13123.6	06610	AW122295	AW122295	NM_019605	30	NM_019605	30	115300.0
1078	111720_at	0.003303	2293.27	819.2	AW12430	AW122295	NM_019605	35.662	1.009	84300.0	84300.0
1079	114550_at	0.003315	958.03	009010	AW122285	AW122285	NM_019605	36.012	5.9835	94300.0	94300.0
1080	164230_at	0.003325	620.1	01610	AW21178	AW21178	NM_12964	40.701	2.9627	13200.5	9835
1081	111855_at	0.003326	954950	888881	AW11030192	AW11030192	NM_019605	1.08217	NM_019605	371	474300.0
1082	162819_at	0.003326	435620	888881	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1083	93762_at	0.00333	3707.9	957881	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1084	111263_at	0.003334	3269	86921	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1085	107304_at	0.003345	618.27	374.73	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1086	101946_at	0.003355	618.27	374.73	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1087	111173_at	0.003355	1130.13	47800	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1088	103569_at	0.003362	432.3	47800	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1089	106200_at	0.003363	4572	3430	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1090	114686_at	0.003381	088881	AW11030192	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1091	103924_at	0.003385	1521	267920	AW1154	AW1154	NM_019605	1.1191	1.1191	94300.0	94300.0
1092	116107_at	0.003396	43921	66980	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1093	167524_at	0.003403	773.1	167524	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1094	99144_s_at	0.003416	667.77	254.3	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1095	162987_at	0.003417	1853.9	998921	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1096	166622_at	0.003422	2114.9	998800	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1097	165580_i_at	0.003424	2336	1588	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1098	133809_at	0.003428	190	48571	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1099	106089_at	0.003445	219.1	847881	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1100	94243_at	0.003446	1413.1	1058	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1101	94009_at	0.003475	614	90100	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1102	163269_at	0.003475	210.93	107.0	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1103	138138_at	0.003476	5836.3	66021	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1104	163863_at	0.003484	600.1	299.53	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1105	116709_at	0.003487	611.03	290600	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1106	163646_at	0.003506	543.8	999610	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1107	110964_at	0.003511	778.3	60481	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0
1108	92580_at	0.003511	150450	088581	AW11030192	AW11030192	NM_019605	1.1191	1.1191	94300.0	94300.0

Table 5

Table 5

1109	141033_at	0.003514	806.97	390.33	---	AI594656	---
1110	98460_at	0.003523	2055.8	1590.97	Fto	AJ2337917	NM_011936
1111	114996_at	0.003535	243.73	93.5	2810417D08Rik	AA967301	NMJD27421
1112	92611_at	0.003539	1135.17	759.2	Gpiap1	U18773	NM_016739
1113	92974_at	0.003554	139.27	89.5	Zfp37	X52533	NM_009554
1114	106819_at	0.003561	382.8	210.03	---	AW061288	---
1115	APFX-Bioc-5_at	0.003571	5733.7	3070.47	---	J04423	---
m e	107389_at	0.003577	1146.97	667.07	---	AW049675	NM_011531 /// NMJ.77129
1117	139237_r_at	0.003587	8019.93	5350.47	Dscr111	AW046916	NM_030598 /// NM_207649
1118	108048_at	0.003595	1954.07	1225.73	A630084M22Rik	AI836258	NM_177305
1119	16067_6_at	0.003597	2059	1627	σ07Rik	AI839212	---
1120	111480_at	0.003602	9835.5	6031.27	---	AI847025	NM_020270
1121	116917_at	0.003608	1015.97	605.07	LOC279653	AI843367	XM_205287
1122	116672_at	0.003615	443.77	171.47	Osbp1	AA611861	NM_001003717 /// NM_175489
1123	109335_at	0.003617	2410.03	1330	9430023P16Rik	AI840418	NM_001005507
1124	100051_at	0.00365	1567.4	1072.43	Epb7.2	U17297	NM_013515
1125	92467_g_at	0.003656	822.93	346.6	Plcbl	U85714	NM_019677
1126	160819_at	0.003666	19645.87	16520.9	Ndr4	AW121600	NM_145602
1127	10542_0_at	0.003673	212.37	102.47	Rab14	AI649155	NM_026697
1128	137084_at	0.00368	2412.4	1590.37	4930565N16Rik	AA624105	XM_125517
1129	98027_at	0.003684	629.23	512.07	C019a2	Z22923	NM_007741
1130	139426_r_at	0.003697	1330.53	861.53	---	AW228933	NM_010206
1131	98386_s_at	0.003698	676.83	497.1	Caenalc	U17869	NM_009781
1132	94064_at	0.0037	489.77	297.9	Zfp91	U05343	---
1133	138986_at	0.003711	7325.8	4388.13	Centg3	AI847278	NM_139153
1134	163530_at	0.003716	2447.73	1764.13	---	AW121535	---
1135	114409_at	0.003717	988.9	100.23	Nktr	AA655805	NM_010918
1136	117137_at	0.003719	7803.5	4906.87	Camk2g	AW121347	NM_178597
1137	138182_at	0.003722	1410.33	991.1	9630036L12Rik	AW049816	XM_288123
1138	94488_at	0.003737	789.97	626.27	1110059P08Rik	AI847041	NM_025418
1139	139029_at	0.003746	585	158	---	AI845271	---
1140	112427_at	0.003752	476.73	150.7	AI427653	AI854077	NM_178714
1141	111156_at	0.003753	118.27	16.73	Jray	AA665916	NM_021310
1142	167250_S_at	0.003762	514.6	294.57	Lactb2	AV0523_94	NM_145381
1143	138381_at	0.003768	1611	902.2	---	AW060967	---
1144	167783_f_at	0.003769	3583.93	1394.87	1810009A16Rik	AV262024	XM_355528
1145	98993_at	0.003776	3752.03	3061.53	Pop2r5c	U59418	NM_012023
1146	100155_at	0.003791	1018.63	762.03	D.drl	L57509	NM_007584

Table 5

1147	97554_at	0.003806	829.8	615.73	BC005624	AI838889	NM_144885
1148	99804_at	0.003831	724.53		---	M97516	NM_J07418
1149	93590jit	0.003844	453.97	300.93	Ndst1	AI844370	NM_J308306
1150	103029_at	0.003864	1570.27	1138.3	Pcdc4	D86344	NM_011050
1151	9815_0_at	0.003875	3189.33	2476.53	Rabilb	L26528	NM_008997
1152	101927_at	0.003894	4972.6	3027.8	Prkarlb	M20473	NM_008923
1153	135253_at	0.003899	6231.53	4823.53	---	AI847615	---
1154	106967_at	0.003901	95.23	26.67	Cul4b	AI427169	NM_028288
1155	139980_g_at	0.003905	1746.5	862.57	Ndufs1	AI450646	NM_145518
1156	168462_at	0.003907	1684.07	1102.9	---	AV340874	NM_139540
1157	131255_at	0.003924	1788.63	836.17	C630016B22Rik	C88213	NM_172051
1158	139519_at	0.003924	19113.3	9458.93	Gabra2	AW046395	NM_008066
1159	102151_at	0.003925	892.83	474.43	---	L10084	NM_007419
1160	10776S_at	0.003927	461.67	267.87	6330500A18Rik	AI426461	NM_172675
1161	111782_at	0.00393	1880.23	1330.47	2310065H12Rik	AW122149	NM_029648
1162	109511_at	0.003933	456.67	234.33	Cy1d	AA798616	NM_173369
1163	112948_at	0.003939	16916.9	13046	D9Bwg0185e	AI844254	NM_173781
1164	111006_at	0.003964	7360.23	5591.4	Plcbl1	AI131739	NM_019677
1165	117011_at	0.003965	1769	797.2	AW105743	NM_013813	---
1166	139278_at	0.003975	5870.17	2669.23	BC042620	AW049028	NM_128530
1167	102664_at	0.003977	789.07	324.1	Cgk5r	U89527	NM_009871
1168	92341_at	0.003977	1049.17	426.87	B3galt2	AF029791	NM_020025
1169	163988_at	0.003978	342.93	188.03	2410127E18Rik	AW125271	NM_029742
1170	13803_e_at	0.003986	3275.4	1463.77	---	AI851444	---
1171	97865_g_at	0.003994	1788.17	1212.83	2511000449911199Rik	AW2255888422	NM_026455
1172	102402_at	0.004	1547.33	1161.43	Gbas	AJ001261	NM_008095
1173	97904_at	0.004014	5447.03	4117.3	Actr3	AW123	NM_023735
1174	103428_at	0.004014	636.87	502.4	P01d3	AW04	NM_133692
1175	140889_s_at	0.004014	6993.13	3471.67	---	AW122377	NM_48B870
1176	99882_at	0.004021	388.63	92.27	Ids	L07921	NM_010498
1177	115814_at	0.004029	1912.73	882.87	2210417C17Rik	AI047908	NM_J29809
1178	138946_at	0.00404	4868.67	1548.07	Syt7	AI844346	NM_018801
1179	160417_at	0.004041	853.17	360	Kif5b	U86090	NM_008448
1180	141051_at	0.004041	488.97	281.37	Fgf10	AI527654	NM_008002
1181	103766_at	0.004044	138.63	77.83	Sema5a	X97817	NM_009154
1182	109945_at	0.004057	4654.53	3402.2	D130026O08Rik	AI850918	NM_080448
1183	114518_at	0.004061	765.73	513.23	Ppmla	AA254205	NM_008910
1184	99077_at	0.004075	365.17	294.63	Thra	X07750	NM_178060

/// NM_173068

/// NM_153 070

Table 5

1185	9944_0_at	0.004079	799.53	377.3	Nfib	Y07686	NM_008687
1186	93463_at	0.004086	439.07	223.8	Üsp19	AW122517	NM_027804
1187	136193_i_at	0.004107	1759.83	1134.73	Cul2	AI852917	NM_029402
1188	106484_at	0.004109	135.73	35.57	---	AI846694	NMJJ29804
1189	111832_at	0.004116	1564.73	975.87	---	AA930337	NM_172827
1190	100507_at	0.004125	2430.17	1695.13	Nov	Y09257	NM_010930
1191	1114092at	0.00413	582.83	400.3	---	AI835528	NM_029654
1192	112049_at	0.004134	206.23	69.13	Ücoa2	AW121738	NM_008678
1193	97944_f_at	0.004142	705.77	475.23	---	AF099808	NMJJ72288
1194	16068_6_at	0.004175	666.67	505.93	5730555F13Rik	AI836015	NM_025690
1195	138554_at	0.004176	1472.43	914.57	---	AI853109	NM_484423
1196	94435_at	0.004186	976.33	503.53	D10Ertg438e	AI839117	---
1197	162910_at	0.004186	516.27	375.5	Xpoott	AI851617	XM_125902
1198	129310_at	0.004189	671.13	133.37	---	AA638581	XM_109700
1199	167028_at	0.004189	1734.03	1332.5	Fads3	AI841650	NM_021890
1200	110172_at	0.004197	1010.8	790.7	493044A02Rik	AA929827	NM_029037
1201	93606_s_at	0.004198	1773.03	1081.3	Igsf4	AB021966	NM_001025600
1202	116355_at	0.0042	640.77	531.5	MLIt 7	AA840142	---
1203	164257_at	0.004222	241.57	55.83	5430432P15Rik	AI44622550022	XM_129246
1204	93712_at	0.004231	499.33	298.33	Ccnt1	AFO 95640	NM_009833
1205	109397_at	0.004232	1682.07	1284.67	E2f4	AI844030	NM_148952
1206	96959_at	0.004236	2696.6	1909.67	Übe2n	AW210080	NM_080560
1207	104625_at	0.004238	641.17	407.37	---	AA874130	NM_011847
1208	160363_at	0.00424	1135.07	932.97	Tcfl1	D43643	NM_009336
1209	100413_at	0.004251	972.7	699.6	Zap3	AB0331e8	NM_178363
1210	103667_at	0.004272	598.03	477.93	---	AA866655	---
1211	97227_at	0.004284	331.87	157.7	Gnal2	M63659	NM_010302
1212	133128_at	0.00429	5006.57	2000.7	8430419L09Rik	AW120461	NM_028982
1213	171126_f_at	0.004292	2937.53	2239.87	---	AV050312	NMJJ45465
1214	104475_at	0.004293	516.7	339.93	---	AW124101	---
1215	109521_at	0.004301	1484.37	1240.57	---	AW123386	NM_008957
1216	103228_at	0.004303	853.93	459.87	Mtmr7	AF073882	NM_019433
1217	137563_f_at	0.004303	544.03	276.9	Akai27	AA966954	NM_018747
1218	114383_at	0.004309	649.33	450.67	Sc5d	AI834900	NM_172769
1219	102225_at	0.004313	1407.33	1042.07	9630005B12Rik	AA163268	NM_013862
1220	163749_at	0.004316	958.63	457.2	1200007B05Rik	AA433491	NM_026165
1221	106571_at	0.00432	511	336.53	Lztf11	AI849674	NM_033322
1222	107880_at	0.004333	1459.67	958.07	---	AI846611	NM_030719

Table 5

1223	94362_at	0.004352	1169.87	1068.53	Nras	AI843682	NM_010937
1224	96801_at	0.004367	1742.87	1264.73	Aki	AJ010108	NM_021515
1225	103710_at	0.004379	146.47	126.8	---	AI037032	NM_001029892
1226	157468_at	0.004382	579.43	394.67	AW011752	AV322674	NMJ.34034
1227	134046_at	0.00439	858.6	312.87	Wnt5a	AA288297	NM_009524
1228	117107_at	0.004392	4034.33	2874.17	Ppm1l	AI837758	NM_178726
1229	104216_at	0.004395	250.13	126.7	Shoc2	AF068921	NM_019658
1230	140886_at	0.004401	1988.5	1330.13	E1303	07J04Rik	AW121467 NM_021885
1231	101830_at	0.004423	383.2	281.57	Ryr3	X83934	XM_619795 /// XM_619796
1232	116003_at	0.004424	696.9	438.97	Slc35e3	AI594591	NM_029875
1233	93063_at	0.004462	23246.1	15966	App	U82624	NM_007471
1234	93615_g_at	0.004464	269.13	202.03	Pbx3	AF020200	NM_016768
1235	97210_at	0.004478	1133.07	893.2	1700037H04Rik	AW048446	NM_026091
1236	111753_at	0.00448	1066.4	520.9	Zfp294	AI156159	XM_128374 /// XM_489597
1237	105838_at	0.004486	1454.6	1290.33	Ppp2r5b	AI846204	NMJL98168
1238	163041_at	0.004491	16587.2	11789.37	D10Erttd749e	AI846333	NM_025635
1239	136007_at	0.004509	2482.17	1049.2	BC044798	AW122183	NMJL72442
1240	101889_s_at	0.004522	486.63	179.73	Rora	U53228	NM_013646
1241	131220_f_at	0.004529	8316	6792.17	4931426N11Rik	AW123699	NM_172579
1242	94196_at	0.004537	399.2	286.37	Ikbkg	AF069542	NM_010547 /// NM_178590
1243	9903G_s_at	0.004542	176.03	58.5	Map2k7	AB005654	NM_011944
1244	115855_at	0.004571	566	206.93	Man2a2	AI851620	NM_172903
1245	108554_at	0.004578	2974.77	1457.53	4631427	C17Rik	AI851845 NM_021414
1246	136202_at	0.004608	1048.97	392.87	Usp33	AI853456	NM_133247
1247	158228_i_at	0.004617	598.77	208.63	Slc35a5	AV260137	NM_028756
1248	163425_at	0.004623	900.03	501.43	1500012D09Rik	AA472312	NM_172601
1249	108044_at	0.00463	456.4	242.5	AW123980	NM_175146	
1250	99048_g_at	0.004632	2054.9	724.07	Mobp	U81317	NMJO 8614
1251	103559_at	0.004647	3027.67	1508.97	Prkaca	M12303	NM_008854
1252	APPX-Bioc-3_at	0.004654	1293	561.17	---	J04423	---
1253	114015_at	0.004659	1213.93	651.73	Leprpt1l	AW122473	NM_026609
1254	139533_at	0.004667	1847.6	670.97	6820402020Rik	AW047575	XM_133187
1255	138058_at	0.004684	1572.47	1103.27	Disp2	AI835296	NM_170593
1255	109951_at	0.004686	459.8	305.13	---	AI644184	NM_199476
1257	94918_at	0.004691	1078.17	957.2	Aars	AI839392	NM_146217
1258	110421_at	0.004698	648.03	425.3	0610010K06Rik	AW060214	NM_027861
1259	95416_at	0.004731	557.03	323.93	Usp15	AI642184	NM_027604
1260	105934_at	0.004731	263.1	81.03	9130423L19Rik	AI846379	NM_029869 /// NM_133906

Table 5

1261	105901_at	0.004741	4201.7	3196.97	Neurod2	AI849563	NM_010895
1262	105272_at	0.004744	452.37	262.27	4930487N19R1c	AA139112	XM_283206
1263	96854_at	0.004748	2550.2	1889.2	Copa	AJO10 391	NM_009938
1264	109962_at	0.004763	1268.53	571.63	Prkarr2b	AI314322	NM_011158
1265	103682_at	0.004767	301.47	185.2	AA122571	NM_011274	
1266	93540_at	0.00477	2499.67	2067.37	Adprh	L13290	NM_007414
1267	112053_at	0.004784	600.67	334.83	E130103E02Rik	AI451118	XM_150227
1268	160558_at	0.004822	1258.3	1084.3	Akt2	U22445	NM_007434
1269	113753_at	0.004831	571.8	206.3	Stard4	AA895787	NM_133774
1270	98587_at	0.004833	1673.8	956.17	Nap111	X61449	NM_015781
1271	106023_at	0.004833	503.97	353.9	Dph212	AW047512	NM_026344
1272	93839_at	0.004837	7516.33	4968.97	Rtn3	AI854888	NM_001003930
	NM_053076						/// NM_001003933
							/// NM_001003934
							///
1273	139261_at	0.004839	5346.13	3049.13	D6Ertg32e	AW046224	NM_001003955
1274	108362_g_at	0.004841	2428.9	806.77	Nr3c1	AW060548	NM_008173
1275	99855_at	0.004847	617.43	456.8	Map3k5	AB006787	NM_008580
1275	99045_at	0.004853	7833.93	6114.47	Eno2	AC002397	NM_013509
1277	115740_at	0.00487	244.87	113.67	2610020C1LRik	AI875624	NM_028130
1278	163130_at	0.004895	6232.4	4534.37	---	AW212010	NM_007561
1279	99046_at	0.004916	1178.2	523.73	Mobp	AI834776	NM_008614
1280	104105_at	0.004933	1530.77	1265.5	Xpo6	AI854665	NM_028816
1281	96433_at	0.004944	92.8	44.37	AA673236	NM_021323	
1282	160428_at	0.004952	636.53	356.63	Suc1g2	AF058956	NM_011507
1283	137719_at	0.004957	1227.03	282.53	Csrad3	AW049014	XM_139502
1284	160427_at	0.004963	1807.47	1393.1	---	AW046323	NM_JL78610
1285	108712_at	0.004975	1985.57	1585.03	Cobl	AI844390	NM_172496
1286	115718_at	0.004986	239.9	123	D630032B01Rik	AW049329	NM_172532
1287	139199_at	0.004988	1465.7	684.6	Slc12a6	AI847794	NM_JL33648
1288	129880_s_at	0.004988	11640.43	8627.07	Bhlhb5	AW122356	NM_021560
1289	160240_at	0.004991	2287.57	1901.53	1110003E0Rik	AI852051	NM_JL33697
1290	99047_at	0.005009	3848.47	1793.43	Mobp	U81317	NM_008614
1291	98007_at	0.005013	987.23	808.07	Rps6ka2	AJ131021	NM_011299
1292	95559_at	0.00502	2954.2	2562.97	6330403K07Rik	AI838836	NM_134022
1293	92397_at	0.005024	2527	1814.8	Centg2	AW123016	NM_178119
1294	104119_at	0.005027	796.67	593	AW060714	AI845028	NM_146084
1295	101571_g_at	0.005034	849.5	561.93	Igfbp4	X76056	NM_010517
1296	113014_at	0.005036	119.73	59.53	Sfmbt1	AA882264	NM_019460
1297	138126_at	0.005039	1710.6	817.43	---	AW048176	XM_354566

Table 5

1298	105243_at	0..00506	856.17	480.97	D6Erttd349e	AI557996	NM_182784
1299	96066_s_at	0..005073	13711.33	10007.77	Pkra2	X97047	NM_011099
1300	103751_at	0..005089	346.57	189.43	AA409316	AA833096	NM_134087
1301	93505_at	0..005095	2440.13	2091.9	Ube2b	U57690	NM_009458
1302	106463_at	0..005095	443.83	232.4	AI850334	XMJ_29010	
1303	93615_at	0..005096	224.6	149.67	Pbx3	AF020200	NM_016768
1304	139493_at	0..005104	1115.77	168.2	C030032C09Rik	AI840105	XM_618798
1305	16681S_at	0..005104	3492.67	2573.4	Cul5	AI852S17	NM_027807
1306	163689_at	0..005118	1826.83	1399.17	Mtel	AA286242	NM_134188
1307	98475_at	0..005122	288.37	166.33	---	U69262	NM_016762
1308	110581_at	0..005132	1881.9	1019.03	5730405I09Rik	AA189229	NM_026484
1309	AFFX-BIOB-M_at	0..005133	3728.1	1675.43	---	J04423	---
1310	113094_at	0.005141	1360.93	523.67	2700038M07Rik	AA175692	NM_019653
1311	98081_at	0.005156	346.93	226.27	Gtf3a	AI853173	NM_009087 /// NM_181730
1312	165698_i_at	0.005165	1254.63	663.57	Zfp261	AI117254	NM_019831
1313	112378_at	0.005173	676.73	488.87	Sh3kbp1	AI842868	NM_0213 89
1314	165581_at	0.005174	8621.83	6836.47	0710005M24Rik	AI841362	NM_178631
1315	131772_at	0.005176	698.97	369.9	AI427604	---	---
1316	96011_at	0.005204	1494.77	699.97	Matr3	AB009275	NM_010771
1317	104654_at	0.005212	1097.53	731.63	Act16	AI847 687	NM_031404
1318	117005_at	0.005222	4286.03	2829.87	C030033M19Rik	AW124012	NM_001012623 /// NM_001012624 ///
NM_001012625	///	NM_053270	///	NM_183018			
1319	117178_at	0.005232	1974.23	1314.27	---	AI844448	XM_484616
1320	109105_i_at	0.005236	369.97	126.73	Parva	AW122202	NM_020606
1321	92870_at	0.005242	711.37	356.1	Sellh	AF063095	NM_011344
1322	108373_at	0.005248	318.57	224.83	B930006L02Rik	AW124108	NM_178764
1323	166513_at	0.005248	1402.9	677.1	CI30038G02Rik	AI844429	NM_001033601 /// NM_029920
1324	112072_at	0.005261	1185.47	610.67	---	AW124532	XM_488897
1325	162855_at	0.005268	1356.23	490.77	Btbl14b	AI851205	NM_025788
1326	94970_at	0.005271	351.6	226.27	C230060M08Rik	AI852314	NM_182939
1327	108308_at	0.005275	800.9	544.7	A730011F23Rik	AW124712	XM_620260
1328	111093_at	0.005296	961.37	270.7	Tcf4	AW122341	NM_013685
1329	163885_at	0.005298	1346	820.53	Ube2d3	AA104137	NM_025356
1330	106893_at	0.005314	2810.33	2067.67	Lgi3	AW046096	NM_145219
1331	161616_f_at	0.00535	659.37	413.53	---	AV354117	NM_023396
1332	102030_at	0.005367	170.4	80.43	Atrx	AF026032	---
1333	97451_at	0.00538	911.3	767.37	Mcf2	AI837599	NM_139295 /// NM_176808
1334	103520_at	0.00541	226.37	74.07	Vegfa	M95200	NM_001025250 /// NM_001025257 /// NM_009505

Table 5

1335	93652_i_at	0.005432	869.97	373.93	Vamp1 U61751	NM_009496
1336	101367_at	0.005437	4226.53	2633.33	Dctn1 U60312	NM_007835
1337	165770_at	0.005453	5468.3	4427.33	4833444A01Rik	AI851927 ---
1338	130469_s_at	0.005454	476.07	307.07	Rbm5 AW049099	NM_148930
1339	165532_r_at	0.005456	5142.43	1436.67	Pum1 AW214087	NM_030722
1340	105301_at	0.00547	1823.27	1184.33	1700020I14Rik	AW121997 XM_488956
1341	106936_at	0.005486	859.37	453.4	A230020K05Rik	AI846328 NM_029930
1342	140699_at	0.005489	776.03	362.7	Gsk3b AW124014	NM_019827
1343	92492_at	0.005497	233.43	116.8	AK31 AB020203	NM_021299
1344	112867_at	0.005499	1177.37	540	1600019D15Rik	AI846416 NM_028975 /// NM_030108
1345	163246_at	0.005534	7265.27	4449.77	Usp22 AA939763	NM_001004143
1346	94955_at	0.005541	411.33	266.57	5530600A18Rik	AW125433 NM_027799
1347	97160_at	0.005542	1104.73	464.7	Sparc X04017	NM_009242
1348	167463_r_at	0.005548	2373.17	1528.3	Ubqln1 AV233802	NM_026842 /// NM_152234
1349	109410_at	0.005557	1681.63	1086.63	9230102N17Rik	AW121121 NM_001012518 /// NM_172545
1350	106581_at	0.005558	3146.6	1986.07	0610042I15Rik	AW049498 NM_019661
1351	162723_at	0.005579	605.5	416.07	Cacnb4 AW046306	NM_146123
1352	103967_at	0.005589	94.83	25.1	Mid2 AI551105	NM_011845
1353	114526_at	0.005618	257.23	138.1	Sc7l AI265613	NM_153091
1354	162834_at	0.005623	918.97	352.43	Ddah1 AW050076	NM_026993
1355	102316_at	0.005635	662.13	488.1	Capn5 Y10656	NM_007602
1356	135364_at	0.005652	727	440.73	---	AI506466 ---
1357	160203_at	0.005657	976.8	784.73	5330419I01Rik	AA840409 NM_134081
1358	137165_at	0.005698	539.6	242.9	---	AI327233 XM_138063
1359	108490_at	0.005699	1604.8	1184	Pten AI463227	NM_008960
1360	105072_at	0.005699	152.8	80.47	A630082K20Rik	C86444 XM_145254
1361	93618_at	0.0057	4272.2	3346.03	Spnb3 AF026489	NM_021287
1362	93852_at	0.005703	2455.53	1383.27	Mef2a AW045443	NM_001033713
1363	110625_at	0.005716	142.53	50.77	5730538E15Rik	AI591648 NM_173443
1364	113012_at	0.005724	2570.07	1620.67	Gpd2 AI846919	NM_010274
1365	113288_at	0.005734	461.17	306.4	Klf3 AA967846	NM_008453
1366	136244_at	0.005746	1726.53	1223.8	---	AI845568 NM_138682
1367	138507_at	0.005753	10250.77	7440.2	---	AI852513 ---
1368	98083_at	0.005765	814.7	537.37	Copeb AW049031	NM_011803
1369	92183_at	0.005765	1082.07	748.07	Dtna Z79787	NM_010087 /// NM_207650
1370	98731_at	0.005769	345.03	184.67	Rab5b X84239	NM_011229 /// NM_177411
1371	166605_at	0.005775	1814.87	1192.47	---	AI315686 ---
1372	112648_f_at	0.005809	314.23	131.93	Mtf2 AA623502	NM_013827

Table 5

1373	112203_at	0.005844	755.6	412.1	GmfEb	AI159117	NM_0222023		
1374	104354_at	0.005853	1396.97		Csflr	X06368	NMJJ07779		
1375	9617_8_at	0.005862	1505.53		MySt2	AI850636	NM_177619		
1376	139224_at	0.005874	2749.97		Habp4	AW049540	NM_019986		
1377	92445_at	0.005889	317.07		Cacnala	U76716	NM_007578		
1378	103436_at	0.005898	828.53		Gtpbp1	U87965	NM_013818		
1379	165951_i_at	0.005901	656.4	321.63	BC034507	AI427140	XM_131888		
1380	101857_at	0.005903	768.4	376.57	SrpK2	AB006036	NM_009274		
1381	160880_at	0.005909	2459.9		Mapk8ip3	AB005562	NM_013931		
1382	137513_at	0.005913	1559.1	1084.4	ElavU	AI666779	---		
1383	135272_at	0.005915	2621.73		C030032C09Rik		AI852221	XM_618798	
1384	166810_at	0.005935	23233.1	15988.13	Trim37	AWI23384	NM_197987		
1385	103611_at	0.005938	4211.93	3078.03	Cd47	AB012693	NM_010581		
1386	139147_at	0.005959	713.43	509.4	---	AWI21331	---		
1387	107426_at	0.005967	449.47	244.57	4932408F19	AW047162	NM_207225		
1388	95405_at	0.005971	959.3	709.1	Mesdc2	AW045534	NM_023403		
1389	163574_at	0.005977	4355.03	2839.63	Slc4a10	AI849868	NM_033552		
1390	106648_at	0.005982	3713.67	2056.93	Ckif Sf3	AW045837	NM_024217		
1391	160320_at	0.006013	795.67	566.33	Sorbsl	U58883	NMJ301034962	/// NM_001034963	/// NM_001034964
	NM_009166	/// NM_178362							
1392	166439_at	0.006015	1955.23	1178.67	Pigb	AI875170	NM_028181		
1393	166843_at	0.006018	15151.47	11120.73	---	AI851523	---		
1394	160777_at	0.006026	2765.73	2052.27	AA048451	AI851515	XM_127105		
1395	98635_at	0.00603	1074.7	653.9	D11M0h35	AI854629	NM_172300		
1396	109647_at	0.006032	1519.87	982.07	E030026I10Rik	AI021441	NM_008687		
1397	104293_at	0.006034	1368.17	1063.37	1810045K06Rik	AI882440	XM_144142		
1398	101564_at	0.006036	358.03	180.3	Cnot7	U21855	NM_011135		
1399	1068D5_at	0.006039	318.03	158.33	9130023D20Rik	AW048267	NM_178746		
1400	99196_at	0.00604	3473.47	1792.03	---	AI848532	NM_001024622		
1401	109760_at	0.006051	5266	4132.83	Dnajc5	AI848972	NM_016775		
1402	166807_at	0.006072	3665.53	2646.03	KcNJ11	AI842722	NM_010602		
1403	109679_at	0.006077	2736.23	2003.93	Galnt11	AI841003	XM2283069		
1404	107411_at	0.00608	387.57	134.87	Pik3ca	AW048031	NM_008839		
1405	109550_at	0.006082	227.03	148.87	1110032A04Rik	AW122199	NMJJL33675		
1406	113855_at	0.00609	3845.8	2671.67	---	AI840093	NM_001029877		
1407	92518_at	0.006091	504.77	411.57	Neol	Y09535	NM_008684		
1408	162978_at	0.006148	684.4	471.17	BB075781	AI840731	NM_027712	/// NM_177639	
1409	163300_at	0.006154	411.9	306.47	2610206B13Rik	AI842125	NM_026047		

Table 5

1410	111211_at	0.006173	2323.23	1391.4	---	AW122869	NMJL98105	
1411	110643_at	0.006178	387.63	263.9	Crlz1	AI516280	NM_023054	
1412	104327_at	0.006195	1099.97	640.17		9030612M13Rik	AA755234	---
1413	111080_at	0.00621	559.6	336.9	B230022H04Rik	AA762313	NMJL53515	
1414	162985_at	0.006215	1336.23	565.93		Pbx1	AI848790	---
1415	92374_at	0.006218	789.93	568.4	---	AW120691	NM_001008533	/// NM_009629
1416	99432_at	0.006222	285.97	162.87		Cyln2	AJ228865~	NM_009990
1417	93341_r_at	0.006234	3731.17	3026.17		Coqb2	AF043120	NM_015827
1418	98596j3_at	0.006235	1477.97	1036.97		Siata9	Y15003	NMJ501035228 /// NMJ311375
1419	116929_at	0.006243	1056.1	776.73	---	---	---	---
1420	135785_at	0.006275	325.27	27.3	---	AI836579	XM_356997	
1421	99146_at	0.006303	645.83	489.57		Stx6	AW124355	NM_021433
1422	11276_l_at	0.006305	1399.63	517.3	Utrn	AI227355	NM_011682	
1423	109499_at	0.006312	694.77	443.5	4930565N16Rik	AA990018	XM_125517	
1424	96375_at	0.006313	144.07	97.03	---	C80249	---	---
1425	1385-24_r_at	0.006336	3953.53	2722.57		9530033F24Rik	AI836314	XM_622106 /// XM_622111
1426	98841_at	0.006357	222.33	147.07		Acvr2	M65287	NM_007396
1427	92769_at	0.006359	2172.7	1616.03		Psmd3	M25149	NM_009439
1428	105878_at	0.006361	499.07	230.6	---	AI846717	---	---
1429	166321_at	0.006381	972.8	473.17	Cdc371	AI851215	NM_025950	
1430	95142_s_at	0.006401	3681.53	2150.77		Capzb	U10407	NM_009798
1431	160936_at	0.00643	308.4	225.33	Tram1	AA763937	NM_028173	
1432	111382_at	0.006434	36045.3	27935.8		Calml	AI835341	NM_009790
1433	109329_at	0.006438	373.27	143.97		6430526O11Rik	AA915457	XM_110937
1434	166213_at	0.006442	1319.47	969.8	2410089E03Rik	AW121869	XMJL27911	
1435	95335_at	0.006443	692.07	462.17		Cx3crl	AF074912	NM_009987
1436	99445_at	0.006455	169.5	122.13	1110028E10Rik	AWO 4 7 012	NM~-152808	
1437	166740_at	0.006461	2266.7	1762.27		D16wsul09e	AA624602	---
1438	109651_at	0.006469	196.73	125.5	SOC52	AA7 64618	NM_007706	
1439	168018_at	0.006472	876.03	571.73		BC003322	AI154887	NM_030257
1440	AFX-CreX-5	st 0.006473	202.03	110.93	---	X03453	---	---
1441	111335_at	0.006498	1794.23	1082.87		1110019L22Rik	AW1222443355	NM_026756
1442	114055_at	0.00651	1861.93	1350.2	---	AI848667	---	---
1443	98872_at	0.006516	351.4	163.37	Ugt8	U48896	HM_011674	
1444	93752_at	0.006519	888.57	743.3	B430001P04Rik	AI848393	NM_172015	
1445	101483_at	0.006548	1842.5	1506.4		Ccndbp1	AI850862	NM~-010761
1446	100494_at	0.00655	320.37	207.63		Fgf1	M30641	NM_010197
1447	162057_f_at	0.006565	544.4	305.73	---	AV269118	NM_026002	

Table 5

1448	163820_at	0.006576	435.87	297.4	Csnk2a2	AW122718	NM_009974		
1449	139123_at	0.006584	4033.37	1904.63	Syng1	AI854087	NM_009303	/// NM_207708	
1450	11233_o_at	0.006586	2086.6	1524.93	Fbxo25	AI847020	NM_025785		
1451	137584_f_at	0.006588	1689.27	1059.4	---	AI504044	---		
1452	139403_s_at	0.006588	2537.57	1216.93	Dgcr2	AI643076	NM_010048		
1453	92673_i_at	0.006604	811.77	470.33	Sh3g12	U58886	NM_019535		
1454	1342S1_at	0.006613	1760.8	1251.8	Pde7b	AI551165	NM_013875		
1455	112804_at	0.006632	4820.3	3124.9	1500001H12R1k	AI849194	NM_02131	δ	
1456	13919S1a	0.006646	155.57	58.67	1190030G24	AW047739	XM_622107		
1457	104361_at	0.006661	598.73	500.37	LOC232337	AI837260	NM_177684		
1458	166874_r_at	0.006675	4354.37	2501.43	LOC381325	AI852300	---		
1459	94105_at	0.006695	1465.13	1010.5	Cdc42	L78075	NM_009861		
1460	107354_at	0.006704	3892.87	2621.4	Slit1rk5	AW049472	NM_029273	/// NM_198865	
1461	112963_at	0.006732	363	177.43	Zfp120	AI315103	NM_023266	/// NM_181266	/// NM_181267
1462	110169_at	0.006738	557.2	218.5	Pdxk	AW214049	NM_17213	<l	
1463	112874_at	0.00674	3524.6	2195.43	Ppp3ca	AW123588	NM_008913		
1464	138007_at	0.006741	3497.7	1878.37	---	AI851235	NM_011323		
1465	105700_at	0.006761	8505.3	4190.5	Syt1	AW125093	NM_009306		
1466	106483_at	0.006772	321.2	227.1	2410014A08R1k	AI850530	NM_175403		
1467	93309_at	0.006798	702.9	320.13	Ddx3x	U42386	NM_010028		
1468	115376_at	0.006801	1297.93	765.53	4933439F18R1k	AI850511	NM_025757		
1469	98960_E3_at	0.006828	580.67	339.5	B3galt3	AF029792	NM_020026		
1470	163285_at	0.006835	451.07	359.43	Rail14	AI853224	NM_030690		
1471	100713_at	0.006859	211.83	124.1	LOC170938	AB020542	NM_133358		
1472	110569_at	0.006875	251.9	137.13	AW556347	AW121158	NM_183186		
1473	111761_at	0.006911	6308.27	4450.93	Pdela	AW125737	NM_00100978	/// NM_00100979	/// NM_016744
1474	AFFX-BioC-3	at	0.006943	4018.07	1730	---	J04423	---	
1475	96655_g_at	"0.006944	790.8	516.4	8430408H12R1k	AI852916	NM_026236		
1476	113597_g_at	0.006949	2283.83	1461	4931406I20R1k	AI842100	NM_025739		
1477	115058_at	0.006951	1120.33	762.37	---	AA756546	---		
1478	164120_at	0.006959	509.33	279.47	Rpe	AI326009	NM_025683		
1479	96592_at	0.006965	835.27	403.37	Pik3r1	U50413	NM_001024955	/// NM_011085	
1480	115021_at	0.006976	1446.33	607.5	2810468K05R1k	AI390477	XM_484053		
1481	160483_at	0.007019	2342	1530.63	TCF4	U16322	NM_013685		
1482	164219_at	0.007021	1032.83	715.6	Phc3	AA967551	NM_153421		
1483	92461_at	0.007024	944.37	709.53	Mmp17	AB021224	NM_011846		
1484	110518_at	0.007082	1075.63	592.13	0710005I19R1k	AW123483	NM_001007569		

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Table 5

1485	114130_at	0.007083	679.9	468.17	Ap3s2	AI843423	AI843423	NM_009682	
1486	133833_at	0.007091	1712.5	1397.03		---	AA210380	---	
1487	117035_at	0.007113	1292.43	815.1	Atp 8a1	AI853962	AI853962	NM_009727	
1488	103842_at	0.007116	524.63	205.27	Ddx3y	AJ007376	NM_012008		
1489	95472_f_at	0.007126	1334.93	899.47	Uqcrb	AI526902	NM_026219		
1490	113534_at	0.00715	349.17	212.07	Trpc4ap	AA821949	NM_019828		
1491	100592_at	0.00717	2068.57	1465.3	Ghlttn	AI929971	NM_078478		
1492	93635_at	0.007177	1216.33	961.07	Kif3c	AF013116	NM_008445		
1493	135312_at	0.007186	3882.57	2941.37	Bra12	AI841064	NM_177900		
1494	111990_at	0.007211	737.33	601.4	Lman21	AI843115	NM_001013374		
1495	104591_g_at	0.00722	2197.43	1446.23	Mef2c	L13171	NM_025282		
1496	93614_at	0.007224	474.83	312.13	Rragd	AA600647	HM_027491		
1497	111138_at	0.007226	573.8	369.23	---	W91678	XM_126551		
1498	166664_at	0.007226	514.73	251.43		1200009K13R1k	AV298782	NM_025814	
1499	93667_at	0.007238	2698.57	1937.37	Fbxw7	AW120511	NM_080428		
1500	112459_at	0.00724	1023.9	811.53	Mapkap1	AW123352	NM_077345		
1501	112862_at	0.007246	1651.57	704.43	Agpat3	AI839358	NM_053014		
1502	96884_at	0.007249	576.53	444.63	Carhsp1	AI847631	NM_025821		
1503	116694_at	0.007255	1688.7	1070.03	BC018242	AI413751	NM_144935		
1504	160760_at	0.007256	767.7	555.1	Ptprk	L10106	NM_008983		
1505	106978_at	0.007257	599.63	434.13		473340IN12R1k	AI843004	NM_001013391	
1506	108575_at	0.007268	3140.3	2584.33	Egfl5	AI842010	---		
1507	114064_at	0.007281	619	414.57	Eya3	AI844637	NM_010166	/// NM_211356	/// NM_211357
1508	93803_at	0.007285	1211.07	943.83	Pstne3	AB007139	NM_011192		
1509	137501_f_at	0.007292	749.9	407.13		2010007L1BR1k	AI529536	NM_007386	
1510	98538_at	0.007305	845.33	615.83		2610507B1LR1k	X81632	NM_001002004	
1511	110163_at	0.007308	870.1	565.2	---	AW259659	NM_180600		
1512	130911_at	0.007313	3565.47	2255.23	---	AI197367	---		
1513	161467_f_at	0.00734	2021.1	1730.43	---	AV348528	NM_009721		
1514	162676_at	0.007346	1449.7	913.3	Glcc1l	AA647842	NM_133236	/// NM_178072	
1515	108748_g_at	0.007348	564.67	330.73	---	AI553620	---		
1516	93583_s_at	0.007349	578.9	432.87	Igh-6	V00817	XM_177464	/// XM_484186	
1517	109790_at	0.007358	356.67	194.1	...	AI414473	NM_019431		
1518	9858_0_at	0.007361	1480.17	979.3	Ppmla	D28117	NM_008910		
1519	162631_at	0.00737	389.07	279.17		G43002H21R1k	AI594352	NM_201638	
1520	110606_at	0.007372	903.73	624.63		D2Bwg1356c	AW122417	XM_130523	
1521	107582_at	0.007396	1446.73	934.73	---	AW050026	---		
1522	102835_at	0.007431	782.07	582.47	Ap2a2	X14972	NM_007459		

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Table 5

1523	106990_at	0.007471	1646.43	674.97	A830007M12	AI843411	NMJ.98250	
1524	106525_at	0.00751	559.63	408.67	9630033F20Rik	AW125887	NMJL77003	
1525	11113_l_g_at	0.007513	690.03	410.63	4333435E07Rik	AW123159	NM_173180	
1526	112756_at	0.007516	1022.4	759.6	1810009A16Rik	AA050204	XM_355528	
1527	107009_at	0.007528	7079.4	4280.33	---	AI842805	---	
1528	110986_at	0.007556	587.23	350.27	B230205M03	AI046348	---	
1529	134152_at	0.007557	326.37	185.17	6030490I01Rik	AA208287	NMJL773 59	
1530	104414_at	0.007558	846.07	567.93	Gnao	AW050194	NM_010308	
1531	114622_at	0.007558	1175.73	605.07	3830421F13Rik	AI850440	NM_027226	
1532	99501_at	0.007582	707.17	281.9	310002M17Rik	AA882416	NMJJD27016	
1533	99459_f_at	0.007605	335.93	97.4	Mark2	X70764	NM_007928	
1534	96596_at	0.007623	1231.3	926.2	Ndr1	U52073	NM_008681	/// NM_010884
1535	111123_s_at	0.007641	286S.83	1954.5	Metapl1	W63868	NM_175224	
1536	134688_at	0.007643	274.9	Foxp2	AI449000	NM_053242	/// KM_212435	
1537	136174_at	0.007654	2965.07	2384.3	---	AW048956	---	
1538	163719_at	0.007658	412.4	270.23	061001N22Rik	AI591477	NM_024201	
1539	134039_at	0.007683	3816.77	1298.23	Gng2	AA253748	NM_010315	
1540	129315_at	0.007695	1153.03	386.07	BC035291	AI122193	---	
1541	9473_7_at	0.007703	481.03	2S3.63	Adcy 8	U85021	NM_009623	
1542	114536_at	0.007704	577.2	369.33	1810013L24Rik	AA792997	XM_148044	/// XM_622721
1543	109709_at	0.007718	1071.13	691.83	2810489O06Rik	AW124034	NM_175386	
1544	115217_at	0.007726	744.07	591.27	Nfat5	AI852272	NM_018823	/// NM_133957
1545	97097_at	0.007732	397.87	258.13	4732465J09Rik	AW125669	XM_356161	
1546	109570_at	0.007743	488.1	285.67	1110015E18Rik	AA763178	NM_026536	
1547	93446_at	0.007747	83.2	28.53	U48721	NM_009560		
1548	107466_at	0.007779	500	272.63	---	AW045897	NM_001014390	
1549	96464_at	0.007785	409.97	289.6	E>lxnb2	N28179	~ XM_484491	
1550	93235_at	0.007793	230.8	130.7	BE128963	AI020029	HM_172742	
1551	108471_at	0.007799	267.33	177.27	903_04I6H16Rik	AW105925	---	
1552	113182_at	0.007805	319.5	154.43	Hdlbp	AI844871	HM_13380B	
1553	160517_at	0.007811	218.83	169.93	lmbbl	M35153	NM_010721	
1554	99154_s_at	0.007823	449.3	404.93	1810020D17Rik	AW122625	NM_183251	
1555	114982_at	0.007837	1835.07	1416.93	Prkaa2	AA959852	NM_178143	
1556	112157_at	0.00784	1189.03	597.07	9430077C05Rik	AW122374	XM_619731	/// XM_622875
1557	96255_at	0.007844	1566.93	1260.23	Bnip3l	AP067395	NM_009761	
1558	104176_at	0.007863	127.03	76.1	C79663	AI850941	NM_177762	
1559	166096_f_at	0.007895	1385.67	775.97	2900054P12Rik	AW125683	NM_028407	
1560	136056-at	0.007909	2762.03	1374.4	Mapk8	AA645429	NM_016700	

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Table 5

1561	162906_at	0.007913	344.83	251.03	111000IM19Rik	AA793025	KM_001024205
1562	162722_at	0.00792	2065.5	1363.93	BC043098	AI845023	NMJ.74997
1563	96913_at	0.007941	1226.8	875.4	AW122615	NMJL45558	
1564	104432_at	0.007966	1462.47	1155.63	Arhn AF016482	NM_009708	
1565	92519_at	0.007989	243.37	151.17	Phkal X74616	NM_008832	/// NM_173021
1566	104407_at	0.007996	880.43	588.73	Alcam I25274	NM_009655	
1567	94478_at	0.007999	2578.87	2176.3	--- AI841377	NM_025887	
1568	163781_at	0.008001	198.17	156.5	2810407C02Rik	AI842531	XM_283848
1569	116987_at	0.00804	969.23	610	4631434019RiJc	AI842482	XM_130859
1570	167447_f_at	0.008046	741.67	539.37	AW260253	AV276666	NM_172930
1571	160287_at	0.008068	2016.8	1310.97	Mapllc3	AI852557	NM_026160
1572	110674_at	0.008072	1614.03	888.97	Sbnc1 AA105753	XM_355637	
1573	165011_i_at	0.008072	644.13	337.4	Rab3c AV159057	NMJD23852	
1574	105651_g_at	0.008077	2314.93	1560.37	--- AI315312	NM_178764	
1575	95522_i_at	0.008078	446.27	294.7	Zfp68 AB024005	NM_013844	
1576	92378_at	0.008094	635.97	373.2	Ptprzl - AI849305	XM_620293	
1577	136733_at	0.008095	1768.2	1227.1	--- AI850939	---	
1578	94511_at	0.008097	280.63	161.13	--- AI850546	NM_025965	
1579	96674_at	0.008098	1008.17	814.2	Tapo3 AW123553	NMJL77296	
1580	168021_at	0.008099	622.5	193.57	2900052N0Rik	AV153111	---
1581	107619_s_at	0.008118	1786.97	631.63	--- AW120573	XM_132143	
1582	135351_i_at	0.008159	1238.97	884.3	MGC38922	AA914469	NM_144842
1583	101914_at	0.008166	1118.63	751.57	DLBrtd396e	AI846484	NM_021421
1584	133553_at	0.00817	265.6	65.57	AI595843	NM_025683	
1585	93358_at	0.008176	684.57	487.67	1500010B24Rik	AI836451	NM_025437
1586	111384_at	0.008178	323.63	207.57	Zfp191	AI019086	NM_021559
1587	96878_at	0.008189	298.9	142.8	1810044022Rik	AW048566	NM_025558
1588	111262_at	0.00819	641.9	449.6	Dusp11	AW061180	NMJ)28099
1589	171557_i_at	0.008191	562.53	281.53	--- AV116073	NM_172148	
1590	160270_at	0.008203	815.63	527.53	Lmanl AWLO 8371	NM_027400	
1591	166812_at	0.008205	2438.3	1500.53	Kcng5 AI844221	NM_023872	
1592	107029_at	0.008237	691.53	589.73	E130306I0Rik	AW048342	NM_145471
1593	163642_at	0.008271	585.17	347.73	--- AI840898	NM_010315	
1594	160843_at	0.008272	495.47	215.43	Spin AA796214	NM_011462	/// NM_146043
1595	113629_at	0.008284	361.07	180.37	Stam2 AW047341	NM_019667	
1596	110858_at	0.008299	4961.6	3251.53	B930006L02Rik	AW121823	NM_178764
1597	107910_at	0.008301	351.07	217.5	Cdadcl AW124595	XM_127813	
1598	117316_at	0.008347	618.9	448.37	Gpd2 AW124811	NM_010274	

Table 5

1599	170044_s_at	0.008356	2245.9	1454.23	---	AV302009	NM_019774	
1500	140640_at	0.008383	764.63	327.87	Cbx5	AI451142	NM_007626	
1601	101138_at	0.008394	407.23	159.13	Gabrb2	U14419	NM_008070	
1602	166666_at	0.008409	2220.63	1458.77	4732496008Rik	AV369609	NMJI72877	
1603	97724_at	0.008415	811.73	461.6	Cry2	AB003433	NM_009963	
1604	9753_0_at	0.008421	1418.4	994.57	Ube2i	U82627	NM_011665	
1605	92186_at	0.008435	166.13	87.7	Arx	AB006103	NM_007492	
1606	92899_at	0.008451	339.87	122.4	Gad2	D42051	NM_008078	
1607	110028_at	0.008453	133.43	59.43	---	AW124261	XM_129972	
1608	98778_at	0.00849	1455.27	1076.43	D5Erttd606e	AI837543	NM_001009818	
1609	113119_at	0.008511	637.53	422.17	Ddx42	AI835854	NM_028074	
1610	107412_at	0.008511	471.93	291.4	---	AW048881	NM_201406	
1611	129853_at	0.00852	12607.47	7835.73	C530050K14	AI838690	NM_001024955	/// NM_011085
1612	100980_at	0.008533	213.2	127.43	Rock1	U58512	NM_009071	
1613	92220_s_at	0.008542	2501.77	1745.47	Bin1	US0884	NM_009668	
1614	161086_at	0.008551	117.8	41.73	Lin7c	AF087695	NM_011699	
1615	114066_at	0.008553	724.77	380	Cugbp1	AI844119	NM_017368	/// NM_198683
1616	133711_at	0.008557	2601.83	1227.9	---	AI462512	NM_153057	
1617	103090_at	0.008578	592.03	403.2	2410003P15Rik	AI838742	NM_018888	
1618	129134_S_at	0.008589	1611.17	1211	Bbna1bp2	AA656774	NM_026932	
1619	135441_at	0.008622	727.03	410.37	D8Erttd457e	AA673815	NM_181854	
1620	11042_3_at	0.008629	2057.87	1192.77	2810425F24Rik	AA895554	NM_001003946	
1621	108915_at	0.008669	241.03	108	Slc17a6	AI841371	NM_080853	
1622	130343_at	0.008677	5623.9	4699.57	---	AU016810	NM_001025192	/// NM_009988
1623	99991_at	0.008693	440.67	298.47	I117r	031993	NM_008359	
1624	138513_at	0.008704	1357.9	611.93	---	AJ853785	---	
1625	112325_at	0.008725	2969.47	2741.43	Bap1	AW124035	NM_027088	
1626	104645_at	0.008739	628.57	420.27	Klf7	AI853712	NM_033563	
1627	110752_at	0.008748	2609.4	1310.47	9430022M17Rik	AW122288	NM_010905	
1628	139531_at	0.008748	835	388.83	Syt6	AW120795	NM_018800	
1629	115489_at	0.00876	7796.57	5344.07	Dpysl2	AI851130	NM_009955	
1630	166681_at	0.008777	9765.77	6038.37	D130060C09Rik	AI447884	NM_177054	/// NM_199038
1631	92952_f_at	0.008782	3208.53	1484.47	Napb	X61455	NM_019632	
1632	115922_i_at	0.008791	422.33	280.23	Cdh13	AI550332	---	
1633	104461_at	0.0088	693.57	264.67	Pik3ca	AW121773	NM_008839	
1634	106975_at	0.008801	22452.6	13971.27	Atpla3	AI837081	NM_144921	
1635	110682_at	0.008806	1573.6	1103.8	---	AW060479	XM_149712	
1636	101998_at	0.008813	118.4	84.27	4833420G17Rik	AW125086	NM_026127	

Table 5

1637	114121_at	0.008824	1750.17	1096.63	Sec1512	AI462110	XM_355790
1638	98364_at	0.008846	276.2	142.8	Kcnd2	AF107780	NM_019697
1639	104214_at	0.008871	267.33	203.77	Slc7a8	AW122706	NM_016972
1640	110857_at	0.008876	1172.2	902.37	Rab6ip2	AW123950	NM_053204 /// NMJL78085
1641	94244_at	0.00892	1106.57	766	Ihpk1	AW123807	NM_013785
1642	110824_at	0.008934	3027.83	1723	Slcla3	AW121315	NM_148938
1643	113901_at	0.008999	2758.2	1549.2	Cap2	AI593827	NM_026056
1644	111229_at	0.009007	634.33	329.8	Slc38a2	AW123416	NMJ.75121
1645	103402_at	0.009031	837.13	583.07	Tm7sf3	AI848522	NM_026281
1646	101590_at	0.009036	429.5	231.3	Lamp2	AI747194	NM_001017959 /// NMJ310685
1647	140546_at	0.009043	10593.83	6101.23	Gfap	AI835926	---
1648	1675S9_at	0.00905	812.4	578.33	AA959934	AI467162	NMJL53167
1649	167886_f_at	0.009062	622.57	340.87	Rnfl38	AV205813	NM_019706 /// NM_207623
1650	102059_at	0.009106	1187.93	873.27	Nicn1	AW125418	NM_025449
1651	115067_at	0.009109	355.1	209.53	Secδ	AW048324	NM_009148
1652	104524_at	0.009112	1628.5	1110	1110001F24Rik	AI842825	NM_019821
1653	138947_at	0.009139	4408.4	3263.47	Kcnp2	AI851528	NM_030716 /// NM_145703 /// NMJL45704
1654	115879_at	0.009144	3088.17	2235.73	1700012G19Rik	AI837146	NM_025954
1655	115831_at	0.009149	934.3	764.2	AI837224	NM_139141	---
1656	134822_at	0.009152	1016.27	693.97	---	AI605231	---
1657	106442_at	0.009156	1866.3	1060.97	Gng7	AI850107	NM_010319
1658	136245_at	0.009156	980.47	476.07	Zdhhc2	AI845904	NM_178395
1659	107393_at	0.009163	465.27	272.27	Rbm5	AI502997	NM_148930
1660	114030_at	0.009165	450.5	299.43	DXIrax41e	AI851819	NM_173747
1661	111877_at	0.009192	1419.23	1141.93	---	AA939957	---
1662	97090_at	0.009215	151.63	99.63	Tcf20	U20282	NM_013836
1663	108745_at	0.009217	47S.03	263.27	9630050M13Rik	AI466491	XM_194000
1664	98827_i_at	0.009222	333.53	109.3	Kif5a	X61435	NM_008449
1665	163313_at	0.009242	526.3	199.83	~	AI648173	XM_486329
1666	101529_g_at	0.009258	926.67	569.53	Tceal	D00925	NM_011541
1667	112204~at	0.009258	237.67	133.77	GcIm	AA636892	NM_008129
1668	93659_at	0.009316	783.47	206.73	Camk2a	X14836	NM_009792 /// NMJ.77407
1669	101919_at	0.009362	279.73	222.2	Zfx	M32309	NM_011768
1670	113596_at	0.009364	2148.83	1456.57	4931406I20Rik	AI842100	NM_025739
1671	93144_at	0.00937	1813.87	1496.87	AI317237	AI854602	NM_172819
1672	162919_at	0.009378	614	238.4	D930036B08Rik	AI227478	NM_198649
1673	100472_at	0.00942	930.63	448.7	Enah	D10727	NM_010135
1674	100037_at	0.009435	211.53	109.37	---	AW213225	NM_025860

Table 5

1675	104109_at	0.009479	998.03	700.13	4930438M06Rik	AI853773	NMJL4E564	
1676	138054_at	0.009489	5233.07	3361.27	Faim2	AI835515	NM_028224	
1677	93716_at	0.009497	789.1	551.03	U16175	NM_017403	/// NMJL83037	
1678	112481_at	0.009508	2948.4	1916.67	BC008150	AI852227	XM_484507	
1679	115553_at	0.009509	9978.67	6896.73	Purb	AI841779	NM_011221	
1680	93298_at	0.009512	1643.57	1136.63	Papssl	U34883	NM_011863	
1681	112861_at	0.009513	1582	1010.23	Rassf3	AI839168	NM_138956	
1682	160457_at	0.009525	6585.3	4888.47	9130413I22Rik	AW125397	NM_026242	
1683	100708_at	0.009526	4070.13	3378.93	H3f3b	XI3605	NM_00_8211	
1684	98528_at	0.009527	1498.27	1303.03	2510006D16Rik	AI854901	NM_029748	
1685	115382_at	0.009528	809.03	559.83	Etohi2	AI874853	NM_026799	
1686	111659_at	0.00953	552:93	441.07	---	AI120758	---	
1587	101973_at	0.009535	1046.63	807.97	Cited2	Y15163	NM_010828	
1688	116518_at	0.009549	762.53	394.57	---	AI509356	---	
1689	100139_at	0.009555	7196.13	5687.6	Pcskln	AI841733	NM_013892	
1590	104058_at	0.009556	2708.33	2219.4	1110018J12Rik	AW047528	NMJ528658	
1691	111806_at	0.009572	2259.57	1473.23	Puml	AI848885	NM_030722	
1692	93054_at	0.009595	4271.87	3052.73	1110054N06Rik	AI8463	68 NM_175134	
1693	160387_at	0.009595	197.8	159.77	1110055L24Rik	AI853900	NM_025422	
1694	112505_at	0.009598	1381.4	971.27	1110030H18Rik	AI851182	NM_026B05	
1695	167611_at	0.009611	1370.4	822.13	Abcf2	AV214932	NM_013853	
1696	96716_at	0.009619	1476.97	128~7.03	1110003E01Rik	AW121102	NM_133697	
1697	94055_at	0.009621	316.27	153.97	Cttn	U03184	NM_007803	
1698	98922_at	0.009634	315.8	253.47	Itml	L34260	NM_00840a	
1699	107091_at	0.009634	1355.9	847.27	4121402D02Rik	AI853096	NM_028722	
1700	162677_at	0.009654	1179.13	969.5	Fath	AA647211	---	
1701	99663_g_at	0.009667	709.6	583.53	Pcnt2	AI194767	NM_001002929	
1702	98513_at	0.009667	1228.23	922	0610033N12Rik	AI851821	NM_019988	
1703	101980_at	0.009704	643.57	409.97	Rpo2tc1	J03750	NM_011294	
1704	104041_at	0.009706	3885.93	2505.73	1810009A16Rik	AW122255~	XM_355528	
1705	160308_at	0.009728	303.7	200.8	Msn	AI839417	NM_010833	
1706	95800_s_at	0.009737	128.93	50.9	---	X53250	NMJD09540	/// NM_011768
1707	96002_at	0.009744	735.57	603.83	4921505F14Rik	AW123936	NM_025783	
1708	99010_at	0.009753	541.47	453.8	IsIr	AB024538	NM_012043	
1709	106606_at	0.009755	1950.27	1601.4	Mfn2	AI854053	NM_133201	
1710	114397_at	0.009779	1874.17	1540.63	9030409G11Rik	AI843245	NM_144531	
1711	93261_at	0.009794	934.03	716.27	Lgmn	AJ000990	NM_011175	
1712	93660-at	0.009807	1279.73	348.1	Camk2a	X87142	NM_009792	/// NM_177407

Table 5

1713	130476_at	0.009811	3099.63	2014.8	Ablim2	AW121090	NM_177678
1714	105699_at	0.009823	680.83	385.7	6330509G02Rik	AI845957	NMJL7294G
1715	100888_at	0.009825	321.83	139.3	Sor11	AB015790	NM_011436
1716	110678_at	0.009831	779.77	544.13	1110003A17Rik	AA259774	NM_026741
1717	115550_at	0.009837	2411.37	1437.83	Prkca	AI838164	---
1718	163745_at	0.009861	892.8	436.73	A430107J06Rik	AA914620	NM_207633
1719	138980_f_at	0.00987	3303.37	2186.5	B230217C12Rik	AI840637	XM_484073
1720	107448_at	0.009871	984.4	679.23	---	AW048685	---
1721	99191__at	0.009888	6885.9	5242.97	Cril	AI844_939	NM_025513
1722	167776_i_at	0.0099	423.5	259.23	C430017H16	AI121941	XM_143616
1723	116971_at	0.009941	867.3	615.3	AI846954	NM_172943	---
1724	94542_at	0.009942	265.17	168.2	Mbtcl	AA929348	NMJ.34012
1725	94088_at	0.009954	700.77	387.13	Ptbp2	AW228429	NM_019550
1726	952883_i_at	0.009967	697.97	294.67	A430106J12Rik	AA189811	NM_176841
1727	AFPX-iioc-5_at	0.00997	1689.47	948.63	---	J04423	---
1728	110159jat	0.00997	1324.9	1021.03	4930538C18Rik	AW123686	NM_029457
1729	115035_at	0.009975	251.27	150.63	1700009P03Rik	AI447318	NM_134077
173.0	100538_at	0.009981	2619.27	1878.97	Sodl	M35725	NM_011434

Table 6

%Monocular deprivation (16 days) versus control		%Downregulated in long term MD		%Significance criterion = 0.01	
%i	affyid	P	MD	control	gene
1	92610_at	0.000733	259.1	470.47	Rdbp NM_138580
2	92625_at	0.008408	1193.87	1530.67	Ntne2 KM_008705
3	92628_at	0.005435	1887.17	2942	Rp136 NM_018730
4	92631_f_at	0.009236	1983.52	3304.1	Calm3 NM_007590
5	92636_f_at	0.003608	913.88	1331.43	Sec 6l9 U11027 NM_011343
6	92769_s_at	0.002068	429.53	909.2	Alas2 NM_009653
7	92798_at	0.002359	3051.12	3880.47	Atp 5C1 AA870675 NMJ320615
8	93008_at	0.000837	569.48	875.83	Iisra4 NM_015816
9	93019_at	0.007564	859.07	1196.83	H2afX Z35401 NM_010436
10	93048_at	0.000008	571.35	925.33	Clpp AJ005253 NM_017393
11	93094_at	0.003971	114.22	203.83	Cdr2 U88588 NM_007672
12	93119_at	0.000094	3974.18	6057.97	Cox 5b X531 E7 NM_009942
13	93257_at	0.003195	834.02	1083.17	Ddx1 AW048287 NMJ_34040
14	93519_s_at	0.009139	1367.95	2200.8	Nedd8 AI847056 NM_008683
15	93559_at	0.007186	685.6	1034.2	Apex1 D90374 NM_009687
16	93589_at	0.001711	1611.7	2411.53	Lysal1 AI851172 NM_026174
17	93764_at	0.002054	1091.97	1626.07	2700054G14Rik AI854527 NM_023312
18	93789_s_at	0.009533	500.92	703.63	Sin3b AP038848 NM_009188
19	94062_at	0.000674	2352.55	3822.07	Ndufv2 AI847609 XMJL28725
20	94068_at	0.003851	1294.02	1688.73	Rps19 AW048899 NM_023133
21	94229_at	0.006025	1560.1	2086.77	0610009M14Rik AWI24489 NM_023910
22	94242__at	0.002521	338.42	522.33	Dl1lrrtg672e AA881309 NM_026559
23	94806_at	0.005224	1179.5	1586.9	--- AW125336 NMJ324221
24	94807_at	0.006567	899.03	1205	Slc25a1 AI848354 NM_153150
25	94850_at	0.005383	293.17	455.5	Acate3 AJ238894 NMJ319736
26	94875_at	0.000744	385.67	646.6	Mrp120 AI838915 NM_025570
27	94897_at	0.005812	811.83	1189.87	Gpx4 D87896 HM_008162
28	95477_at	0.007402	929.23	1636.57	111000IM20Rik AWI25185 NM_029565
29	96041_at	0.007153	869.33	1509.03	Rbm3 AB016424 NM_016809
30	96054_f_at	0.006022	248.43	357.67	Acp1 Y17345 NM_021330
31	96060_at	0.005014	290.37	380.83	Serp1nb6a U25844 NM_009254
32	96617_at	0.009867	754.6	1148.3	Drapl AI844737 NM_024176

Table 6

33	96709_at	0.003341	4179.12	7394.83	1110008P14Rik	AI839839	NM_198001
34	97204_s_at	0.000624	172.22	362.53	Dnajd1	AI850983	NM_025384
35	97229_at	0.004304	519.65	759.23	5730427N09Rik	AW061042	NM_021552
36	97241_at	0.006237	393.1	648.87	D19Erttd721e	AI787713	NM_146093
37	97274_at	0.004015	946.47	1346.67	Psmq14	Y13071	NM_021526
38	98936_at	0.006461	720.93	1003.93	Sars1	AI837395	NM_011319
39	98937_at	0.004035	834.98	1032.37	Tbrg1	AW049795	NM_025289
40	94526_at	0.003127	1646.85	2518.37	D10Erttd214e	AI848453	NM_134007
41	94530_at	0.008075	433.87	628.8	C85417	AI840376	NM_145445
42	95044_at	0.000001	625.47	1096.03	1500003D12Rik	AI844549	NM_025895
43	95046_s_at	0.00741	762.63	1067.57	Eif2b4	M98036	NM_010122
44	95053_s_at	0.00082	2508.5	3917.9	Sdhh	AA674669	NM_023374
45	95131_f_at	0.000864	5476.75	6840.3	Ndufb2	AI852592	NM_026612
46	95132_r_at	0.008433	4074.27	6418.43	Ndufb2	AI852592	NM_026612
47	95137_at	0.004919	487.02	749.37	1810014L12Rik	AI852985	NM_133706
48	95689_at	0.009342	1464.07	2059.57	Mtchl1	AI840995	NM_019880
49	95696_at	0.00036	1590.53	2447.6	Txnl2	AI840882	NM_023140
50	95701_at	0.005204	940.08	1381.9	4930415K17Rik	AW124069	NM_133687
51	95707_at	0.002178	1023.92	1793.7	2900010M23Rik	AA615853	NM_026063
52	96258_at	0.003014	2101.02	4019.6	Mgst3	AI843448	NM_025569
53	96290_f_at	0.003834	5406.58	7332.5	Gtf3a	U93863	NM_019647
54	96318_at	0.009638	685.28	914.27	I125	AW045739	NM_080837
55	96864_at	0.0079	384.93	494.9	AI648866	AI848770	NM_207207
56	96900_at	0.003876	5343.98	8428.83	I620401E04Rik	AW125480	NM_175329
57	96902_at	0.002162	154.33	268.27	2900091E11Rik	AW121847	NM_026070
58	97443_at	0.007506	1497.6	1860.07	Mrpl52	AI850850	NM_026851
59	97518_at	0.009573	1035.65	1698	Fdft1	D29016	NM_010191
60	98125_at	0.004121	649.85	1009.53	1110025I09Rik	AI849193	NM_026795
61	98147_at	0.006596	1500.4	2081.33	Usp5	AC002397	NM_013700
62	98588_at	0.007687	523.82	740.7	Fah	Z11774	NM_010176
63	98627_at	0.005161	591.02	1011.2	Igfbp2	X81580	NM_008342
64	99106_at	0.002248	2180.33	3023.73	Cops6	AF071315	NM_012002
65	99123_s_at	0.008858	471.33	703.93	---	AW061280	NM_019502
66	99128_at	0.009963	2669.78	3867.43	---	AI849767	NM_138597
67	99150_at	0.004739	343.48	497.93	Ict1	AI844357	NM_026729
68	99607_at	0.002588	2438.88	3859	Skp1a	Z47088	NM_011543
69	99656_at	0.000127	451.6	740.63	D8Erttd812e	AI849027	NM_198020
70	100040_at	0.009841	205.78	298.7	Mrpl17	AI843081	NM_025301

Table 6

71	100042	_at	0.002091	708.95	1056.7	Hagh	AI837921	NM_024284	
72	100079	_at	0.001385	2191.53	3370.53	Kdufb9	AI845556	NM_023172	
73	100095	_at	0.000136	524.77	691.5	Scarb1	U37799	NM_016741	
74	100576	_at	0.003731	211.22	309.87	Pafahlb3	U57746	NM_008776	
75	100599	_at	0.009874	1611.77	2278.87	Atf4	M94087	NM_009716	
76	100628	_at	0.004829	1491.4	2766.13	---	AI840263	NM_025523	
77	101039	_at	0.001053	736.87	1054.37	Col4a2	X04647	NM_009932	
78	101063	_at	0.000027	220.68	742.23	Tncc	M29793	NMJ309393	
79	101057	_at	0.001669	678.75	840	BC023814	AW124711	NM_026591	
80	101094	_at	0.001168	189.27	329.87	7420700H20Rik	AI836820	NM_019814	
81	101486	_at	0.007463	1300.57	1777.63	Psmb10	Y10875	NM_013640	
82	101517	_at	0.002171	635.12	906.67	Tex261	X81058	NM_009357	
83	101989	_lat	0.000256	2823.92	4891.23	Ugcrc1	AW125380	NM_025407	
84	102036	_at	0.002657	292.12	421.8	810004B07Rik	AW046757	HM_026909	
85	102395	_at	0.007877	207.67	290.93	Pmp22	Z38110	NM_008885	
86	102409	_at	0.006707	549.88	743.23	Lsm8	AW046963	NMJ133939	
87	103074	"f at	0.000346	411.47	747.17	Taf9	AI842969	NM_001015889	/// NM_027139
88	103631	_at	0.004504	231.17	340.3	2810407K09Rik	AA985795	NM_026999	/// NM_027592
89	103664	_at	0.008092	318.25	480.6	2810452K22Rik	AA959648	NM_026048	/// XM_620010
90	103904	_at	0.002462	1047.8	2163.97	Krt2-8	X81584	NM_008344	
91	103910	_at	0.002177	781.53	1028.43	---	AJ249987	NM_020024	
92	104366	_at	0.000974	473.37	775.9	BC039093	AW047831	XM_131700	
93	104573	_at	0.000766	480.62	900.4	1110025L05Rik	AA921069	NM_175103	
94	104616	_gat	0.005645	541.1	823.47	Illlral	M96265	NM_016658	
95	104711	_at	0.009847	1479.15	1903.13	Vps4a	AW122109	NM_126165	
96	104738	_at	0.00269	577.62	903.83	Zrf2	D63784	NM_009583	/// NM_009584
97	94347	_i_at	0.007505	462.92	569.03	Pcratl	AW124044	NM_008786	
98	94367	_at	0.006853	260.5	338.7	AA407809	AI850362	NM_030724	
33	94381	_at	0.003538	796.53	1165.23	Umpk	L31783	NM_011675	
100	95607	_at	0.004193	957.28	1272.63	Stard3	X82457	NM_021547	
101	9613	2_at	0.000658	449.45	829.9	AB023957	AB023957	XM_619546	
102	96212	_at	0.003367	1166.88	1562.3	2310061104Rik	AI853918	XM_128627	
103	96760	_at	0.007442	128.9	193.93	Tiramlo	AW122428	NM_001024853	/// NM_001024854
104	96785	_at	0.003741	163.88	340.9	0610013D04Rik	AF110520	NM_030697	/// NM_013896
105	97366	_at	0.003839	564.7	734.63	BC026588	AI851024	NM_146075	
106	97374	_at	0.00401	376.6	576.63	2810025M15Rik	AI840458	NM_027274	
107	97424	_at	0.00221	1687.9	3393.8	Ar16ip5	AW049647	NM_022992	
108	97917	_at	0.000656	585.47	762.73	Gcn511	Y13778	NM_015740	

Table 6

109	97933_at	0.00487	905.57	1149.57	2300006M17Rik	AW045317	XM_127387
110	98031_at	0.001955	801.6	1154.77	Bok	AF027707	NM_016778
111	98429_at	0.006654	1286.02	1897.03	Lypla2	AB009653	NM_011942
112	98492_at	0.00031	485.47	679.93	Ckl1fsf7	AA920419	NM_133978
113	99032_at	0.002824	80.12	230.33	Rasdl	AF009246	NM_009026
114	99078_at	0.002173	552.62	1022.83	L110033C18Rik	AI839522	NM_133964
115	99444_at	0.003238	280.47	450.93	Ramp2	AJ250490	NM_019444
116	99546_at	0.005569	1984.05	3408.43	Fkbp2	M77831	NM_008020
117	99953_at	0.005011	390.75	574.13	Rgl2	AP100956	NM_009059
118	100007_at	0.007344	1260.93	1654.43	Irf2bp1	AI837573	NM_178757
119	100033_at	0.002557	326.02	484.6	Msh2	X81143	NM_00862
120	100429_at	0.00516	137.55	234.47	---	U89155	NM_008911
121	100446_r_at	0.000197	6419.02	12236.33	Sprrlb	X91825	HM_009265
122	100915_at	0.004564	622.92	966.33	Myh9	AW125698	NM_022410
123	100927_at	0.003157	734.27	1398.23	Pltp	U28960	NM_011125
124	100961_r_at	0.005873	648.83	915.93	Kcnh2	AF012871	NM_013569
125	101408_at	0.008154	397.2	638.37	Gamt	AF010499	NM_010255
126	103273_s_at	0.002904	235.27	362.13	Abcc8	AF037312	NM_011510
127	103524_at	0.005678	265.4	362	Cdanl	AA691078	XM_485054
128	103534_at	0.000053	4886.43	12812.07	---	V00722	NM_016956
129	103935_at	0.00942	334.07	484.47	Atp2a3	AI504474	NM_016745
130	104155_f_at	0.001204	180.1	253.37	Atf3	U19118	NM_007498
131	104408_s_at	0.000173	182.6	345.53	Eox18	L35032	NM_009236
132	92291_f_at	0.000618	47.23	168.37	Cfhl1	M29008	NM_015780
133	9242_3_at	0.009984	558.88	796.97	Pard6a	AF070970	NM_019695
134	93924_f_at	0.004003	812.72	1145.97	Tuba7	M13443	NM_009449
135	94194_s_at	0.001885	645.6	178.5	Hcn2	AJ225122	NM_308226
136	99335_at	0.000285	1501.65	3263.03	Hki	J05277	NM_010438
137	99842_at	0.001526	259.63	381.73	Coll19a1	AB000636	NM_007733
138	10038_l_at	0.004783	304.98	537.4	Acta1	M12347	NM_309606
139	100718_at	0.00263	1848.65	3298.83	Ptma	X56135	NM_008972
140	102099_f_at	0.008095	1203.68	1708.97	---	AI843637	XM_110121
141	102134_f_at	0.000344	525.12	800.53	Atp5g2	AI461702	NM_026468
142	160092_at	0.003749	245.83	561.93	Ifrd1	V00756	NM_013562
143	160195_at	0.000105	1700.3	2244.5	I200013P24Rik	AI846961	NM_029090
144	160212_at	0.00101	327.17	597.93	Ttc4	AW050205	NM_028209
145	ie0235_at	0.005025	515.9	862.2	5033425B17Rik	AI843521	NM_027215
146	160237_at	0.004904	434.48	749. G3	Ndufa 6	AW047339	NM_025987

Table 6

147	160305	Jit	0.004706	419.7	573.8	Psmdl1	AWL21693	NMUL78616	
148	160317	_at	0.003376	238.85	562.23	Rab34	AI835712	NM_033475	
143	160350	_lat	0.006432	768.5	949.07	Gstz1	AW060750	NM_010363	
150	160395	_at	0.007084	250.27	429.8	Pl1Erttd603e	AW046672	NM_026023	
151	160431	_lat	0.000205	468.67	868.7	Mrpl12	AWL24432	NM_027204	
152	160487	_at	0.000167	253.55	601.83	My14	M19436	NM_010858	
153	160621	_lat	0.006126	156.38	236.67	Mrps22	AI852322~	NM_025485	
154	160709	_at	0.00982	178.18	237.37	IUOOOIAI 6Rik	AI788201	---	
155	160805	_s_at	0.006823	399.22	625.67	Mpdul AB025354	NM_011900		
156	160869	_at	0.006409	512.6	718.2	Sirt3 AI849490	NM_022433		
157	160894	_at	0.009099	220.35	340.63	Cebpd X61800	NMJ307679		
158	161127	_i_at	0.007006	305.23	495.13	Rpl24 AV294412	NM_024218	/// XM_194389	
159	161145	_jf_at	0.009011	599.85	821.66	AV217314	NM_025313		
160	161176	_r_at	0.008751	4649.28	6218.03	---	AV230593	NM_013515	
161	161327	_f_at	0.00102	725.4	1684.3	AV104703	NM_011287		
162	161487	_f_at	0.005352	638.45	891.77	---	AV080542	---	
163	161657	_f_at	0.003643	1231.48	1755.5	---	AV105022	NM_052835	/// XMJL34291
164	161715	_f_at	0.004661	358.53	464.37	---	AV250651	NM_025667	
165	161763	_r_at	0.000034	397.82	1719.63	Pip5k2c	AV303514	NM_054097	
165	161997	_f_at	0.0009	68.98	137.07	AV329607	---		
167	162457	_jf_at	0.00009	2992.8	7294.6	---	AV003378	NM_008218	
168	106026	_at	0.002848	944.8	1465.63	2610318118Rik	AI845205	NM_145479	
169	106196	_at	0.0004	435.08	6449.88	Htf9c AW060432	KM_033324		
170	10662	theta_jat	0.005551	946.32	1503.07	1500_019_J17Rik	AW120962	NM_026398	
171	106659	_at	0.005956	288.63	480.2	6720484B16	AI551954	NM_172502	
172	107124	_at	0.000134	541.67	834.77	2810021014Rik	AI848296	NM_025480	
173	107562	_g_at	0.001136	354.67	531.17	2400006N03Rik	AI527865	NM_027186	
174	107572	_at	0.001189	1208.7	1507.6	Taz AW046145	HM_181516		
175	10802	theta_r_at	0.007103	617.75	1002.3	Htgall4	AI850464	NM_023547	
176	108473	_at	0.00783	390.88	513.5	A730011E05Rik	AA510244	NM_132150	
177	108489	_at	0.008319	958	1334.47	2810403L02Rik	AW120875	NM_025616	
178	108493	_at	0.006984	409.03	530.83	Cabcl AI852390	NM_023341		
179	10850	theta_jat	0.003436	454.43	660.17	111000IM24Rik	AA792670	---	
180	108512	_at	0.005691	566.6	890.87	2810038K19Rik	AW125356	NM_023684	
181	108564	_at	0.007321	361.12	577.67	2310045B01Rik	AA966986	NM_025538	
182	108565	_at	0.004451	661.5	1006.03	E430002G05Rik	AI853095	NM_173749	
183	108586	_at	0.006947	289.65	411.77	Psip2 AI842921	NM_133948	/// XM_620422	
184	109686	_at	0.009172	193.78	275.8	2310040GI7Rik	AI122103	NM_183358	

Table 6

185	109711	_at	0.009401	1183.55	1703.07	473340IH18Rik	AI036922	NM_023247
186	110269	_at	0.003439	847.9	1307.23	Bdh	AW045975	NMJ.75177
187	11033	θ_at	0.001952	910.8	1258.83	BC026996	AI843917	NM_201407
188	110763	_at	0.001317	3244.1	4491.6	Hdac1l	AI835406	NMJ.44919
189	110826	_at	0.000317	200.95	333.8	C730042F17Rik	AW122152	NM_028091
190	111402	_at	0.006066	959.7	1338.77	---	AI851217	NM_001001183
191	111816	_at	0.004633	2000.22	2796.33	Arp2d	AI853182	NM_028779
192	111821	_at	0.002843	1211.53	1784.27	1110014P06Rik	AI847255	NM_028634
193	111845	_at	0.001103	3212.33	5557.53	---	AW049453	---
194	111894	_at	0.007182	493.5	688.53	Mrp132	AA734460	NM_029271
195	111915	_at	0.000423	519.38	708.43	1500003022Rik	AI585944	NM_025897
196	112353	_at	0.008446	952.43	1491.57	ORF61	AI156772	NM_001003949
197	112356	_at	0.002238	380.35	644.63	---	AM061229	---
198	112392	_at	0.002864	346.82	605.4	1810027I20Rik	AI834768	NM_026950
199	112791	_at	0.000425	1518	3076.97	FKFP	AI839070	NM_173430
200	112845	_at	0.005023	1836.42	2588.47	4121402D02Rik	AI850655	NM_028722
201	113129	_at	0.003172	2730.95	3868	11110003P22Rik	AI836839	NM_144522
202	113211	_at	0.000505	343.33	706.47	BC023126	AW049974	NM_015807
203	113564	_at	0.002173	647.98	1202.93	1810014P10Rik	AI837984	NM_026928
204	113578	_at	0.006237	546.32	799.83	Csrp2bp	AW125290	NM_181417
205	114002	_at	0.007595	399.18	589.77	5730578N08Rik	AI573804	NM_025693
206	114311	_at	0.008943	614.6	802.57	Uchl5	AW214698	NM_019562
207	114994	_at	0.000068	1754.78	2268.93	Rfx1	AW050047	NM_009055
208	115038	_i_at	0.00256	562.85	768.97	Fbxo34	AW046955	NM_030236
209	115735	_ir_at	0.00246	790.52	1248.97	C6	AI326046	NM_016704
210	108783	_at	0.000058	1072.38	1489.7	Shc2	AI835933	XM_125779
211	109363	_at	0.000706	1917.87	2606.4	Adar	AI847526	NM_019655
212	1094151	_at	0.000484	833.52	1221	Hook1	AI646948	NM_030014
213	109999	_at	0.002607	1202.83	2090.9	2310046N15Rik	AW123653	NM_133765
214	111515	_at	0.00419	1198.63	2213.9	2810008D09Rik	AW060320	---
215	111532	_at	0.007295	1334.05	1813.67	2510002C16Rik	AW123028	NM_134134
216	111945	_f_at	0.009272	3559.27	3959.63	AV312086	AA611185	NM_172635
217	111966	_at	0.000583	670.83	1374.5	Hist3h2ba	AI836766	NM_030082
218	112033	_at	0.005492	994.08	1781.6	4833424P18Rik	AA967479	NM_029017
219	112416	_at	0.001132	1765.92	2400.2	Ctdspl	AA607067	NM_133710
220	112472	_at	0.00029	285.77	471.37	---	AI286746	NM_139064
221	112900	_at	0.001843	777.55	1554.6	Mfp63	AA682034	NM_026401
222	112913	_at	0.003273	668.37	931.33	Ttk1AA1064	AI836838~	NM_198631

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Table 6

411	168956_f_at	0.003982	1892.52	2275.07	---	AV092698	211021026027	---	---	---
412	169005_f_at	0.00592	919.97	1359.53	---	AV122385	XM_133134	---	---	---
413	169135_r_at	0.008561	418.65	728.33	---	AV235986	NM_148673	---	---	NM_198936
414	169396_r_at	0.000008	1861.47	3561.6	---	AV101367	XM_132830	---	---	---
415	169448_r_at	0.001931	1746.32	2722.77	---	AV168418	NM_145620	---	---	---
416	169457_r_at	0.004902	7486.23	9743.47	---	AV169944	NM_026380	---	---	---
417	169465_s_at	0.001751	1272.07	1840.7	---	AV156900	NM_028454	---	---	---
418	169766_r_at	0.008856	809.23	1128.17	---	AV101347	NM_026797	---	---	---
419	169773_r_at	0.001645	2036.37	3037.5	---	AV102460	NM_010094	---	---	---
420	169784_at	0.003852	1795.65	2334.77	---	AV111532	---	---	---	---
421	169799_r_at	0.00123	999.85	1568.47	---	AV124293	NM_020560	---	---	---
422	169815_i_at	0.002303	736.78	1132.67	---	AV139932	---	---	---	---
423	170164_r_at	0.004691	664.03	1059.03	---	1700058F15Rik	AV046567	---	---	---
424	170384_r_at	0.000024	716.55	1256.57	---	AV325109	NM_138744	---	---	---
425	170411_at	0.008023	899.83	1184.4	---	AV333428	NM_033574	---	---	---
NM_033578	/// NM_033579	/// NM_033580	/// NM_033581	/// NM_033582	/// NM_033583	/// NM_033584	/// NM_033585	/// NM_033586	/// NM_033576	/// NM_033577
NM_033587	/// NM_033588	/// NM_033589	/// NM_033590	/// NM_033591	/// NM_033592	/// NM_033593	/// NM_033594	/// NM_033595	/// NM_033596	/// NM_033597
426	170475_r_at	0.003811	574.03	837.6	---	AV211446866AV	NM_008550	---	---	---
427	170480_at	0.009995	1855.45	496554	---	5010AV	AV216313	---	---	---
428	170586_r_at	0.007752	11135.92	14950.93	---	522852AV	AV258212	---	---	---
429	170587_at	0.002239	1729.27	676795	---	212852AV	AV258254	---	---	---
430	170932_at	0.007319	1606.8	25800	---	313912AV	AV102105	---	---	---
431	171010_at	0.00151	202.08	855800	---	AV229454712AV	NM_133564	---	---	---
985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN	/// 985330_MN
447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN	/// 447831_MN
799940AV	/// 799940AV	/// 799940AV	/// 799940AV	/// 799940AV	/// 799940AV	/// 799940AV	/// 799940AV	/// 799940AV	/// 799940AV	/// 799940AV
095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN	/// 095020 MN
460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN	/// 460010~ MN
467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN	/// 467920 MN
484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN	/// 484200_MN
499999AV	/// 499999AV	/// 499999AV	/// 499999AV	/// 499999AV	/// 499999AV	/// 499999AV	/// 499999AV	/// 499999AV	/// 499999AV	/// 499999AV
99547MN	/// 99547MN	/// 99547MN	/// 99547MN	/// 99547MN	/// 99547MN	/// 99547MN	/// 99547MN	/// 99547MN	/// 99547MN	/// 99547MN
88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX	/// 88267JMX
379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN	/// 379841 MN
41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX	/// 41331 MX
720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12	/// 720920_MN12
896969AV	/// 896969AV	/// 896969AV	/// 896969AV	/// 896969AV	/// 896969AV	/// 896969AV	/// 896969AV	/// 896969AV	/// 896969AV	/// 896969AV

Table 7 9 of 2

34	97923_at	0.004944	3344	218520	9631781	1315Rik	5026Wg	W046573	5917M	62077	507391T	610500.0	ta	91611T	37						
35	97935_at	0.003091	1302	42	42821	7	43036	6A202P1k	278	5260	125159122	946000.0	ta	23811T	27						
36	98993_at	0.001233	4928	17	2812	1W	4182	0190006	6B55	9418	651523M	01272	1954	478501T	17						
37	99049_at	0.000165	605	86	620	3	555	4701V	asp2	D	861	42	888	234500.0	ta	09701T	07				
38	99440_at	0.000439	818	50	60	10	77	3	88	22	1W	07	68	8	888	234500.0	ta	25701T	69		
39	99465_at	0.009284	1057	13	26	5	1	58	1V	13	2	3	5	50	68	8	8	479400.0	ta	95580T	89
40	99510_at	0.008967	1049	1	8	2	1	2	6	1	5	5	5	5	5	5	5	604100.0	ta	20390T	79
41	100959_at	0.003333	144	2	1	8	2	1	2	6	1	5	5	5	5	5	5	596500.0	ta	f-62319T	99
42	101933_at	0.007513	587	12	4	6	1	0	5	8	2	1	2	6	1	5	5	521200.0	ta	f-611191	59
43	102646_at	0.005149	556	98	4	6	1	0	5	8	2	1	2	6	1	5	5	352800.0	ta	s-658091	49
44	102922_at	0.007706	1108	28	5	4	2	4	1	2	6	1	5	5	5	5	5	527200.0	ta	i-277091	39
45	102936_at	0.007706	1108	28	5	4	2	4	1	2	6	1	5	5	5	5	5	150300.0	ta	i-277091	29
46	103678_at	0.0049	143	7	6	5	2	5	8	2	1	2	6	1	5	5	5	131000.0	ta	097091	19
47	103791_at	0.000138	052	8	2	6	4	6	7	9	2	6	1	5	5	5	5	15300.0	ta	384091	09
48	103924_at	0.005179	663	2	2	6	4	6	7	9	2	6	1	5	5	5	5	213500.0	ta	363091	65
49	104461_at	0.00388	111	3	3	8	9	0	7	1	8	1	0	1	1	1	1	959200.0	ta	i-789101	85
50	92243_at	0.004056	668	08	3	7	3	9	8	8	9	1	0	1	1	1	1	889300.0	ta	s-98386	75
51	92378_at	0.004005	194	5	8	5	8	7	0	9	9	8	0	1	1	1	1	205100.0	ta	s-36676	95
52	92749_at	0.009	215	6	5	8	2	1	0	1	0	1	0	1	0	1	0	926700.0	ta	g-96496	55
53	92947_s_at	0.007926	175	3	6	9	0	8	0	0	7	3	8	6	3	3	8	589700.0	ta	s-58456	45
54	93485_at	0.001502	525	6	2	0	2	9	7	1	1	0	0	1	8	6	3	359600.0	ta	s-74626	35
55	96496_g_at	0.003688	981	9	5	6	2	0	2	9	7	1	1	0	0	1	8	500400.0	ta	64726	25
56	97793_at	0.002656	187	5	2	6	7	9	2	0	1	5	3	1	2	4	8	950400.0	ta	8326	15
57	98386_s_at	0.005312	248	2	1	7	1	1	1	1	1	1	1	1	1	1	1	88300.0	ta	3726	05
58	101684_r_at	0.00351	514	8	2	6	8	0	3	5	0	1	6	3	2	1	7	621500.0	ta	19401	4
59	160393_at	0.001371	835	4	6	1	0	1	1	1	1	1	1	1	1	1	1	831000.0	ta	26301	84
60	160483_at	0.003051	599	1	4	0	9	7	8	3	1	5	8	1	1	1	1	647500.0	ta	19401	4
61	160603_at	0.008753	537	7	8	9	6	6	8	1	0	1	1	1	1	1	1	621500.0	ta	26301	84
62	160760_at	0.002125	399	4	2	9	1	9	1	0	1	1	1	1	1	1	1	315400.0	ta	36101	34
63	160772_1_at	0.005965	130	3	3	1	1	6	0	0	3	6	1	1	1	1	1	315400.0	ta	36101	34
64	160859_s_at	0.001409	860	7	2	5	8	8	0	0	1	1	1	1	1	1	1	482600.0	ta	65601	14
65	161119_at	0.004647	163	4	8	1	0	1	0	1	1	1	1	1	1	1	1	482600.0	ta	65601	14
66	161329_f_at	0.005432	884	8	3	1	3	1	0	4	7	1	1	1	1	1	1	634000.0	ta	01566	63
67	106302_at	0.005877	456	7	2	6	7	8	2	6	2	5	1	5	3	0	0	591000.0	ta	04766	73
68	108556_at	0.000946	26	2	8	2	0	1	0	2	5	1	5	3	0	0	0	332100.0	ta	36686	93
69	110752_at	0.005079	176	3	1	0	4	7	1	1	1	1	1	1	1	1	1	160300.0	ta	36686	93
70	110760_at	0.005079	176	3	1	0	4	7	1	1	1	1	1	1	1	1	1	160300.0	ta	36686	93
71	110858_at	0.005079	176	3	1	0	4	7	1	1	1	1	1	1	1	1	1	160300.0	ta	36686	93
72	111832_at	0.005079	176	3	1	0	4	7	1	1	1	1	1	1	1	1	1	160300.0	ta	36686	93
73	111916_at	0.005079	176	3	1	0	4	7	1	1	1	1	1	1	1	1	1	160300.0	ta	36686	93

Table 7 9309

192	168462_at	0.009717	1812.47	1102.9	---	AV340874	XM_139540
193	168478_s_at	0.003674	6265.57	3104.2	---	5730496F10R1k	AV366153
194	168513_f_at	0.001831	1600.07	1138.7	---	Rnut1 AV331209	NM_178374
195	168597_s_at	0.003626	759.63	596.63	---	AV235358	---
196	169223_at	0.002246	1136.07	808.67	---	4632425D07R1k	AV305379
197	170018_r_at	0.006368	3058.38	2476.37	---	AV328848	NM_027288
198	170053_i_at	0.001649	1250.3	888	---	AV303269	---
199	171126_f_at	0.001719	2802.53	2239.87	---	AV050312	NM_145465
200	171190_f_at	0.009929	1205.9	467.33	---	AV118515	NM_011857

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Table 7 9309

192	168462_at	0.009717	1812.47	1102.9	---	AV340874	XM_139540
193	168478_s_at	0.003674	6265.57	3104.2	---	5730496F10R1k	AV366153
194	168513_f_at	0.001831	1600.07	1138.7	---	Rnut1 AV331209	NM_178374
195	168597_s_at	0.003626	759.63	596.63	---	AV235358	---
196	169223_at	0.002246	1136.07	808.67	---	4632425D07R1k	AV305379
197	170018_r_at	0.006368	3058.38	2476.37	---	AV328848	NM_027288
198	170053_i_at	0.001649	1250.3	888	---	AV303269	---
199	171126_f_at	0.001719	2802.53	2239.87	---	AV050312	NM_145465
200	171190_f_at	0.009929	1205.9	467.33	---	AV118515	NM_011857

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Table 8

		%Monocular deprivation (4 days) versus control		%Downregulated in short term MD		%Significance criterion = 0.01	
%							
%i	affyid	p	data	control	gene		
1	1445805_x_at	0	1648.67	2595.4	Kcnh3	BG069378	NM_010601
2	1454671_at	0.000007	490.73	595.23	Insig1	BB005488	NM_153526
3	1420901_a_at	0.000008	3185.2	4790.07	IK1	NM_010438	NM_010438
4	1423560_at	0.000009	1211.87	2468.47	Netl1	AI838010	NM_016743
5	1424400_a_at	0.000009	1106.87	1547.73	Albhl1	AK007822	NM_027406
6	1424459_at	0.000009	1496.77	2685.7	BC005662	BG068664	NM_145376
7	1440407_at	0.000009	433.17	960.27	---	BE955823	---
8	1423749_s_at	0.000013	1376.5	1836.1	Rangap1	AV258722	NM_011241
9	1423044_at	0.000014	1345.87	1864.07	Prosc	AV072100	NM_054057
10	1420807_a_at	0.000016	513.93	809.57	Egfr19	NM_134120	NM_134120 /// NM_207666
11	1423823_at	0.000017	1046.3	1186.63	2610012022Rik	BC005734	NM_023536
12	1426699_at	0.000017	268.17	431.5	AU040320	BG071197	NM_133886
13	1417042_at	0.000018	869.03	1130.73	Slc37a4	NM_008063	NM_008063
14	1460663_at	0.000018	454.17	1008.23	Cckbr	NM_007627	NM_007627
15	1423909_at	0.000019	642.53	786.93	0610011104Rik	BC010831	NM_025326
16	1429039_s_at	0.00002	568.27	894.7	1500034701Rik	BI904336	NM_356085
17	1430514_a_at	0.000022	388.57	598.5	2410026K10Rik	AK002762	NM_025584
18	1422605_at	0.000028	1460.13	2422.23	Ppp1r1a	NM_021391	NM_021391
19	1423721_at	0.000028	1057.87	1517.03	Tpnl	M22479	NM_024427
20	1449960_at	0.000028	153.33	866.23	Nptx2	NM_016789	NM_016789
21	1424476_at	0.00003	343.33	1010.83	Camkk2	BI157430	NM_145358
22	1451007_at	0.000033	125.9	248.2	Cnnm2	BB278118	NM_033569
23	1451226_at	0.000034	1015.93	1644.77	Pex6	BC003424	NM_145488
24	1434762_at	0.000038	363.67	515.77	A730041015Rik	BF457736	NM_178751
25	1433429_at	0.000042	855.93	1046.63	Pigs	B3309245	NM_201406
26	1453419_at	0.000044	2625.47	4014.57	2900078C09Rik	AK013800	---
27	1418370_at	0.000045	291.9	1017.13	Tnnc1	NM_009393	NM_009393
28	1449977_at	0.000052	263.83	711.43	Egr4	NM_020596	NM_020596
29	1424345_s_at	0.000055	1666.47	2247.47	Ube2m	BC021792	NM_145578
30	1451992_at	0.00006	1646.07	2355.17	Adrbk1	AF333028	NM_130863
31	1436094_at	0.000064	1962.47	3452.77	---	BF458396	---
32	1455462_at	0.000065	2796.3	4038	Adcy2	AV025455	NM_153534
33	1415964_at	0.000066	1767.83	2509.97	Scd1	NM_009127	NM_009127
34	1423794_at	0.000068	705.3	895	D2Ertcd391e	BM231455	NM_145528

Table 8

75	1419389_at	0.00018	200.23	365.9	Pdel10a	BQ180352	NM_011866
76	1448891_at	0.000187	224.8	260.07	Msr2	BC016551	NM_030707
77	1418053_at	0.000192	4577.13	7433.07	Shcb	NM_033610	NM_033610
78	1417050_at	0.000193	6565.03	7958.03	C1qlnf4	NM_026161	NM_026161
79	1434125_at	0.000194	483.37	566.3	Utp15	AV227804	NM_178918
80	1449471_at	0.000196	3158	4086.53	Kcmbd4	NM_021452	NM_021452
81	1421124_at	0.000198	548.2	1300.23	Cdk5r1	NM_009871	NM_009871
82	1424146_at	0.000199	3758.2	5767.03	Gpr3711	AB016602	NM_134438
83	1448378_at	0.000202	1428.03	3224.2	Fscn1	NM_007984	NM_007984
84	1453273_at	0.000203	690.97	1253.3	Kcnvl	AV142265	NM_026200
85	1427189_at	0.000205	491.43	697.43	Arhh1	BB362210	NM_019927
86	1422619_at	0.000212	464.8	629.37	Ppap2a	NM_008903	NM_008247
87	1418079_at	0.000213	804.07	1176.2	Psmc3	U60339	NM_011192
88	1422580_at	0.000213	646.03	1257.23	My14	NM_010858	NM_010858
89	1423449_at	0.000215	1191.3	1762.83	Acth4	BM234779	NM_021895
90	1439578_at	0.000222	880.97	1344.2	Lsm11	BB713457	NM_028185
91	1418457_at	0.000226	926.83	1475.53	Cxcl14	AF252873	NM_019568
92	1460393_at	0.000228	459.83	719.7	Dusp7	BE136125	NM_153459
93	1451935_at	0.000229	558.53	659.97	Splt2	AP099020	NM_011464
94	1435677_at	0.000233	468.23	767.3	C85492	BB247709	NM_153540
95	1451072_at	0.000236	949.1	1348.8	Rnf4	AV045658	NM_011278
96	1427735_at	0.00024	637.13	1000.8	Acta1	M12233	NM_009606
97	1436373_at	0.000241	328.87	537.63	Map3k10	AA789425	NM_194344
98	1423561_at	0.000247	3626.4	5737.9	Nel12	A1838010	NM_016743
99	1434575_at	0.000249	2711.7	3723.1	Epb4.111	BB794965	NM_001003815
100	1434610_at	0.00025	1212.2	1473.67	Plec1	BM210485	NM_011117
NM_201388	/// NM_201389	/// NM_201390	/// NM_201391	/// NM_201392	/// NM_201393	/// NM_201394	/// NM_201385
101	1454159_at	0.000252	876.07	1915.33	Igfpp2	AK011784	NM_008342
102	1416754_at	0.000254	4351.47	8472.7	Prkar1b	NM_008923	NM_008923
103	1417313_at	0.000258	536.43	961.6	Lsm7	NM_025349	NM_025349
104	1451663_at	0.000261	2203.43	2497.73	Trim3	AF220019	NM_018880
105	1448130_at	0.000262	1759.1	2579.4	Fdft1	NM_010191	NM_010191
106	1416516_at	0.000264	350.07	1262.4	Fscn1	NM_007984	NM_007984
107	1447634_x_at	0.000267	109.1	141	Chc11	BB091862	NM_134083
108	1421123_at	0.000277	335.1	869.97	Cdk5r1	NM_009871	NM_009871
109	1417035_at	0.000278	797.13	1038.97	Sacd1	BI134670	NM_133678
110	1424132_at	0.000279	847.2	1311.3	Hras1	BC011083	NM_008284
111	1442883_s_at	0.000281	3433.43	5168.4	D10Bwg1364e	BI413749	NM_145421
112	1435790_at	0.000285	1776.87	2631.67	O1fm2	BG864960	NM_173777
113	1454780_at	0.000285	660.23	836.1	Galnt14	AV238718	NM_173739

Table 8

114	1433695_at	0.000289	2782.17	429800	MN	3052.37	628700	1500011B16R1k	65.1266	P0174769	67.509	NM_020061	863000	0	ta	e	065671	651
115	1421606_a_at	0.000293	1884.0	969500	MN	1118100X	884.0	699500	68.0	699500	68.0	NM_013877	68.0	0	ta	e	1011521	651
116	1436642_x_at	0.00	154420	154420	MN	047L0DB	512	154420	512	154420	512	NM_013877	68.0	0	ta	e	1011521	651
117	1449380_at	0.0003	4633.93	154420	MN	047L0DB	512	154420	512	154420	512	NM_013877	68.0	0	ta	e	1011521	651
118	1428753_a_at	0.000301	959.1	255800	MN	418	565	255800	565	255800	565	NM_010077	62.71	0	ta	e	9362271	641
119	1440433_x_at	0.000305	3711	80010	MN	565	255800	80010	565	255800	565	NM_010077	62.71	0	ta	e	9362271	641
120	1423816_x_at	0.000309	1783	109010	MN	1783	109010	109010	1783	109010	1783	NM_010077	62.71	0	ta	e	9362271	641
121	1433899_x_at	0.000312	43953	160920	MN	51	160920	160920	51	160920	51	NM_010077	62.71	0	ta	e	9362271	641
122	1416278_a_at	0.000318	2768.7	62320	MN	62320	62320	62320	62320	62320	62320	NM_010077	62.71	0	ta	e	9362271	641
123	1434761_at	0.000318	584.1	59810	MN	59810	59810	59810	59810	59810	59810	NM_010077	62.71	0	ta	e	9362271	641
124	1445878_at	0.000319	52.03	114	MN	95131	95131	95131	114	95131	114	NM_010077	62.71	0	ta	e	9362271	641
125	1423940_at	0.000324	47	586100	MN	100	586100	586100	100	586100	100	NM_010077	62.71	0	ta	e	9362271	641
126	1426055_a_at	0.000337	115.1	002920	MN	002920	002920	002920	115.1	002920	002920	NM_010077	62.71	0	ta	e	9362271	641
127	1428165_at	0.000337	115.1	002920	MN	002920	002920	002920	115.1	002920	002920	NM_010077	62.71	0	ta	e	9362271	641
128	1429290_at	0.000334	4479	422861	MN	4479	422861	422861	4479	422861	4479	NM_010077	62.71	0	ta	e	9362271	641
129	1451943_a_at	0.000339	034900	034900	MN	034900	034900	034900	034900	034900	034900	NM_010077	62.71	0	ta	e	9362271	641
130	1458996_a_at	0.000343	016800	016800	MN	016800	016800	016800	016800	016800	016800	NM_010077	62.71	0	ta	e	9362271	641
131	1439333_at	0.000344	1350	83900	MN	83900	83900	83900	1350	83900	1350	NM_010077	62.71	0	ta	e	9362271	641
132	1448956_at	0.000346	1780.9	83900	MN	83900	83900	83900	1780.9	83900	1780.9	NM_010077	62.71	0	ta	e	9362271	641
133	1451427_a_at	0.000346	256.5	412	MN	412	412	412	256.5	412	256.5	NM_010077	62.71	0	ta	e	9362271	641
134	1428964_at	0.000346	1255.13	2589	MN	2589	2589	2589	1255.13	2589	1255.13	NM_010077	62.71	0	ta	e	9362271	641
135	1436702_at	0.000349	1655.03	2589	MN	2589	2589	2589	1655.03	2589	1655.03	NM_010077	62.71	0	ta	e	9362271	641
136	1456838_at	0.000351	441.3	848.1	MN	848.1	848.1	848.1	441.3	848.1	441.3	NM_010077	62.71	0	ta	e	9362271	641
137	1417664_a_at	0.000359	4353	82981	MN	4353	82981	82981	4353	82981	4353	NM_010077	62.71	0	ta	e	9362271	641
138	1415978_at	0.00037	2640	679610	MN	679610	679610	679610	2640	679610	2640	NM_010077	62.71	0	ta	e	9362271	641
139	14139742_at	0.00037	514.23	753.1	MN	753.1	753.1	753.1	514.23	753.1	514.23	NM_010077	62.71	0	ta	e	9362271	641
140	1434612_s_at	0.00037	664320	664320	MN	664320	664320	664320	664320	664320	664320	NM_010077	62.71	0	ta	e	9362271	641
141	1459107_x_at	0.00037	664320	664320	MN	664320	664320	664320	664320	664320	664320	NM_010077	62.71	0	ta	e	9362271	641
142	1449381_a_at	0.000376	27	2839100	MN	2839100	2839100	2839100	27	2839100	27	NM_010077	62.71	0	ta	e	9362271	641
143	1422733_at	0.000382	326800	326800	MN	326800	326800	326800	326800	326800	326800	NM_010077	62.71	0	ta	e	9362271	641
144	1419223_a_at	0.000383	117.1	470010	MN	470010	470010	470010	117.1	470010	117.1	NM_010077	62.71	0	ta	e	9362271	641
145	1422936_at	0.000383	117.1	470010	MN	470010	470010	470010	117.1	470010	117.1	NM_010077	62.71	0	ta	e	9362271	641
146	1434707_at	0.000393	1137.83	1744.7	MN	1744.7	1744.7	1744.7	1137.83	1744.7	1137.83	NM_010077	62.71	0	ta	e	9362271	641
147	1426667_a_at	0.000397	433.1	34810	MN	34810	34810	34810	433.1	34810	433.1	NM_010077	62.71	0	ta	e	9362271	641
148	1425110_at	0.000397	433.1	34810	MN	34810	34810	34810	433.1	34810	433.1	NM_010077	62.71	0	ta	e	9362271	641
149	1449590_a_at	0.00	1998620	1998620	MN	1998620	1998620	1998620	1998620	1998620	1998620	NM_010077	62.71	0	ta	e	9362271	641

40f45 8 table1

Table 8

54305

154	1431137_at	0.000408	1111.03	1656.37	Rusc1	NM_020188	47421	475000	0	ta	644471	61
155	1427708_a_at	0.000412	80	185.3	0892248B	NM_020198	38104	415000	0	ta_x	269451	61
156	1449511_a_at	0.000413	2119.8		920110_WN	NM_020172	215000	0	ta_e	152521	61	
157	1431799_a_at	0.000415	4787.00	03	4787.00_WN	NM_020172	115000	0	ta_e	186611	61	
158	1417080_a_at	0.000421	4197.00	25.1	4197.00_WN	NM_020172	805000	0	ta_e	1800051	61	
159	1419655_a_at	0.000421	641.1	815610	0681708B	NM_020199	105000	0	ta_s	1468141	61	
160	1452782_a_at	0.000426	980.73		3397.00_WN	NM_020199	464000	0	ta_e	269411	61	
161	1441718_a_at	0.000427	101.23	221.1	513010_WN	NM_020199	164000	0	ta_l	154811	61	
162	1448164_a_at	0.000429	3163	146.1	920010_WN	NM_020199	584000	0	ta_e	125521	61	
163	1448247_a_at	0.00043	874.17		858010_WN	NM_020199	444000	0	ta_l	01611	61	
164	1422134_a_at	0.000431	071920	98.37	6223000A	NM_020199	284000	0	ta_e	162021	61	
165	1434900_a_at	0.000437	1075	369	455820_WN	NM_020199	944000	0	ta_e	618331	61	
166	1422807_a_at	0.000438	410550	216.1	4669624A	NM_020199	544000	0	ta_s	618331	61	
167	1428123_a_at	0.000439	106	216.1	4296620_WN	NM_020199	544000	0	ta_e	1335621	61	
168	1421348_a_at	0.00044			398010_WN	NM_020199	544000	0	ta_l	1335621	61	
169	1449111_a_at	0.000444	1369.9	1823	482800_WN	NM_020199	594000	0	ta_l	118621	61	
170	1419184_a_at	0.000447	482800	5204.43	482800_WN	NM_020199	494000	0	ta_s	204221	61	
171	1419737_a_at	0.000447	5204.43	2699	486700_WN	NM_020199	194000	0	ta_l	151911	61	
172	1423785_a_at	0.000448	2107.2		644521_WN	NM_020199	554000	0	ta_l	146231	61	
173	1417876_a_at	0.000449	95.27	159.1	625700_WN	NM_020199	554000	0	ta_l	181911	61	
174	1416718_a_at	0.000454	1529.9	2293	981010_WN	NM_020199	644000	0	ta_l	181911	61	
175	1437944_a_at	0.000455	215.67		402350_WN	NM_020199	844000	0	ta_e	947811	61	
176	1416515_a_at	0.000461	649.1		669010_WN	NM_020199	444000	0	ta_e	73611	61	
177	1422407_s_at	0.000464			212010_WN	NM_020199	444000	0	ta_e	481611	61	
178	1424981_a_at	0.000465	213.1		391800_WN	NM_020199	444000	0	ta_e	1111611	61	
179	1426249_a_at	0.000473	341.7	548.8	391800_WN	NM_020199	444000	0	ta_e	84121	61	
180	1429533_a_at	0.000475	587.1		481541_WN	NM_020199	634000	0	ta_e	84121	61	
181	1433819_s_at	0.000475	1599	084.00	841210_WN	NM_020199	634000	0	ta_e	84121	61	
182	1433029_a_at	0.000476	1339.2		606510_WN	NM_020199	834000	0	ta_l	106821	61	
183	1423333_a_at	0.000482	399.47	841.1	930800_WN	NM_020199	134000	0	ta_l	1431221	61	
184	1419710_a_at	0.000484	604.17		547600_WN	NM_020199	434000	0	ta_e	742841	61	
185	1425572_a_at	0.000485			016270_WN	NM_020199	624000	0	ta_e	491841	61	
186	1418451_a_at	0.000491	031961	266.1	4383282B	NM_020199	424000	0	ta_e	81141	61	
187	1416492_a_at	0.000494	266.1	01.3	8352000A	NM_020199	924000	0	ta_e	28251	61	
188	1441894_s_at	0.000501	2864.1		686600_WN	NM_020199	124000	0	ta_e	559611	61	
189	1450008_a_at	0.000511	620210	972	620210_WN	NM_020199	814000	0	ta_e	80211	61	
190	1419398_a_at	0.000512	3158	942110	636666	NM_020199	514000	0	ta_e	64131	61	
191	1425525_a_at	0.000514	701.83		224331_WN	NM_020199	314000	0	ta_e	115641	61	
192	1454692_x_at	0.000517	124.47		888010_WN	NM_020199	804000	0	ta_e	804221	61	
193	1447449_at	0.000517	124.47		881820_WN	NM_020199	804000	0	ta_e	731131	61	

50f45

8 a1qel

Table 8

194	1417959_at	0.000523	1178.83	1378.4	Eplim7	NM_026131	NM_026131
195	1424196_at	0.000528	937.67	1184.83	Yipf1	BC009080	NM_145550
196	1428777_at	0.000536	951.27	1191.9	Spre1	AK017680	NM_033524
197	1421396_at	0.000539	237.73	467.37	Pesk1	M69196	NM_013628
198	1433993_at	0.00054	611	691.17	4931406D16Rik	BG067664	NM_172741
199	1422153_a_at	0.000541	171.23	282.7	Asb11	NM_026853	NM_026853
200	1460498_a_at	0.000541	540.33	967.27	Dnajc5	BT385030	NM_016775
201	1426738_at	0.000544	2345.17	3526.6	Dygz	BC014860	NM_138306
202	1449980_a_at	0.000544	1549.27	1904.63	Gabrd	IM_008072	NM_008072
203	1444723_at	0.000544	516.77	832.6	6530418L21Rik	BB049759	NM_175398
204	1454871_at	0.000544	342.53	595.67	Rbm15b	BB776868	NM_175402
205	1437078_at	0.000545	697.43	1031.93	Vps52	BF468377	NM_172620
206	1434325_x_at	0.000552	16705.13	24930.6	Pfkar1b	BB274009	NM_008923
207	1447965_at	0.000553	127.13	222.43	C80012	BG066596	---
208	1429392_at	0.000553	525	645.03	Wdr40a	BT558553	NM_026893
209	1421486_at	0.000563	168.6	325.43	Egr3	NM_018781	NM_018781
210	1448718_at	0.000565	824.53	1015	240001E08Rik	NM_025605	NM_025605
211	1416437_a_at	0.000567	1735.67	2705.97	Mapk8ip3	AY262046	NM_013931
212	1421181_at	0.000569	658.17	1699.3	Npexr	BT733611	NM_030689
213	1449552_at	0.00058	985	2252.67	Zfr	IM_011767	NM_011767
214	1452427_s_at	0.000582	1694.37	2229.73	AW742319	BM950003	NM_021345
215	1430607_at	0.000586	179.27	452.5	4930305D03Rik	BB279598	NM_137322
216	1455436_at	0.000587	6827.57	10025.53	Diras2	LOC544932	EM114282
217	1423222_at	0.00059	1751.1	3021.27	Cap2	AV261931	NM_026056
218	1448335_s_at	0.00059	4222.87	5090.6	Ccni	NM_017367	IM_017367
219	1423853_at	0.000591	5386.6	7438.33	6330527006Rik	BC004791	---
220	1451290_at	0.000596	3610.07	6293.07	Map11c3a	BC010596	NM_025735
221	1418004_a_at	0.000607	1348.13	1614.67	1810009M01Rik	NM_023056	NM_023056
222	1448431_at	0.000607	463.87	667.9	Asb6	NM_133346	NM_133346
223	1424956_at	0.000611	246.47	417.3	Ahdcl	BC019130	NM_146155
224	1423049_a_at	0.000616	715.3	1160.8	Tpml	AK022271	NM_024427
225	1449198_a_at	0.000619	1410.47	2231.37	Sr3gal15	BB829192	NM_001035228
226	1415824_at	0.000623	1332.1	2685.7	Scd2	BG060909	NM_009128
227	1434879_at	0.000623	1120.5	1536.77	Cdc34	BT794243	NM_177613
228	1431420_s_at	0.000626	3205.83	3876.57	2610524G07Rik	BT082843	IM_025596
229	1426379_at	0.000627	651.97	977.13	Bif4b	AW741453	NM_145625
230	1432016_a_at	0.000627	6919.63	8332.2	Irh3a	AK003393	NM_029573
231	1416965_at	0.00063	7858.67	9456.17	Pgsk1n	AF181560	NM_013832
232	1441300_at	0.000631	359.8	673.93	Kcnfl	B3275623	NM_201531
233	1420368_at	0.000635	1988.17	2242.67	Denr	AK010394	NM_026603

Table 8

432	1428393_at	0.001355	8130.43	14074.53	Nrnl	AK003046	NM_153529
433	1420720_at	0.001357	519.07	1773.13	Nptc2	NM_216789	NM_016789
434	1455924_at	0.001358	1290.1	4076.93	Rab6b	AV220161	NM_173781
435	1449173_at	0.001369	1108.37	1755.27	Mpp2	NM_016695	NM_016695
436	1421949_a_at	0.00137	80.63	116.1	2610507103Rik	BB042564	NM_028120
437	1436383_at	0.001371	4568.27	5456.23	Cplx2	BE946233	NM_009946
438	1421026_at	0.001377	330.77	454.1	Gnal2	BF302166	NM_010302
439	1415953_s_at	0.001384	563.67	716.73	Mark2	BI686255	NM_007928
440	1419954_s_at	0.001392	1019.43	1205.23	Tex27	AW339211	NM_148926
441	1439553_s_at	0.001394	938.83	1256.8	NutF2	AU018817	NM_026532
442	1416521_at	0.001399	9387.7	15441.67	Sepw1	NM_009156	NM_009155
443	1428697_at	0.001405	733.63	1277.53	Dpp8	BM339621	NM_028906
444	1423204_at	0.001406	396.2	685.27	Tm9sf4	BB67487	NM_133847
445	1415859_at	0.001414	1544.93	2070.8	Elf38	B3858329	NM_146200
446	1426764_at	0.001414	2536.63	3341.13	Oaz2	AW214584	NM_110952
447	1433464_at	0.001415	1259	1750.53	Ipo13	B3475675	NM_146152
448	1422044_at	0.001417	134.47	279.47	Ndst1	A3074926	NM_108306
449	1426463_at	0.00142	1407.07	1661.57	Gphn	AA170590	NM_172952
450	1435902_at	0.001423	1910.4	2325.47	Ndt18	BM120193	NM_153136
451	1436155_at	0.001424	2194.57	2851.5	Nmnat2	BB398185	NM_175160
452	1451155_at	0.001426	132.27	291.27	Cugbp2	BB644164	NM_010160
453	1435780_at	0.001427	2763.1	3756.47	Psd	BG66595	NM_028627
454	1455136_at	0.00143	3663.67	4546.47	Atpl2	AI845177	NM_178405
455	1416786_at	0.001446	393.73	647.37	Avr1	NM_007394	NM_007394
456	1424203_at	0.001446	499.83	725.67	Ncln	BC019501	NM_134009
457	1455760_at	0.001446	322.17	640.4	Gm696	3B749107	NM_204297
458	1454106_a_at	0.001449	238.73	278.2	Cxnc1	AK017941	NM_028868
459	1429979_a_at	0.001453	131.53	307.27		1810073N04Rik	AK007977
460	1452964_at	0.001453	1204.93	1934.5		4932702F08Rik	AK016577
461	1441625_at	0.001455	823.1	1182.67		A930033C01Rik	BQ174470
462	1433556_at	0.001471	2487.43	3182.27	Cental	AV254037	NM_132396
463	1443660_at	0.001471	144.5	291.2	---	BB750724	NM_172723
464	1418616_at	0.001476	307.67	371.37	Maik	NM_010757	NM_010757
465	1451743_at	0.001476	192.97	319.5	D19wsh162e	BC026369	NM_145099
466	1453988_a_at	0.00148	289.63	417.5	Ide	AK014703	NM_031156
467	1436508_at	0.00148	428.9	547.7		BS000110	NM_175403
468	1423642_at	0.001483	6639.33	8339.7		4930542G03Rik	BC005347
469	1437740_at	0.001485	573.3	881.47	Plek.m2	BB757269	NM_204109
470	1450414_at	0.001486	680.03	1028.53	Pdylfb	BC023427	NM_011057
471	1420580_at	0.001499	251.73	407.63		4930429B21Rik	NM_026249

Table 8
Splice1

472	1433937_at	0.0015	411	554920	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
473	1418938_at	0.001502	84	531	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
474	1460343_at	0.001502	2612	3521	3110	50	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
475	1419732_at	0.001506	1225	77	687	94	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
476	1430829_s_at	0.001508	459	969	821	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
477	1448207_at	0.001508	459	969	821	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
478	1453367_a_at	0.001522	243	330	73	71	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
479	1433462_a_at	0.001522	243	330	73	71	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
480	1418508_a_at	0.00154	3850.8	10690	2000	982	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
481	1448787_at	0.001536	2105	354	700	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
482	1420837_at	0.001537	227.37	56561	3335	71	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
483	1417632_at	0.00154	3850.8	10690	2000	982	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
484	1435019_at	0.00154	3875	10690	2000	982	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
485	1435115_at	0.001544	466920	646	103	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
486	1431349_x_at	0.001559	1599.3	2491	389	100	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
487	1421349_x_at	0.001559	1599.3	2491	389	100	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
488	1415746_at	0.001559	1599.3	2491	389	100	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
489	1420920_a_at	0.001559	4824.63	2491	389	100	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115
490	1422009_at	0.001562	2206.67	5921	37	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
491	1420575_at	0.001563	2566.37	514	75	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
492	1435525_at	0.001563	2566.37	514	75	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
493	1451088_a_at	0.001572	140.4	947	100	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
494	1422735_at	0.001576	4778.5	286	420	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
495	1415816_at	0.001588	4778.5	286	420	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
496	1452742_at	0.001615	894	913	120	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
497	APFX-TransRecMux/457349_3_at	0.001615	1995	204	720	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
498	1451431_a_at	0.00161	1592.3	402	6	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
499	1460650_at	0.00161	1592.3	402	6	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
500	1435558_at	0.00161	402	6	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
501	1417716_at	0.001615	54	280	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
502	1421324_a_at	0.001616	386.53	225	0	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
503	1447229_x_at	0.001617	325	0	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
504	1454512_a_at	0.001633	360	10	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
505	1420506_a_at	0.001642	444	73	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
506	1429708_at	0.001642	444	73	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
507	1439148_a_at	0.001659	751.63	63	63	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
508	1428354_a_at	0.001665	63.63	141	57	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
509	1440347_at	0.001677	2476.3	1458	184	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115	
510	1426729_at	0.001686	1458	184	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		
511	1428874_at	0.001686	1458	184	MN531	565555	BB2	JRQNS100111	17476	781	8571	989100.0	t_e	4788271	115		

Table 8

512	1417780_at	0.001689	336.33	454.73	1454	BB006809	NM_026058	268100.0	te	2163371	645
513	1448384_at	0.00169	233.37	330.03	595	BC018194	NM_030262	6193	te	2163371	645
514	1417224_at	0.001694	139.63	209.1	602	BB022222	NM_027253	618100.0	te	9852271	845
515	1418695_at	0.001695	2814.1	3166	603	BC018194	NM_00101958	618100.0	te	8621471	745
516	1439892_at	0.001697	2150.13	3135.37	604	BB022222	NM_020594	618100.0	te	5532271	945
517	1425605_at	0.001698	437.1	848.0	605	BB022222	NM_020594	608100.0	te	2941471	545
518	1425621_at	0.0017	989800	1867	606	BB022222	NM_020594	618100.0	te	1332271	445
519	1450845_at	0.001702	1905.63	746.6	607	BB022222	NM_020594	618100.0	te	8412271	345
520	1420610_at	0.001707	1719.53	507.2	608	BB022222	NM_020594	618100.0	te	5112271	245
521	1422156_at	0.001709	1568.9	451.47	609	BB022222	NM_020594	618100.0	te	4861271	145
522	1423252_at	0.001709	451.47	964.0	610	BB022222	NM_020594	618100.0	te	1966271	045
523	1424646_at	0.00171	569.7	0.001716	611	BB022222	NM_020594	618100.0	te	3512271	635
524	1416568_at	0.001713	569.7	0.001716	612	BB022222	NM_020594	618100.0	te	2585271	735
525	1438670_at	0.001713	569.7	0.001716	613	BB022222	NM_020594	618100.0	te	4332271	835
526	1416256_at	0.001716	87.7	140	614	BB022222	NM_020594	618100.0	te	6272271	935
527	1416028_at	0.001728	87.7	140	615	BB022222	NM_020594	618100.0	te	1012271	435
528	1438330_at	0.001731	87.7	140	616	BB022222	NM_020594	618100.0	te	828271	535
529	1419077_at	0.001732	87.7	140	617	BB022222	NM_020594	618100.0	te	873271	635
530	1428465_at	0.001732	87.7	140	618	BB022222	NM_020594	618100.0	te	574271	735
531	1433445_x_at	0.001739	0.00	0.00	619	BB022222	NM_020594	618100.0	te	594271	835
532	1450378_at	0.001743	799.97	643.88	620	BB022222	NM_020594	618100.0	te	4706271	935
533	1448828_at	0.001746	857.72	852.90	621	BB022222	NM_020594	618100.0	te	1033271	835
534	1423101_at	0.001755	497.9	591.10	622	BB022222	NM_020594	618100.0	te	8209271	735
535	1423334_at	0.001757	497.9	591.10	623	BB022222	NM_020594	618100.0	te	9529271	835
536	1435852_at	0.001772	240.17	223.4	624	BB022222	NM_020594	618100.0	te	0498271	935
537	1422537_at	0.001772	4813.4	591.97	625	BB022222	NM_020594	618100.0	te	8959271	425
538	1415753_at	0.001772	1110.99	891.09	626	BB022222	NM_020594	618100.0	te	949271	525
539	1449961_at	0.001772	4813.4	591.97	627	BB022222	NM_020594	618100.0	te	252271	625
540	1455115_at	0.001789	1207	6033.00	628	BB022222	NM_020594	618100.0	te	966819	725
541	1416331_at	0.001791	2720	646620	629	BB022222	NM_020594	618100.0	te	5480571	825
542	1417448_at	0.001804	2720	646620	630	BB022222	NM_020594	618100.0	te	1295271	925
543	1424355_at	0.001811	489.1	514610	631	BB022222	NM_020594	618100.0	te	5095271	025
544	1441298_at	0.001813	573.0	352720	632	BB022222	NM_020594	618100.0	te	4272171	125
545	1423586_at	0.001814	573.0	352720	633	BB022222	NM_020594	618100.0	te	4272171	225
546	1433712_at	0.001832	3613.23	729030	634	BB022222	NM_020594	618100.0	te	483871	325
547					635	BB022222	NM_020594	618100.0	te	0877171	425
548					636	BB022222	NM_020594	618100.0	te		525
549					637	BB022222	NM_020594	618100.0	te		625

Table 8

140f45

Table 8

550	1424078_s_at	0.001834	982.93	1156.1	Pex6	BC003424	NM_145488
551	1423078_a_at	0.001835	1724	2449.8	Scam1	AK005441	NM_025436
552	1453414_at	0.001837	107.5	156.23	Ypel12	BB133023	NM_001005341
553	1418647_at	0.001843	1784.47	2043.53	Gna-rs1	BF577955	NM_008136
554	1448277_at	0.001843	414.37	591.2	Pol12	NM_008894	NM_008894
555	1417271_a_at	0.001846	380.77	611.67	Eng	NM_007932	NM_007932
556	1424935_at	0.001854	908.63	1086.7	Gdap111	BC019941	NM_144891
557	1422966_a_at	0.001859	545.93	1031.73	Tfrc	BB810450	NM_011638
558	1434946_at	0.001859	1351.27	1612.63	C330021A05R1k	BB303415	NM_153082
559	1421815_at	0.001862	1160.3	1377.17	Frdx2	AF353717	NM_134065
560	1419022_a_at	0.001874	12747.1	18328	Eno1	NM_023119	NM_001025388
561	1430307_a_at	0.001877	1360.57	1648.8	Mod1	AK006387	NM_008615
562	1455499_at	0.001903	308.37	561.57	Mrxn2	BE949064	NM_020253
563	1431932_s_at	0.001904	328.23	396.07	Trim44	AK015519	NM_020267
564	1425553_s_at	0.00191	1031.73	1301.53	Hiplr	AA590970	NM_145070
565	1439954_at	0.00192	161.17	412.13	G43051AM23R1k	AI849139	---
566	1426590_at	0.00193	228.9	311.93	Gfm2	BB497484	NM_177266
567	1426763_at	0.001937	3967.23	4546.73	Oaz2	AW214584	NM_010952
568	1434902_at	0.001938	736.03	1051.23	Rnf157	BB163668	NM_126776
569	1423169_at	0.00194	119	181.7	Taf7	AV213552	NM_011901
570	1421789_s_at	0.001941	1481.2	2051.23	Arf3	NM_007478	NM_007478
571	1415907_at	0.001944	451.83	618.27	Ccnd3	NM_007632	NM_007632
572	1422513_at	0.001944	124.43	237.47	Ccndf	NM_007634	NM_007634
573	1426554_a_at	0.001947	7737.3	9723.03	Pgam1	BI407347	NM_023418
574	1456603_at	0.001951	251.67	341.33	1500005K14R1k	EG070087	---
575	1424661_at	0.001955	744.13	1018.93	Pmpca	AK004549	NM_173180
576	1423365_at	0.001959	467.8	716.1	AW494038	NM_009783	---
577	1415831_at	0.00196	4680.2	5718.97	Psmc2	NM_134101	NM_134101
578	1438546_x_at	0.001974	1455	2147.4	Slc25a5	CS1442	NM_007451
579	1447711_x_at	0.001978	149.97	260.57	4933412E12R1k	BB265147	---
580	1427529_at	0.001979	165.53	237.27	Fzd9	Y17709	NM_284144
581	1415965_at	0.001981	139.5	346	Scd1	NM_009127	NM_009127
582	1422465_a_at	0.001984	241.1	310.63	Nxn	BB366804	NM_008750
583	1423294_at	0.001988	648.77	1151.5	Mest	AW555393	NM_008590
584	1435411_at	0.001993	1436.43	1686.23	Neurod2	BE950834	NM_010895
585	1451256_at	0.001999	337.4	535.07	Gpr172b	BC016264	NM_029643
586	1459729_at	0.002011	142.33	394.27	Slc13a5	BE979238	NM_001004148
587	1421097_at	0.002012	488.07	697.73	Endog	NM_007931	NM_007931
588	1423737_at	0.002014	5719.6	6469.57	Ndufs3	BC027270	NM_026688

Table 8

629	1451158_at	0.002239	173.9	291.83	Triip12	EG923744	NM_133975
630	1430552_a_at	0.002245	692.17	1082.97	Sbfi	AK020972	XM_358316
631	1435722_at	0.002251	1758.87	2125.6	Gria4	BB130399	NM_019691
632	1439741_x_at	0.002251	109.97	200.83	At481316	AU018180	---
633	1416701_at	0.002252	342.9	661.17	Rnd3	BC009002	NM_028810
634	1424982_a_at	0.002256	250.2	300.53	2700c78E1Rik	BB137173	NM_030197
635	1427307_a_at	0.002269	424.67	512.3	Dabl	BB644109	NM_010014
636	1416758_at	0.002274	172.13	389.83	Arhgap27	NM_133715	XM_618932
637	1425933_a_at	0.002274	654.1	845.47	Nt5c2	BC006028	NM_029810
638	1451872_a_at	0.002282	309.57	465.4	Neur1	AF400063	NM_021360
639	1438905_x_at	0.002284	335.2	568.07	C030046I0Rik	BB765277	NM_177994
640	1423845_at	0.002288	677.73	955.4	Csdc2	BC016109	NM_145473
641	1420839_at	0.002293	429.73	571.47	Plekha3	BB780848	NM_031256
642	1417015_at	0.002301	115.53	244.47	Rassf3	BB703307	NM_138956
643	1420403_at	0.002302	3952.13	-7391.03	Atp2b2	NM_009723	NM_009723
644	1432543_a_at	0.002302	759.87	938.33	Klf13	AK002926	NM_021366
645	1419188_s_at	0.002313	4316.43	5179.5	Ccl127	NM_011336	NM_011336
646	1415988_at	0.002314	203.5	390.67	Hdlbp	BG055877	NM_133808
647	1421093_at	0.002318	483.47	654.13	Slc7a10	NM_017394	NM_017394
648	1423588_at	0.00232	2283.77	2563.63	Arpc4	BG145444	NM_026552
649	1426081_a_at	0.00232	1011.1	1469.8	Dio2	AF177197	NM_010050
650	1426648_at	0.002322	416.13	646.63	Mapkapk2	BG918951	NM_008551
651	1448218_s_at	0.002323	5984.93	8544.77	Ywhaz	AV027921	NM_011740
652	1439859_at	0.002327	384.13	573.6	9630033F2ORik	BB278948	NM_177003
653	1433703_s_at	0.002331	700.13	954.9	Bahd1	BM115038	XM_130491
654	1452245_at	0.002333	128.63	205.3	G630039L02	BB627486	XM_618988
655	1454995_at	0.002334	1489.97	2024.67	Ddah1	AW556888	NM_026993
656	1426383_at	0.002341	1590.67	2065	Cry2	BF303057	NM_009963
657	1448110_at	0.002354	433.37	762.17	Semada	NM_013658	NM_013658
658	1450062_a_at	0.002356	5910.53	6888.17	Maged1	NM_019791	NM_019791
659	1447062_at	0.002356	187.6	262.3	Vps24	BG073566	NM_025783
660	1450247_a_at	0.00236	1168.57	2164.93	Scamp5	NM_020270	NM_020270
661	1425608_at	0.002361	199.6	258.03	Dusp3	BC016269	NM_028207
662	1421042_at	0.002367	834.4	1464.37	Arhgef2	NM_008487	NM_008487
663	1435548_at	0.002371	200.53	314.73	Mrs21	EB015377	NM_001013389
664	1426023_a_at	0.00238	351.3	486.7	Rabep1	AF248489	NM_019400
665	1424100_s_at	0.002385	2649.7	3687.53	1500001H12Rik	BC023032	NM_021316
666	1425106_a_at	0.002388	402.07	552.07	Wars	BC003450	NM_011710
667	1422576_at	0.00239	5787.13	6469.03	Scal10	NM_016843	NM_016843

Table 8

668	1420140_at	0.002402	154.8	320.13	Bcdln3	AA407595	NM_144913
669	1423927_at	0.002407	373.07	542.13	Slc35b2	BC025875	XM_128634
670	1426975_at	0.002407	512.63	728.67	4632413K17R1k	BG067859	NM_177614
671	1450623_at	0.002417	5815.3	8658.9	Gnb2	NM_010312	NM_010312
672	1433446_at	0.002427	1740.93	2728.9	Hmgcs1	BB705380	NM_145942
673	1460411_s_at	0.002427	247.03	390	AW548124	BC022157	NM_134117
674	1417986_at	0.00243	300.23	533.5	Nrarp	BI696369	NM_025980
675	1451168_a_at	0.002435	4478.6	6218.8	Arhgdia	BC004732	NM_133756
676	1460042_at	0.002435	40.23	194.57	Slc23a3	AY293965	NM_194333
677	1419190_at	0.002436	348.47	563.03	Vt1a	BC019386	NM_016862
678	1425784_a_at	0.002438	10461.9	13549.33	Olfml1	D78264	NM_019498
679	1440274_at	0.002439	213	327.13	Rapgef4	BH948992	NM_019688
680	1451592_at	0.002439	816.37	1152.33	Mgi:2446472	AF364868	NM_145579
681	1450202_at	0.002441	1234.07	2031.03	Grin1	NM_008169	NM_008169
682	1416590_a_at	0.00245	348.27	451	Rab34	AF327929	NM_033475
683	1455963_at	0.002453	621.4	789.2	633324010L9R1k	AV3117707	NM_177013
684	1435638_at	0.002457	2691.43	4024.47	Gsk3a	BG808297	NM_001031667
685	1439647_at	0.002463	448.83	614.9	LOC433698	LOC545611	AV257990
686	1428070_at	0.002464	640.17	776.8	Sywn1	AKU04688	NM_028769
687	1423892_at	0.002487	4530.7	5759.97	Apbb1	AF206720	NM_009685
688	1421622_a_at	0.002501	1785.07	2616.03	Rapgef4	NM_019688	NM_019688
689	1426327_s_at	0.002513	412.73	476.87	Chtf	Zfp91	U05343
690	1453097_a_at	0.002516	1468.4	2062.97	Ubtf	AK004961	NM_011551
691	1420876_a_at	0.002522	637.6	825.67	6-Sep	NM_019942	NM_019942
692	1424116_x_at	0.002522	2259.67	2786.23	Ppp5c	BC003744	NM_011155
693	1433821_at	0.002522	342.4	469.6	1110012D08R1k	BH489180	NM_178066
694	1456813_at	0.002529	384.9	557.13	---	AI854058	---
695	1429568_x_at	0.002537	778.07	939.83	2510010F1SR1k	AK007937	NM_026454
696	1418444_a_at	0.00254	5969.83	8045.23	Mgi:1891827	BC003902	NM_019580
697	1449054_a_at	0.002542	1521.13	1965.4	Pcbp4	NM_021567	NM_021567
698	1447625_at	0.002542	645.8	3448	B2F5	BH286270	NM_007892
699	1448298_at	0.002552	752.7	1183.6	Thk2	NM_016788	NM_016788
700	1436077_a_at	0.002557	626.77	930.63	Fchol	BF730694	NM_028715
701	1451748_a_at	0.002561	2373.63	2837.23	D12Etd771e	BC019973	NM_028262
702	1450846_at	0.002565	1370.6	2077.1	Bzw1	AV144956	NM_025824
703	1431415_a_at	0.002566	751.17	1063.93	Tbp11	AK005604	NM_011603
704	1417954_at	0.002568	4231.53	7032.43	Sst	NM_009215	NM_009215
705	1423239_at	0.002579	757.77	1144.7	Impdh1	BB551792	NM_011829
706	1450451_at	0.002579	348.3	818.73	Spock2	NM_052994	NM_052994
707	1420388_at	0.002585	494.6	674.9	Prss12	NM_008939	NM_008939

Table 8

708	1421768_a_at	0.002588	739.37	1243.73	Homert1	NM 011982	NM 011982	// NM 147176	// NM 152134
709	1436393_a_at	0.00259	2515	206.3	410202W	NM 026277	NM 197987	842200.0	te 059281
710	1455750_a_at	0.002591	829.40	829.40	829902B	NM 026277	NM 197987	842200.0	te 150928
711	1451248_a_at	0.002601	824.2	824.2	824202B	NM 026277	NM 197987	842200.0	te 266128
712	1416250_a_at	0.002606	588.2	588.2	588202B	NM 026277	NM 197987	842200.0	te 142888
713	1450187_a_at	0.00261	1653	1653	1653202B	NM 026277	NM 197987	842200.0	te 182228
714	1416013_a_at	0.002617	110600	110600	1106002B	NM 026277	NM 197987	842200.0	te 695538
715	1444513_a_at	0.002617	369.2	369.2	369202B	NM 026277	NM 197987	842200.0	te 122278
716	1418784_a_at	0.00262	2074.8	2074.8	2074820B	NM 026277	NM 197987	842200.0	te 159538
717	1434156_a_at	0.002627	3564.7	3564.7	3564720B	NM 026277	NM 197987	842200.0	te 152158
718	1448851_a_at	0.002629	1349	1349	1349202B	NM 026277	NM 197987	842200.0	te 189478
719	1435598_a_at	0.002632	820.23	820.23	8202320B	NM 026277	NM 197987	842200.0	te 187428
720	1436703_x_at	0.002635	1794	1794	1794202B	NM 026277	NM 197987	842200.0	te 104458
721	1456338_a_at	0.002636	455.27	455.27	4552720B	NM 026277	NM 197987	842200.0	te 155838
722	1423881_a_at	0.002638	867.1	867.1	8671202B	NM 026277	NM 197987	842200.0	te 151638
723	1450727_a_at	0.002639	538.8	538.8	5388202B	NM 026277	NM 197987	842200.0	te 103218
724	1456767_a_at	0.002639	2197.07	2197.07	21970720B	NM 026277	NM 197987	842200.0	te 152228
725	1452057_a_at	0.002647	347.17	347.17	3471720B	NM 026277	NM 197987	842200.0	te 152228
726	1419344_a_at	0.002654	45.47	45.47	4547202B	NM 026277	NM 197987	842200.0	te 143618
727	1431257_a_at	0.002655	1876.4	1876.4	1876420B	NM 026277	NM 197987	842200.0	te 152228
728	1426522_a_at	0.002658	243.4	243.4	2434202B	NM 026277	NM 197987	842200.0	te 129588
729	1417303_a_at	0.002693	683920	683920	6839202B	NM 026277	NM 197987	842200.0	te 127058
730	1448413_a_at	0.002693	1040.1	1040.1	1040120B	NM 026277	NM 197987	842200.0	te 188328
731	1424151_a_at	0.002699	94787	94787	9478720B	NM 026277	NM 197987	842200.0	te 188328
732	1433915_s_at	0.002706	13531.67	13531.67	135316720B	NM 026277	NM 197987	842200.0	te 188328
733	1438514_a_at	0.002706	89631.67	89631.67	896316720B	NM 026277	NM 197987	842200.0	te 188328
734	1454770_a_at	0.002708	261.6	261.6	2616202B	NM 026277	NM 197987	842200.0	te 188328
735	1417119_a_at	0.002709	1176.13	1176.13	11761320B	NM 026277	NM 197987	842200.0	te 188328
736	1423746_a_at	0.002714	922	922	922202B	NM 026277	NM 197987	842200.0	te 158888
737	1417481_a_at	0.002715	5703	5703	5703202B	NM 026277	NM 197987	842200.0	te 151588
738	1451753_a_at	0.002718	668.0	668.0	6680202B	NM 026277	NM 197987	842200.0	te 184888
739	1435651_a_at	0.002719	891800	891800	8918002B	NM 026277	NM 197987	842200.0	te 151588
740	1424222_s_at	0.00272	1544.7	1544.7	1544720B	NM 026277	NM 197987	842200.0	te 151588
741	1435549_a_at	0.002721	181.1	181.1	1811202B	NM 026277	NM 197987	842200.0	te 110988
742	1423283_a_at	0.002724	3752.97	3752.97	37529720B	NM 026277	NM 197987	842200.0	te 181058
743	1448237_x_at	0.00273	7516	7516	7516202B	NM 026277	NM 197987	842200.0	te 052988
744	1421992_a_at	0.002744	404547	404547	40454720B	NM 026277	NM 197987	842200.0	te 842158
745	1426051_a_at	0.002748	48661	48661	4866120B	NM 026277	NM 197987	842200.0	te 054588
746	1426150_a_at	0.002750	48661	48661	4866120B	NM 026277	NM 197987	842200.0	te 663938
747	1426150_a_at	0.002750	48661	48661	4866120B	NM 026277	NM 197987	842200.0	te 663938
748	1426150_a_at	0.002750	48661	48661	4866120B	NM 026277	NM 197987	842200.0	te 663938
749	1426150_a_at	0.002750	48661	48661	4866120B	NM 026277	NM 197987	842200.0	te 663938
750	1426150_a_at	0.002750	48661	48661	4866120B	NM 026277	NM 197987	842200.0	te 663938

Table 8

903	1423054_at	0.003546	1221.37	1634.1	AK001644	NM_011715	570472	154200	0	ta	6206371	246
904	1424550_at	0.003546	366.7	9985.18	AK001629	AK001629	5666313	47987	0	ta	177119	146
905	1423427_at	0.00355	262.53	198810	AK001629	AK001629	5666313	47987	0	ta	177119	146
906	1428356_at	0.003556	527.7	198810	AK001629	AK001629	5666313	47987	0	ta	177119	146
907	1434504_at	0.003558	773.6	61671	AK001629	AK001629	5666313	47987	0	ta	177119	146
908	1418795_at	0.003566	229.33	986820	AK001629	AK001629	5666313	47987	0	ta	177119	146
909	1431752_at	0.003577	2640.98	2640.98	AK001629	AK001629	5666313	47987	0	ta	177119	146
910	1429534_at	0.003585	62029	62029	AK001629	AK001629	5666313	47987	0	ta	177119	146
911	1448692_at	0.003591	42127	42127	AK001629	AK001629	5666313	47987	0	ta	177119	146
912	1457212_at	0.003593	42127	42127	AK001629	AK001629	5666313	47987	0	ta	177119	146
913	1423453_at	0.003593	42127	42127	AK001629	AK001629	5666313	47987	0	ta	177119	146
914	1431072_at	0.0036	194.48	482.1	AK001629	AK001629	5666313	47987	0	ta	177119	146
915	1453556_x_at	0.0036	482.1	482.1	AK001629	AK001629	5666313	47987	0	ta	177119	146
916	1454046_x_at	0.0036	1001	1001	AK001629	AK001629	5666313	47987	0	ta	177119	146
917	1452399_at	0.003601	290.57	290.57	AK001629	AK001629	5666313	47987	0	ta	177119	146
918	1422102_at	0.003602	210.7	210.7	AK001629	AK001629	5666313	47987	0	ta	177119	146
919	1428195_at	0.003609	385.6	385.6	AK001629	AK001629	5666313	47987	0	ta	177119	146
920	1421877_at	0.003612	80.6	80.6	AK001629	AK001629	5666313	47987	0	ta	177119	146
921	1452219_at	0.003625	823.23	823.23	AK001629	AK001629	5666313	47987	0	ta	177119	146
922	1416184_s_at	0.003625	823.23	823.23	AK001629	AK001629	5666313	47987	0	ta	177119	146
923	1441325_at	0.003625	823.23	823.23	AK001629	AK001629	5666313	47987	0	ta	177119	146
924	1451182_s_at	0.003648	266.7	266.7	AK001629	AK001629	5666313	47987	0	ta	177119	146
925	1435867_at	0.003648	266.7	266.7	AK001629	AK001629	5666313	47987	0	ta	177119	146
926	1460260_s_at	0.003656	220.7	220.7	AK001629	AK001629	5666313	47987	0	ta	177119	146
927	1441993_at	0.003668	7562.1	7562.1	AK001629	AK001629	5666313	47987	0	ta	177119	146
928	1449888_at	0.003668	7562.1	7562.1	AK001629	AK001629	5666313	47987	0	ta	177119	146
929	1451002_at	0.003668	7562.1	7562.1	AK001629	AK001629	5666313	47987	0	ta	177119	146
930	1433485_x_at	0.003735	1005.2	1005.2	AK001629	AK001629	5666313	47987	0	ta	177119	146
931	1433485_x_at	0.003735	1005.2	1005.2	AK001629	AK001629	5666313	47987	0	ta	177119	146
932	1421350_at	0.003689	115.07	115.07	AK001629	AK001629	5666313	47987	0	ta	177119	146
933	1438122_at	0.003708	92530	92530	AK001629	AK001629	5666313	47987	0	ta	177119	146
934	1437901_a_at	0.003711	1297.23	1297.23	AK001629	AK001629	5666313	47987	0	ta	177119	146
935	1438565_at	0.003724	519920	519920	AK001629	AK001629	5666313	47987	0	ta	177119	146
936	1431644_a_at	0.003732	1005.2	1005.2	AK001629	AK001629	5666313	47987	0	ta	177119	146
937	1417381_at	0.003735	650510	650510	AK001629	AK001629	5666313	47987	0	ta	177119	146
938	1443851_at	0.003745	718.5	718.5	AK001629	AK001629	5666313	47987	0	ta	177119	146
939	1454803_a_at	0.003748	5497	5497	AK001629	AK001629	5666313	47987	0	ta	177119	146
940	1428397_at	0.003757	319.53	319.53	AK001629	AK001629	5666313	47987	0	ta	177119	146
942	1439029_at	0.003757	319.53	319.53	AK001629	AK001629	5666313	47987	0	ta	177119	146

240f.45

8 etpbl

Table 8

1061	1428843_at	0.004615	2713.6	3220.77	5-Mar	AK009364	NM_027314
1062	1428852_at	0.004622	2811.77	3266.27	Dock3	AK018140	NM_153413
1063	1439030_at	0.004648	187.33	280.17	Gmpb	BI410722	NM_177910
1064	1447385_at	0.004649	1086.97	1497.5	---	AI843353	---
1065	1460687_at	0.004657	399.5	603.07	2410195B05Rik	BB787289	NM_030241
1066	1455143_at	0.004658	3371.97	4380.1	Nlgn2	AU042744	NM_198862
1067	1454769_at	0.004664	160.17	255.77	Tatdn2	BB314680	NM_001033463
1068	1415919_at	0.004667	3799.27	4601.07	Npdc1	NM_008721	NM_008721
1069	1425326_at	0.004669	710.97	1187.8	Acly	BI456232	NM_134037
1070	1424416_at	0.004671	353.97	442.73	Nkiras2	BC024398	NM_028024
1071	1423363_at	0.004672	517.1	711.93	Sort1	AV247637	NM_019972
1072	1439041_at	0.004691	2515	3275.93	Slc39a10	BM239325	NM_172653
1073	1458123_at	0.004706	145.9	310.17	9630002A11Rik	BB124953	---
1074	1431530_a_at	0.00471	1079.23	1766.03	Tspan5	---	NM_019571
1075	1423748_at	0.004717	415.7	481.6	Pdk1	BC027196	NM_172665
1076	1423778_at	0.004719	253.63	360.67	Usp20	AK006800	NM_028846
1077	1417240_at	0.004721	797.37	1196	Zyx	NM_011777	NM_011777
1078	1417663_a_at	0.004731	7271.33	8153.37	Ndrg3	BE631549	NM_013865
1079	1452009_at	0.004731	441.1	603.97	9130422G05Rik	AK018685	NM_025782
1080	1448121_at	0.004735	4462.93	6603.47	Wbp2	NM_016852	NM_016852
1081	1418889_a_at	0.004736	642.27	906.43	Csn1d	---	NM_139059
1082	1436159_at	0.00474	6118.77	7048.13	Usp32	BQ175926	NM_110937
1083	1433720_s_at	0.004744	6881.7	9718.13	Mgt1	2143558	AI647775
1084	1437984_x_at	0.004754	3187.03	4017.9	Bac1a	BB461609	NM_019693
1085	1439398_x_at	0.004754	1096.37	1787.27	Nelf	BB266960	NM_020276
1086	1429190_at	0.004754	214.8	444.03	1110007C02Rik	BI440651	NM_027923
1087	1431784_a_at	0.004761	335.23	393.07	Bxdg5	AK008988	NM_027332
1088	1438285_at	0.004784	239.43	342.63	2210015D19Rik	---	NM_027371
1089	1423957_at	0.004786	335.7	432.87	Isg2011	BI440638	NM_026531
1090	1418467_at	0.004787	1050.3	1307.63	Smardc3	NM_025891	NM_025891
1091	1423075_at	0.004791	904.47	1210.47	Lman2	AK004952	NM_025828
1092	1424494_s_at	0.004794	474.4	605.6	2810417J12Rik	BC024947	NM_029798
1093	1420817_at	0.004795	8665.2	10554.17	Ywnag	NM_018871	NM_018871
1094	1451835_at	0.004802	106.93	208.4	Sox21	AY069926	NM_145464
1095	1452584_at	0.004807	4405.1	5377.87	1500032L24Rik	BG915677	NM_026914
1096	1429071_at	0.004815	1106.57	1507.6	Me3	AK006146	NM_181407
1097	1419260_a_at	0.004824	2080.37	2839.33	Shrb	NM_009225	NM_009225
1098	1417890_at	0.004835	6180.97	7121.1	Pdcp	NM_020271	NM_020271
1099	1420744_at	0.004843	103.63	201.87	Ctrnb2	NM_009602	NM_009602
1100	1452686_s_at	0.00485	1143.53	1423.23	D4Erttd196e	AK017503	NM_025667

Table 8

1299	1436377_at	0.006352	1070	1293.0	AT728855	RT410102	NM_207220	666171	4821
1300	1416020_a_at	0.00636	4429	159110	159110	159110	NM_017506	666171	4821
1301	1416289_at	0.006365	259.5	286.73	689060	808.73	NM_011122	666171	4821
1302	1448003_at	0.006372	261.5	348.1	181004	181004	NM_011122	666171	4821
1303	1417388_at	0.006404	7013	8201.33	Bex2	NM_029749	666171	4821	
1304	1460262_a_at	0.006406	1098.83	0.006406	0.006406	0.006406	NM_029749	666171	4821
1305	1423772_x_at	0.006414	614.07	614.07	614.07	614.07	NM_029749	666171	4821
1306	1454753_at	0.00642	463.33	156.07	156.07	156.07	NM_010317	666171	4821
1307	1422136_at	0.006439	156.07	415.57	415.57	415.57	NM_010317	666171	4821
1308	1447669_s_at	0.006445	1591.27	1861.87	906664	906664	NM_027220	666171	4821
1309	1427288_at	0.006447	1830.53	2267.57	886670	886670	NM_010317	666171	4821
1310	1448262_at	0.006449	154.17	185010	185010	185010	NM_010317	666171	4821
1311	1454037_a_at	0.00645	618.3	520	520	520	NM_145473	666171	4821
1312	1451147_x_at	0.006454	1215	475.87	475.87	475.87	NM_145473	666171	4821
1313	1435607_at	0.006454	57.73	46.07	46.07	46.07	NM_145473	666171	4821
1314	1437840_s_at	0.006454	185.73	475.87	475.87	475.87	NM_145473	666171	4821
1315	1444307_at	0.006485	503.8	747.97	747.97	747.97	NM_023558	666171	4821
1316	1420877_at	0.006504	502.1	1691.1	1691.1	1691.1	NM_023558	666171	4821
1317	1448844_at	0.006506	502.1	1691.1	1691.1	1691.1	NM_023558	666171	4821
1318	1426409_at	0.006508	502.1	1691.1	1691.1	1691.1	NM_023558	666171	4821
1319	1456313_x_at	0.006509	190.1	254.87	254.87	254.87	NM_144932	666171	4821
1320	1424651_at	0.006518	190.1	254.87	254.87	254.87	NM_144932	666171	4821
1321	1416900_s_at	0.006518	190.1	254.87	254.87	254.87	NM_144932	666171	4821
1322	1439765_x_at	0.006518	190.1	254.87	254.87	254.87	NM_144932	666171	4821
1323	1421059_a_at	0.006544	3884.57	4403.1	4403.1	4403.1	NM_019998	666171	4821
1324	1439583_x_at	0.006552	657.87	657.87	657.87	657.87	NM_019998	666171	4821
1325	1430997_at	0.006585	160.23	160.23	160.23	160.23	NM_019998	666171	4821
1326	1425351_at	0.006591	290.7	506.0	506.0	506.0	NM_134147	666171	4821
1327	1416032_at	0.006596	472.93	472.93	472.93	472.93	NM_134147	666171	4821
1328	1427110_at	0.006596	263.93	263.93	263.93	263.93	NM_027911	666171	4821
1329	1419495_at	0.006601	257.0	257.0	257.0	257.0	NM_027911	666171	4821
1330	1430851_at	0.006601	257.0	257.0	257.0	257.0	NM_027911	666171	4821
1331	1418279_a_at	0.006623	265.4	417.5	417.5	417.5	NM_028316	666171	4821
1332	1452211_at	0.006662	809.5	975.4	975.4	975.4	NM_030694	666171	4821
1333	1450147_at	0.006665	1245.3	905700	905700	905700	NM_030694	666171	4821
1334	1419439_at	0.006668	145.77	145.77	145.77	145.77	NM_030694	666171	4821

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Table 8

1535	1424757_at	0.008222	2227.57	2510.53	BC018242	BC018242	NM_144335
1536	1450963_at	0.008224	5033.07	6033.93	Ugcxf51	AK003966	NM_025710
1537	1421924_at	0.008232	533.87	839.5	Slc2a3	M75135	NM_011401
1538	1417611_at	0.00824	78.6	221.13	Them37	BC024613	NM_019432
1539	1424303_at	0.008251	1800.47	2433.37	Slc24a3	BC017615	NM_053195
1540	1443162_at	0.008253	57.53	107.37	---	BB043397	---
1541	1459947_at	0.008253	93.6	175.3	Txn3c5	BB007036	NM_145367
1542	1442524_at	0.008254	105.93	214.9	---	AT836948	---
1543	1426430_at	0.008266	258.47	418.77	Jag2	AV264681	NM_010588
1544	1450056_at	0.008272	700.33	1025.77	Apc	NM_007462	NM_007462
1545	1418396_at	0.008308	80.43	131.9	Gpm3	NM_134116	NM_134116
1546	1418485_at	0.008319	2041.07	2428.3	Slc4a3	NM_009208	NM_009208
1547	1452909_at	0.008323	302.83	427.8	2110127E18R1k	BB487410	NM_029742
1548	1452316_at	0.008327	252.13	330.57	Phf22	AK003874	NM_027927
1549	1452137_at	0.008331	244.7	331.93	Acbb3	BB704602	NM_133225
1550	1424668_a_at	0.008334	383.77	585.07	Cutl1	BC014289	NM_009985
1551	1451708_at	0.008338	52.4	94.27	Gpr33	AF045766	NM_008159
1552	1415836_at	0.008348	300.1	428.03	1dh18a1	NM_019698	NM_019698
1553	1419221_a_at	0.008349	1481.6	1704.73	Rgs14	NM_016758	NM_016758
1554	1440152_x_at	0.008355	944.4	1490.23	Edf1	AV003223	NM_021519
1555	1449401_at	0.008359	776.4	952.6	C1g9	NM_007574	NM_007574
1556	1435844_at	0.008361	497.43	725	A330009M23R1k	BB154247	XM_358477
1557	1456304_at	0.008373	186.9	365.57	Gm995	BF453551	NM_001005424
1558	1422801_at	0.008389	1322.5	1528.07	Mgt1	1351465	BC021156
1559	1451309_at	0.008405	839.07	1075.57	Athgap1	BC006592	NM_146124
1560	1433665_at	0.008408	2022.93	2857.57	Yps41	AM536822	NM_172120
1561	1431360_s_at	0.008411	225.5	339.53	Fzd2	B3371406	NM_020510
1562	1418533_s_at	0.008429	291.97	467.23	Ankfy1	AFFX-MURINE_B2	NM_001004436
1563	AFFX-MURINE_B2	at 0.008431	29218.53	41537.6	---	---	---
NM_001008498	/// NM_001009573	/// NM_001031814	/// NM_007506	/// NM_007687	/// NM_007744	/// NM_009461	/// NM_009634
NM_008363	/// NM_008441	/// NM_008893	/// NM_009118	/// NM_009180	/// NM_009442	/// NM_009461	/// NM_009634
NM_009780	/// NM_009805	/// NM_009905	/// NM_009909	/// NM_009984	/// NM_010233	/// NM_010380	/// NM_010704
NM_011079	/// NM_011195	/// NM_011317	/// NM_011397	/// NM_011431	/// NM_011495	/// NM_011585	/// NM_011933
NM_013534	/// NM_013881	/// NM_013885	/// NM_016694	/// NM_015762	/// NM_015858	/// NM_016918	/// NM_018804
NM_018851	/// NM_019519	/// NM_019758	/// NM_019921	/// NM_020584	/// NM_021282	/// NM_023440	/// NM_025326
NM_025338	/// NM_025441	/// NM_025904	/// NM_026020	/// NM_026031	/// NM_026101	/// NM_026201	/// NM_026440
NM_026541	/// NM_026701	/// NM_026917	/// NM_027421	/// NM_028527	/// NM_028717	/// NM_028726	/// NM_028838
NM_030116	/// NM_031375	/// NM_033078	/// NM_033218	/// NM_033325	/// NM_033564	/// NM_133648	/// NM_133649
NM_133850	/// NM_133851	/// NM_134115	/// NM_138689	/// NM_144807	/// NM_144807	/// NM_144386	/// NM_145150
NM_145427	/// NM_145495	/// NM_145497	/// NM_145819	/// NM_145916	/// NM_145916	/// NM_145985	/// NM_146115
							/// NM_146146
							/// NM_172453

Table 8

1572	1452913_at	0.008515	527.93	719.37	Pop411	AV137888	XM_484933
1573	1426766_at	0.008517	3125.4	3467.97	6330403K07R1k	AK018106	NM_134022
1574	1418402_at	0.008531	316.33	468.33	Adam19	NM_009616	NM_009616
1575	1452201_at	0.008535	194.93	381.93	2310047B19R1k	BC019749	XM_150151
1576	1416972_at	0.008548	4446.17	5618.73	Mhp211	NM_011482	NM_011482
1577	1450007_at	0.008548	1304.97	1861.63	1500003003R1k	NM_019769	NM_019769
1578	1424421_at	0.008549	555.93	683.87	Flad1	BC006806	NM_177041
1579	1415699_a_at	0.008554	2873.1	3765.5	Gps1	BC003350	NM_145370
1580	1428180_at	0.008554	677.43	785.2	2810422J05R1k	AK013115	---
1581	1451067_at	0.008563	2135.4	3415.83	Sgta	KC003836	NM_024499
1582	1452958_at	0.008584	2127.37	2698.8	2900006H09R1k	AK013495	NM_013495
1583	1422186_s_at	0.008589	1128.77	1385.73	Gybr3	NM_029787	NM_029787
1584	1418522_at	0.008596	882.43	1074.3	Mx1	NM_013604	NM_013604
1585	1453324_at	0.0086	532.93	675.07	6330509M23R1k	BF459399	---
1586	1446049_at	0.0086	450.73	752.6	Gdh11	BG072720	NM_009866
1587	1448571_a_at	0.008624	391.0	543.33	Gmfb	BG228815	NM_022023
1588	1450039_at	0.008652	698.13	987.47	Tsp9k	AW107303	NM_009481
1589	1424115_at	0.008657	1993.93	2510.63	Pp5c	BC003744	NM_011155
1590	1442824_at	0.008663	32.17	58.7	8010497I03R1k	BB071501	---
1591	1435986_x_at	0.008673	1043.37	1152.33	Sdhc	AW107712	NM_025321
1592	1422321_a_at	0.008678	252.2	562.3	Zfp162	NM_011750	NM_011750
1593	1433324_at	0.008686	72.83	112.27	9330154F10R1k	AK020373	---
1594	1415814_at	0.008699	10682.8	13571.8	Atp6v.b2	NM_007509	NM_007509
1595	1440570_at	0.008717	77.63	124.8	AU30031114R1k	BB309408	XM_485569
1596	1450640_x_at	0.008719	9235.73	12218.7	Atp5k	NM_007507	NM_007507
1597	1417263_at	0.008743	139.13	291.6	Ptgs2	M94967	NM_011198

Table 8

1678	1437023_at	0.009462	393.13	429.73	Zfp12	BJ176333	NM_177681	
1679	1457840_at	0.009469	163.63	251.93	Pikna4	BG073521	NM_175750	
1680	1428667_at	0.00948	669.37	760.07	Maoa	AW986246	NM_173740	
1681	1431997_at	0.009486	2481.7	2786.67	3000002C10Rik		AK013857	XM_486264
1682	1420934_a_at	0.009488	390.37	471.47	Strm1	NM_016799	NM_016799	
1683	1431030_a_at	0.009509	1464.57	1752.03	Rnf14	AK010162	NM_020012	
1684	1454056_at	0.009517	206.5	281	9030407P20Rik	AK018490		
1685	1453932_at	0.009526	121.17	204.3	4931433A01Rik	AK016502	XM_485427	
1686	1428718_at	0.009537	1440.77	1682	Scrn1	AW490544	NM_027268	
1687	1458421_at	0.009539	218.7	259.13	Keng3	AW494964	NM_152923	
1688	1415834_at	0.009543	1523.27	2288.23	Dusp6	NM_026268	NM_026268	
1689	1425212_a_at	0.009543	343.63	568.2	Thfrsf19	AF167554	NM_013869	
1690	1434261_at	0.009552	747.73	992.27	Sipa112	AV228782	XM_146572	
1691	1424441_at	0.009557	1586.33	1951.07	Slc27a4	BC023114	NM_011989	
1692	1427922_at	0.009561	182.83	350.17	2310061C15Rik	AW045976	NM_026844	
1693	1454206_a_at	0.009562	181.67	393.73	Adam15	AK020649	NM_009614	
1694	1457968_at	0.009562	43.97	108.93	Tmem23	BI499880	NM_144792	
1695	1455873_a_at	0.009577	453.13	700.9	Vps18	BB313038	NM_172269	
1696	1455369_at	0.009586	2683.03	3670.4	Appb1	BQ174146	NM_177034	
1697	1424138_at	0.009622	285.1	372.33	Rhbdfl	BC027346	NM_010117	
1698	1426710_at	0.009655	15393.43	23171.07	Calm3	BB369904	NM_007590	
1699	1422461_at	0.009659	319.13	407.67	Atad3a		NM_133233	NM_179203
1700	1442752_at	0.009669	244.07	401.57		BE650754		
1701	1423973_a_at	0.009699	9129	11881.73	Acf3	BC024935	NM_007478	
1702	1428247_at	0.009704	1336.13	1425.37	2310075A12Rik		BI081895	NM_178027
1703	1423140_at	0.009708	140.1	165.67	Lip1	AI596237	NM_021460	
1704	1437882_s_at	0.009708	116.93	143.97		3110948L19Rik	AV376276	NM_176962
1705	1450436_s_at	0.009708	1642.7	2118	Dnaj35	AI664344	NM_019874	
1706	1436286_at	0.009713	84.53	196.47	B830017H08Rik	BB333971	NM_001002790	
1707	1439705_at	0.009729	114.57	210.8	Ptgn12	BM239037	NM_011203	
1708	1457177_at	0.009733	153.9	267.3	---	BB050663		
1709	1435965_at	0.009765	930.2	1330.67	Choc3	AI481951	NM_146176	
1710	1450413_at	0.009777	181.37	287.73	3dgb	BC023427	NM_011057	
1711	1431946_a_at	0.009779	835.67	1057.57	Appa2bp		AK013520	NM_021546
1712	1452663_at	0.009783	920.73	1170	1110030H18Rik		AK003981	NM_026805
1713	1451312_at	0.00979	4026.97	4588.47	Ndufs7	BC013503	NM_029272	
1714	1460554_s_at	0.009793	1654.87	2075.23	G1g1	BB795216	NM_009149	
1715	1427646_a_at	0.009798	575.43	831.63	Arhgef2	X35761	NM_008487	
1716	1442163_at	0.009799	161.77	232.03	Hacel	BG070640	NM_172473	

Table 8

543054

1717	1458075	at	0.00981	216.87	301.53	Dst	BB50401	NM_010081	///	NM_133833	///	NM_134448
1718	1436026	at	0.009814	957.63	1092.7	MGI	2662729	B1558298	---			
1719	1416749	at	0.00982	3936.23	4630.83	Htral	NM_019564	NM_019564				
1720	1449646	s_at	0.009823	561.4	795.87	Tigds	A1666797	NM_178646				
1721	1451768	a_at	0.009829	309.3	610.5	Slc20a2	AF196476	NM_011394				
1722	1429591	at	0.009862	301.17	385.5	Tacc1	BB862546	NM_177089	///	NM_199323		
1723	1417949	at	0.009867	670.17	932.8	Ilf2	NM_026374	NM_026374				
1724	1436727	s_at	0.00987	553.07	719.2	Ppp1r10	BC004771	NM_175934	///	XM_622225		
1725	1416934	at	0.009884	163.43	192.57	Meth1	NM_019926	NM_019926				
1726	1448209	a_at	0.009906	6196.4	9305.27	Slc22a17	NM_021551	NM_021551				
1727	1427966	at	0.009908	370.17	446.73	BC087945	AW551849	NM_001013792				
1728	1419198	at	0.009913	182.2	207.03	Cbx8	A1428839	NM_013926				
1729	1416004	at	0.009935	16385.67	21679.5	Ywhah	NM_011738	NM_011738	///	XM_619940		
1730	1441063	at	0.009937	130.27	178.23	E1f2c3	BB229155	NM_153402				
1731	1416241	at	0.009939	813.77	1057.43							
1732	1426128	a_at	0.009952	528.17	610.04							
NM_001006669	///	NM_001006669	///	528.17	610.04							
NM_001006680	///	NM_010611										
1733	1438206	a_at	0.009952	2891.5	09763969							
1734	1425975	a_at	0.009955	2891.5	09763969							
1735	1441554	at	0.009957	16610.25	93981.83							
1736	1415932	x_at	0.009971	357.93	652.93	Slc39a3	AV369681	NM_134135				
1737	1417882	at	0.009971	357.93	652.93	Slc39a3	AV369681	NM_134135				
173	8999000	at	0.009975	27.1	902.20							
1740	1432748	at	0.009975	27.1	902.20							

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Table 9

Significance criterion = 0.01	Hspal1b		Hspal1b		Hspal1b		Hspal1b		Hspal1b		Hspal1b		Hspal1b	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1416094_at	1452318_at	1455145_at	1417_00625_at	1434539_at	1434977_at	1434141_at	1426951_at	1447277_s_at	1415971_at	1418574_a_at	1419442_a_at	1436824_x_at	1455620_at	1438423_at
0.00	0.000003	0.000004	0.000008	0.000008	0.000008	0.000013	0.000013	0.00	0.00	0.00	0.00	0.00	0.00	0.000026
961110_MN700	961110_MN409.57	606619_MX	8466100B130.9	337700_MN	208522FB	815010_MN9	1013.9	1869200B9	1869200B9	5683000X	932420_MN98.6	035700_MN8	553513BB	981420_MN69.9
665452BB	665452BB	606619_MX	471080BB	552622AV	208522FB	208522FB	1013.9	1869200B9	1869200B9	5683000X	932420_MN98.6	035700_MN8	553513BB	981420_MN69.9
47.7251	47.7251	60.6619	47.1080	55.2622	208.522F	208.522F	1013.9	186.9200	186.9200	568.3000	93.2420	03.5700	55.3513	98.1420
31.5911	31.5911	60.6619	47.1080	55.2622	208.522F	208.522F	1013.9	186.9200	186.9200	568.3000	93.2420	03.5700	55.3513	98.1420
47.7251	47.7251	60.6619	47.1080	55.2622	208.522F	208.522F	1013.9	186.9200	186.9200	568.3000	93.2420	03.5700	55.3513	98.1420
290000.0	290000.0	90000.0	500000.0	470000.0	540000.0	540000.0	240000.0	140000.0	220000.0	820000.0	820000.0	220000.0	140000.0	220000.0
ta	ta	ta	ta	ta	ta	ta	ta	ta	ta	ta	ta	ta	ta	ta
602591T	652234T	914434T	558147T	171454T	172955T	171454T	171454T	185431T	1409424T	1658254T	366634T	177014T	156924T	328834T
53	43	33	43	42	52	42	42	22	22	42	61	81	81	91

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Table 9

78	1442867	at	0.000151	850.07	581.07	2410080	0.000000	0.61	9250371	611
79	1438633	x	0.000154	3038.00	1469.00	11515	0.000000	0.61	9484571	811
80	1423597	at	0.000157	70.00	85.00	11515	0.000000	0.61	115899571	711
81	1418160	at	0.000164	0.00	0.00	11515	0.000000	0.61	1339471	911
82	1426994	at	0.000175	0.00	0.00	11515	0.000000	0.61	6982871	511
83	1436842	at	0.000175	0.00	0.00	11515	0.000000	0.61	9254271	511
84	1435511	at	0.000185	0.00	0.00	11515	0.000000	0.61	1464571	211
85	1449023	a	0.000185	0.00	0.00	11515	0.000000	0.61	1222371	111
86	1435698	at	0.000187	0.00	0.00	11515	0.000000	0.61	1222371	111
87	1454609	x	0.000187	1164.13	885.3	11515	0.000000	0.61	1339471	911
88	1457225	at	0.000187	807.00	885.3	11515	0.000000	0.61	1339471	911
89	1456028	x	0.00019	0.00	0.00	11515	0.000000	0.61	1871271	701
90	1460363	at	0.00019	0.00	0.00	11515	0.000000	0.61	1871271	701
91	1451075	s	0.000191	0.00	0.00	11515	0.000000	0.61	1871271	701
92	1429085	at	0.000216	1717.63	1718.00	11515	0.000000	0.61	1505271	66
93	1457424	at	0.000216	0.00	0.00	11515	0.000000	0.61	1505271	66
94	1434075	at	0.000206	0.00	0.00	11515	0.000000	0.61	1049371	101
95	1434205	at	0.000206	0.00	0.00	11515	0.000000	0.61	1049371	101
96	1435818	at	0.000208	0.00	0.00	11515	0.000000	0.61	1512871	001
97	1439263	at	0.000219	0.00	0.00	11515	0.000000	0.61	1512871	001
98	1428505	at	0.000219	0.00	0.00	11515	0.000000	0.61	1512871	001
99	1428715	at	0.000219	0.00	0.00	11515	0.000000	0.61	1512871	001
100	1433460	at	0.000219	0.00	0.00	11515	0.000000	0.61	1512871	001
101	1437559	at	0.000224	0.00	0.00	11515	0.000000	0.61	1512871	001
102	1424186	at	0.000224	0.00	0.00	11515	0.000000	0.61	1512871	001
103	1428113	at	0.000224	0.00	0.00	11515	0.000000	0.61	1512871	001
104	1456107	x	0.000233	0.00	0.00	11515	0.000000	0.61	1512871	001
105	1416814	at	0.000233	0.00	0.00	11515	0.000000	0.61	1512871	001
106	1429178	at	0.000233	0.00	0.00	11515	0.000000	0.61	1512871	001
107	1421074	at	0.000244	0.00	0.00	11515	0.000000	0.61	1512871	001
108	1433460	at	0.000244	0.00	0.00	11515	0.000000	0.61	1512871	001
109	1433460	at	0.000244	0.00	0.00	11515	0.000000	0.61	1512871	001
110	1435822	at	0.000244	0.00	0.00	11515	0.000000	0.61	1512871	001
111	1454941	at	0.000244	0.00	0.00	11515	0.000000	0.61	1512871	001
112	1427680	a	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001
113	1427526	at	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001
114	1428369	s	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001
115	1443931	at	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001
116	1456685	at	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001
117	1454846	at	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001
118	1430526	a	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001
119	1430526	a	0.000262	0.00	0.00	11515	0.000000	0.61	1512871	001

Table 9

454	1418271_at	0.001185	6780.37	4601.27	Bhlhb5	NM_021560	NM_021560
455	1455434_a_at	0.00119	2114.3	1454.9	Rtn1	BF162017	NM_008477
456	1426412_at	0.001209	1326.3	747.63	Neurod1	BM116592	NM_010894
457	1459897_a_at	0.00121	872.93	535.57	MGT:2446326	AI507307	NM_172205
458	1454824_s_at	0.001211	710.37	416.27	Mrcs1	BB699957	NM_001005863
NM_001005865 /// NM_178902							
459	1423711_at	0.001218	978.23	780.23	Ndufaf1	BC018422	NM_027175
460	1441165_s_at	0.001225	4199.6	3381.37	C1stn2	AI448973	NM_022319
461	1429000_at	0.001226	862.07	568.27	Phf3	AK010013	XM_129836
462	1438430_at	0.001234	736.57	605.9	Hbp1	AW536702	NM_153198
463	1451310_a_at	0.001235	5602.67	4589.7	Cucl1	J02583	NM_009984
464	1447825_x_at	0.001239	4445.2	2283.03	Pcdh8	BB076893	NM_021543
465	1455272_at	0.001251	3759.9	2671.3	Grn5	BB429139	XM_149971
466	1428388_at	0.001254	4269.3	3098.43	Thls2	BB339554	XM_129246
467	1435464_at	0.001254	2054.23	1618.13	111000JH01R1K	BB701294	NM_133697
468	1436200_at	0.001265	688.27	463.23	Lomrf3	BE956940	NM_028894
469	1450102_a_at	0.001269	3276.93	2641.3	Amfr	NM_011787	NM_011787
470	1422697_s_at	0.001274	866.83	699.9	Jurid2	NM_021878	NM_021878
471	1454809_at	0.001279	2279.53	1664.47	Ncoa7	BB686893	NM_172495
472	1427127_x_at	0.001281	475.9	222.93	Hspalj	M12573	NM_010478
473	1456069_at	0.001281	1626.57	968.6	Dtna	BM117918	NM_010087
474	1416221_at	0.001282	840.27	575.8	Fstl1	BC452727	NM_008047
475	1433951_at	0.001285	3779.07	2845.93	Arl5	BG064956	NM_182994
476	1450071_at	0.001286	1594.83	1237.87	Ash11	BG694892	NM_138679
477	1452065_at	0.001288	3397.07	1886.7	BC027127	BB085570	NM_145967
478	1438412_at	0.001288	549.2	456.2	Phf17	BM119726	NM_172303
479	1436982_at	0.001297	1517.67	1190.1	Thrc6b	BB788270	NM_144812
480	1440346_at	0.001305	406.07	255.63	Umjd3	HG228765	NM_001017426
481	1452654_at	0.001306	2027.83	1340.43	Zdhhc2	BB224658	NM_178395
482	1438292_x_at	0.001316	4949.23	3507.13	Adk	BB559878	NM_134079
483	1447693_s_at	0.001319	2237.23	1651.5	Neol	BB350308	NM_008684
484	1460588_at	0.001329	494.17	270.8	BE457506	---	---
485	1421786_at	0.001333	496.17	304.2	Epp3r1	NM_024459	NM_024459
486	1435618_at	0.001334	1774.33	1387.9	Pnma2	BB473446	IM_175498
487	1415800_at	0.001337	6532.17	5297.9	Gjal	M63801	IM_010288
488	1428656_at	0.00134	1471.9	1175.23	Rhnsen	BG072418	NM_026799
489	1426743_at	0.001342	2073.4	1757.17	MGT:2384914	BC002232	NM_145220
490	1428474_at	0.001345	447.83	244	PP3cb	AK004360	NM_008914
491	1423310_at	0.001346	456.43	284.9	Tpbg	BQ177165	NM_011627
492	1436420_a_at	0.001347	1505.5	950.33	Ipo4	BB390936	NM_024267
493	1451077_at	0.001354	1398.6	1260.93	Rpl5	BM114165	NM_016980
/// XM_619831 /// XM_620340							

Table 9

Line No.	Seq ID	Accession	Length	GC	Start	End	Strand	Quality	Annotations
662	1435267_at	0.001958	1536.8	1196.4	A430150301Rik	BB041868	---		
663	1438236_at	0.001933	1669.13	728.33	238.33	162429	...	0.653471	
664	1433986_at	0.001965	5808.1	8329.66	6024659	5808.1	...	1.006347	
665	1418245_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
666	1460601_at	0.001969	2205.5	195.42	630.5	630.5	...	1.005517	
667	1435167_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
668	1436641_x	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
669	1438641_x	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
670	1448653_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
671	1457059_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
672	1455222_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
673	1423902_s	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
674	1448780_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
675	1433225_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
676	1438239_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
677	1435174_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
678	1426976_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
679	1423275_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
680	1427882_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
681	1445723_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
682	1433738_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
683	1437002_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
684	1426685_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
685	1428099_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
686	1420376_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
687	1426877_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
688	1457218_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
689	1447522_s	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
690	1424824_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
691	1438098_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
692	1449446_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
693	1435207_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
694	1455046_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
695	1438628_x	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
696	1424674_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
697	1455052_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
698	1417665_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
699	1437576_at	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
700	1455052_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
701	1455052_a	0.001969	5451.00	121.27	85192.57	429682	...	1.005517	
702	1443904_at	0.002111	5060.10	1071.62	498858	1071.62	...	1.005517	
703	1435930_at	0.002111	5060.10	1071.62	498858	1071.62	...	1.005517	

Table 9

787	1419469_at	0.002485	777.87	615.93	Gmb4	67307033933	NM_013531	599200.0	0	ta	1043471
788	1434044_at	0.002485	777.87	615.93	Part1	AY286809	NM_175808	599200.0	0	ta	1043471
789	1426924_at	0.002485	777.87	615.93	Part2	AY286809	NM_175808	599200.0	0	ta	1043471
790	1425940_at	0.002485	777.87	615.93	Part3	AY286809	NM_175808	599200.0	0	ta	1043471
791	1457632_s_at	0.002485	777.87	615.93	Part4	AY286809	NM_175808	599200.0	0	ta	1043471
792	1437621_x_at	0.002485	777.87	615.93	Part5	AY286809	NM_175808	599200.0	0	ta	1043471
793	1439478_s_at	0.002485	777.87	615.93	Part6	AY286809	NM_175808	599200.0	0	ta	1043471
794	1459861_s_at	0.002485	777.87	615.93	Part7	AY286809	NM_175808	599200.0	0	ta	1043471
NM_013910											
795	1448178_a_at	0.002485	777.87	615.93	Part8	AY286809	NM_175808	599200.0	0	ta	1043471
796	1436318_at	0.002485	777.87	615.93	Part9	AY286809	NM_175808	599200.0	0	ta	1043471
NM_001008545											
797	1430667_s_at	0.002485	777.87	615.93	Part10	AY286809	NM_175808	599200.0	0	ta	1043471
798	1460315_s_at	0.002485	777.87	615.93	Part11	AY286809	NM_175808	599200.0	0	ta	1043471
799	1423829_at	0.002485	777.87	615.93	Part12	AY286809	NM_175808	599200.0	0	ta	1043471
800	1452152_at	0.002485	777.87	615.93	Part13	AY286809	NM_175808	599200.0	0	ta	1043471
801	1427351_s_at	0.002485	777.87	615.93	Part14	AY286809	NM_175808	599200.0	0	ta	1043471
802	1448269_s_at	0.002485	777.87	615.93	Part15	AY286809	NM_175808	599200.0	0	ta	1043471
803	1427504_s_at	0.002485	777.87	615.93	Part16	AY286809	NM_175808	599200.0	0	ta	1043471
804	1422624_at	0.002485	777.87	615.93	Part17	AY286809	NM_175808	599200.0	0	ta	1043471
805	1458370_s_at	0.002485	777.87	615.93	Part18	AY286809	NM_175808	599200.0	0	ta	1043471
806	1419443_at	0.002485	777.87	615.93	Part19	AY286809	NM_175808	599200.0	0	ta	1043471
807	1451542_at	0.002485	777.87	615.93	Part20	AY286809	NM_175808	599200.0	0	ta	1043471
808	1453104_at	0.002485	777.87	615.93	Part21	AY286809	NM_175808	599200.0	0	ta	1043471
809	1448100_at	0.002485	777.87	615.93	Part22	AY286809	NM_175808	599200.0	0	ta	1043471
810	1429189_at	0.002485	777.87	615.93	Part23	AY286809	NM_175808	599200.0	0	ta	1043471
811	1455151_at	0.002485	777.87	615.93	Part24	AY286809	NM_175808	599200.0	0	ta	1043471
812	1436875_at	0.002485	777.87	615.93	Part25	AY286809	NM_175808	599200.0	0	ta	1043471
813	1418304_at	0.002485	777.87	615.93	Part26	AY286809	NM_175808	599200.0	0	ta	1043471
814	1450223_at	0.002485	777.87	615.93	Part27	AY286809	NM_175808	599200.0	0	ta	1043471
815	1456026_at	0.002485	777.87	615.93	Part28	AY286809	NM_175808	599200.0	0	ta	1043471
816	1417371_at	0.002485	777.87	615.93	Part29	AY286809	NM_175808	599200.0	0	ta	1043471
817	66800100_at	0.002485	777.87	615.93	Part30	AY286809	NM_175808	599200.0	0	ta	1043471
818	1418048_at	0.002485	777.87	615.93	Part31	AY286809	NM_175808	599200.0	0	ta	1043471
819	1451740_at	0.002485	777.87	615.93	Part32	AY286809	NM_175808	599200.0	0	ta	1043471
820	1435430_at	0.002485	777.87	615.93	Part33	AY286809	NM_175808	599200.0	0	ta	1043471
821	1435430_at	0.002485	777.87	615.93	Part34	AY286809	NM_175808	599200.0	0	ta	1043471
822	1434084_at	0.002485	777.87	615.93	Part35	AY286809	NM_175808	599200.0	0	ta	1043471
823	1434084_at	0.002485	777.87	615.93	Part36	AY286809	NM_175808	599200.0	0	ta	1043471
824	1454794_s_at	0.002485	777.87	615.93	Part37	AY286809	NM_175808	599200.0	0	ta	1043471
825	1437287_at	0.002485	777.87	615.93	Part38	AY286809	NM_175808	599200.0	0	ta	1043471
826	1443401_at	0.002485	777.87	615.93	Part39	AY286809	NM_175808	599200.0	0	ta	1043471

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Table 9

952	1448144_at	0.003237	570.63	371.2	Hnrpab	64.3%	010448	NM_010448	563300.0	ta_s	0024241	066
953	1441662_at	0.003237	568.9	443.07	trpae	---	Brl71122	NM_179306	683300.0	ta_e	8839341	686
955	1455082_at	0.003264	768.97	450.267	Rtda/ Rcn7c2q3	5.0828	NM_156257	NM_156257	883300.0	ta_e	6998441	886
956	1455047_at	0.003361	361.87	111.9	Urb1b	---	NM_026112	NM_026112	783300.0	ta_e	4669341	786
957	1420822_s_at	0.003361	361.87	111.9	Urb1b	---	NM_026112	NM_026112	783300.0	ta_e	4669341	786
958	1424242_at	0.003387	744.57	732.97	Bph1	8.5922	RC02314	NM_026112	833300.0	ta_s	8524241	586
959	1448702_at	0.003388	1627.9	1603.33	Ter3ip1	---	RC02314	NM_026112	833300.0	ta_s	8524241	586
960	1438062_at	0.003283	705.920	820.47	Ter3ip1	---	RC02314	NM_026112	833300.0	ta_s	8524241	586
961	1426856_at	0.003286	705.920	820.47	Ter3ip1	---	RC02314	NM_026112	833300.0	ta_s	8524241	586
962	1435484_at	0.003286	705.920	820.47	Ter3ip1	---	RC02314	NM_026112	833300.0	ta_s	8524241	586
964	1433461_at	0.003287	705.920	820.47	Ter3ip1	---	RC02314	NM_026112	833300.0	ta_s	8524241	586
965	1457257_x_at	0.003292	256.4	83.23	Thrrp	55.382	NM_179306	NM_179306	533300.0	ta_e	6919341	846
966	1436600_at	0.003298	422.13	609.35	Thrrp	55.382	NM_179306	NM_179306	533300.0	ta_e	6919341	846
967	1435285_at	0.003303	994.5	843.7	Thrrp	55.382	NM_179306	NM_179306	533300.0	ta_e	6919341	846
968	1448484_at	0.003313	471.6	385.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
969	1451769_s_at	0.003313	471.6	385.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
970	1423451_at	0.003322	369.7	400.21	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
971	1438782_at	0.003331	514.6	417.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
972	1420925_at	0.003335	599.6	473.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
973	1426851_at	0.003335	599.6	473.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
974	1426851_at	0.003335	599.6	473.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
975	1426851_at	0.003335	599.6	473.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
976	1434101_at	0.003335	599.6	473.4	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
977	1455940_x_at	0.003345	1241.63	848.73	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
978	1436169_at	0.003357	1199.33	848.73	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
979	1436908_at	0.003357	1199.33	848.73	Amtd1	---	NM_009665	NM_009665	533300.0	ta_e	1014341	946
980	1434314_s_at	0.003363	5623.07	3656	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
981	1438634_x_at	0.003364	1834	167.07	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
982	1425115_at	0.003368	1834	167.07	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
983	1416757_at	0.003368	1834	167.07	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
984	1437200_at	0.003368	1834	167.07	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
985	1434258_s_at	0.003387	514.9	491.22	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
986	1423479_at	0.003387	514.9	491.22	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
987	1439777_at	0.003395	1619	1300.7	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
988	1448694_at	0.003395	1619	1300.7	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
989	1436388_a_at	0.003395	1619	1300.7	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996
990	1424200_s_at	0.003395	1619	1300.7	Rah1t1	---	NM_011651	NM_011651	483300.0	ta_e	7284241	996

6 Table 9

Seq	Label	Value	Unit	Seq	Label	Value	Unit	Seq	Label	Value	Unit
991	1435556_at	0.003395		829.3	597.57			---			
992	1450069_at	0.0339		158861	148.3			---			
993	1423043_s_at			851060	45960			---			
994	1452761_a_at	0.003425		898400	49.2			---			
995	1437217_at	0.003425		998110	80.2			---			
996	1440816_x_at	0.003432		022482	389.3			---			
997	1425186_at	0.003444		2548	63			---			
998	1422553_at	0.003444		93233	904			---			
999	1438666_at	0.003444		096400	27			---			
1000	1422685_at	0.003444		516251				---			
1001	1435616_at	0.003444		640431				---			
1002	1457229_at	0.003446		453	93			---			
1003	1424015_at	0.003455		1141	9			---			
1004	1436895_at	0.00346		825610	97.2			---			
1005	1428086_at	0.00346		52565				---			
1006	1429768_at	0.003473		924710	920			---			
1007	1416614_at	0.003473		1102				---			
1008	1456948_at	0.003473		955830	88			---			
1009	1428471_at	0.003473		223	2			---			
1010	1460303_at	0.003473		899670	95.23			---			
1011	1421756_a_at	0.00351		06520	69.4			---			
1012	1452657_at	0.00351		488920				---			
1013	1434441_at	0.00351		451800	42			---			
1014	1421190_at	0.003512		321800				---			
1015	1428471_at	0.003512		201892	034.3			---			
NM_001034964	/// NM_009166	/// NM_009584		05151				---			
1016	1456379_x_at	0.003515		419520				---			
1017	1457149_at	0.003515		480010	967.4			---			
1018	1456610_at	0.003515		480010	967.4			---			
1019	1429417_at	0.003532		660231				---			
1020	1429401_at	0.003539		611220	62.67			---			
1021	1444560_at	0.003539		414	7			---			
1022	1416319_at	0.003539		755989	066.2			---			
1023	1423671_at	0.003559		841600	2847.17			---			
1024	1422607_at	0.003559		988871				---			
1025	1438295_at	0.003559		096900				---			
1026	1434687_at	0.00357		364907				---			
1027	1433514_at	0.00357		040431				---			
NM_001034964	/// NM_009166	/// NM_009584		05151				---			
1029	1417307_at	0.00359		054210	256.5			---			
1030	1433561_at	0.00359		220010	457			---			
1031	1428416_at	0.00359		926099				---			

Table 9

25 of 188022AV 6 elpae

			Table 9						
1032	1448537_at	0.003598	1311.4	1217.17	1333795	0.02	56.31	615157	0.02
1033	1433782_at	0.003599	1270.1	1210.0	1264233	0.02	56.31	615157	0.02
1034	1429779_at	0.003603	966800	505801	1264233	0.02	56.31	615157	0.02
1035	1451405_at	0.00	218520	218520	14816	0.02	56.31	615157	0.02
1036	1423883_at	0.003616	1806.0	0.08289	1411.8	0.02	56.31	615157	0.02
1037	1435021_at	0.003635	0.00	0.00	0.00	0.02	56.31	615157	0.02
1038	1450663_at	0.003655	799700	0.00	0.00	0.02	56.31	615157	0.02
1039	1456089_at	0.00	538310	87.1	3599710	0.02	56.31	615157	0.02
1040	1433507_at	0.00	61820	0.00	0.00	0.02	56.31	615157	0.02
1041	1422481_at	0.00	40820	73.3	147276	0.02	56.31	615157	0.02
1042	1440910_at	0.003644	1848.17	0.00	0.00	0.02	56.31	615157	0.02
1043	1455113_at	0.003646	837.3	34383	75.2	0.02	56.31	615157	0.02
1044	1434842_s_at	0.00	66821	0.00	0.00	0.02	56.31	615157	0.02
1045	1451264_at	0.00	300600	24.5	0.00	0.02	56.31	615157	0.02
1046	1455712_at	0.00	124460	1	0.00	0.02	56.31	615157	0.02
1047	1435260_at	0.00	50551	59.27	1.29	0.02	56.31	615157	0.02
1048	1437748_at	0.003656	497.2	291.0	0.00	0.02	56.31	615157	0.02
1049	1435545_at	0.003656	0.00	0.00	0.00	0.02	56.31	615157	0.02
1050	1448570_at	0.003664	70490	125.7	0.00	0.02	56.31	615157	0.02
1051	1436034_at	0.003665	694910	1210.57	0.00	0.02	56.31	615157	0.02
1052	1453266_at	0.003668	0.00	0.00	0.00	0.02	56.31	615157	0.02
1053	1440279_at	0.003673	280.0	966800	06.6	0.02	56.31	615157	0.02
1054	1454960_at	0.003674	277.0	14041	0.00	0.02	56.31	615157	0.02
1055	1455945_at	0.003679	423.43	824820	0.00	0.02	56.31	615157	0.02
1056	1433521_at	0.003684	0.00	0.00	0.00	0.02	56.31	615157	0.02
1057	1453002_at	0.003696	0.00	0.00	0.00	0.02	56.31	615157	0.02
1058	1437468_x_at	0.003703	81281	60684	81281	0.02	56.31	615157	0.02
1059	1455339_at	0.003704	0.00	0.00	0.00	0.02	56.31	615157	0.02
1060	1415908_at	0.00371	666610	99484	0.00	0.02	56.31	615157	0.02
1061	1449048_s_at	0.003722	2366	897820	977.7	0.02	56.31	615157	0.02
1062	1426774_at	0.003723	804	585.8	703	0.02	56.31	615157	0.02
1063	1427281_at	0.003728	0.00	0.00	0.00	0.02	56.31	615157	0.02
1064	1456262_at	0.003742	0.00	0.00	0.00	0.02	56.31	615157	0.02
1065	1436836_x_at	0.00	18110	18110	0.00	0.02	56.31	615157	0.02
1066	1429443_at	0.00	466910	11.0	18855	0.02	56.31	615157	0.02
1067	1436535_at	0.00	18292	47	0.00	0.02	56.31	615157	0.02
1068	1455365_at	0.003753	0.00	0.00	0.00	0.02	56.31	615157	0.02
1069	1440825_s_at	0.003754	186400	26990	0.00	0.02	56.31	615157	0.02
1070	1454919_at	0.003775	44844	44844	0.00	0.02	56.31	615157	0.02
1071	1416722_at	0.00	44844	44844	0.00	0.02	56.31	615157	0.02
1072	1448210_at	0.00	0.00	0.00	0.00	0.02	56.31	615157	0.02
1073	1451519_at	0.00	0.00	0.00	0.00	0.02	56.31	615157	0.02

Table 9

1156	1428130_at	0.004148	553.23	382.47	Iman-67707671597	NM_027400	963400.0	ta	096161T	961T
1157	1459843_s_at	0.004149	1179.13	725.2	Sm-219B257769	NM_008539	963400.0	ta	561638T	561T
1158	1428883_at	0.00417	1487.86	153.33	19855714449	NM_026148	963400.0	ta	511928T	511T
1159	1457568_at	0.004173	9726.27	1492.47	2etum9-1	NM_026148	963400.0	ta	982848T	982T
1160	1428434_at	0.004191	1057	768.82	45096170B	NM_026148	963400.0	ta	813400.0	813T
1161	1418332_a_at	0.0042	6660.22	9020868EB	559.63	NM_026148	963400.0	ta	313400.0	313T
1162	1434285_at	0.0042	906..	8112020	Prmd4a	NM_026148	963400.0	ta	1591647T	1591T
1163	1416841_at	0.004202	816..	841820	1110059B24R1	NM_026148	963400.0	ta	588254T	588T
1164	1454968_at	0.004205	149..	6.63	1110059A24R1	NM_026148	963400.0	ta	5995954T	599T
1165	1437230_at	0.004205	2578.8	28427.1	465474B	NM_026148	963400.0	ta	113400.0	113T
1166	1437230_at	0.004205	799..	2039.47	Kcnal1	AV361923	NM_010595	980129_WX	580129_WX	580129_WX
1167	1452861_at	0.004225	4824.5	187.9	W048713	NM_128649	505400.0	ta	12988T	1298T
1168	1428377_at	0.004225	4824.5	187.9	2010300C02R1	NM_01017525	162400.0	ta	160254T	1602T
1169	1429689_at	0.004228	193920	519.4	RPD411	NM_01017525	162400.0	ta	69554T	6955T
1170	1431432_at	0.004228	64294T	224.6	4932453N03R1	NM_01017525	162400.0	ta	782400.0	7824T
1171	1429514_at	0.004239	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1172	1430982_at	0.004241	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1173	1429685_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1174	1434284_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1175	1447720_x_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1176	1460545_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1177	1436790_a_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1178	1417202_s_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1179	1447904_s_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1180	1419174_s_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1181	1452798_s_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1182	1448253_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1183	1438663_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1184	1437382_at	0.004242	6855.4	149.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1185	1455665_at	0.004287	1509.57	474.0	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1186	1452200_at	0.004291	2270.5	2725.5	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1187	1433968_a_at	0.004305	650.27	5568.33	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1188	1416453_x_at	0.004305	650.27	5568.33	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1189	1456599_at	0.004305	650.27	5568.33	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1190	1452885_at	0.004305	650.27	5568.33	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1191	1449059_a_at	0.004305	650.27	5568.33	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1192	1436907_at	0.004305	650.27	5568.33	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1193	1434286_at	0.004305	650.27	5568.33	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1194	1426315_a_at	0.004326	475.5	329.7	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1195	1434395_at	0.004326	475.5	329.7	AW986926	NM_01017525	162400.0	ta	82400.0	824T
1196	1419460_at	0.004346	844.97	2372.9	AW986926	NM_01017525	162400.0	ta	82400.0	824T

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Table 9

1197	1436247_at	0.004351	547.9	385.57	463241912222	AW552294	---	95400.0	ta	8360541	4321	
1198	1417298_at	0.004357	168800	WN82.3	585851AVbpl	uq0C02742	47.284M	026.4376201	ta	95400.0	4321	
1199	1428570_at	0.004368	93120	WN83.2	052903AVkxkx4D5	N.437.3547.47.196	845400.0	ta	9608471	9321		
1200	1437723_s_at	0.004372	1105328	WN2	KTR5IN58000320	822.7	31.347Derr11	B.66.047.9	335400.0	07	5321	
1201	1429356_s_at	0.004384	439541	WN3	3339709868	67	120xqgppsl	A.4.06475	31.549182	625400.0	ta	
1202	1416765_s_at	0.004407	945.07	WN4	025122AV330180L21R1k	47.511K02039	49.012M	17.815700.0	ta	425400.3971	ta	
1203	1429749_at	0.004419	292.8	WN5	KTR2IM3E003003	3.7.83C	5.914	17.815700.0	ta	6975541	3321	
1204	1448021_at	0.004426	816.	WN6	3315451AVK	bcuq4	4.662M	025.35.008C	ta	6275541	0321	
1205	1423155_at	0.004426	405302	WN7	6.4pppw6G04R1k	45.594V3	3.131E7	405400.0	ta	3424541	6221	
1206	1440849_at	0.004426	0.00	WN8	342420	WN57.	342420	WN	3.8911	40.382784	505400.0	ta
1207	1424415_s_at	0.004427	465477	WN9	0628116	Errtd.2.1411C01995	6.5471M	0259.5400.0	ta	4850541	4221	
1208	1419164_at	0.004428	308241	WN10	337890984	4p000	4.43.82281	264400.0	ta	5049471	9221	
1209	1434603_at	0.004445	05631	WN11	1.147epk	1.49.014N20R1	44.0121M	02.294700.0M	024223	6118471	5221	
1210	1448557_at	0.004445	2942	WN12	694507	WN337.	954366M	47.6631M	00.584700.30	721	4864571	
1211	1428845_at	0.004451	4782918	WN13	649132M	WY1M1	J.462dfz	N.47.946921	1921	947400.0	ta	
1212	1418369_at	0.004451	6	WN14	493471	WN4	4.403XCU	9.8384	33.1211	694400.0	ta	
1213	1433969_at	0.004452	4161	WN15	14711E1	WN464	906303E	WM.1b5407	N.30.02940	1.946	894400.0	ta
1214	1416904_at	0.004452	122936	WN16	95.4	KTR40C47001E203	45.7471	32.2281	594400.0	ta	8784541	
1215	1429463_at	0.004465	1822.23	WN17	1374.57	361032M	C04R1k	4.564M	2.3191	434400.3905	721	
1216	1454878_at	0.004468	946.	WN18	400020	WN6	11uq66	4943M	1312	1.914	254400.0	ta
1217	1429519_at	0.004476	1121.33	WN19	428290AVXxc4	428290AV6	N.30.6430	5.4719	154400.0	ta	6963471	
1218	1437351_at	0.004479	766.2	WN20	645.1	4930428B01R1k	B.167877	---	484.51	WN	463520100	
1219	1427949_at	0.004479	26320100	WN21	339.	6305961E	53.3	C.14743M	93375	9.4332M	2057.6	2462
1220	1430516_at	0.004492	19810	WN22	1.01254	D.092342G0	8213	33.642703	824400.0	ta	4916141	
1221	1455058_at	0.004507	48554	WN23	1350208	tund0	5ucal	N.45.3630	N.46.41594	424400.0	ta	
1222	1424243_at	0.004507	48142	WN24	65.57	KTR40D4	140E39	30.46197	N1.833907	924400.0	ta	
1223	1455729_at	0.004513	3800	WN25	394.7	404800AV	V15	153	N.35.5993	4.918	924400.0	
1224	1453381_at	0.004513	416.57	WN26	338.7	32792CV	M12R1k	R.37.201	7.8.262	---	614400.0	
1225	1455769_at	0.004529	145520	WN27	6693161	IDM14653	46.031TG09439	5.8422	---	483400.0	ta	
1226	1452828_at	0.004529	2820	WN28	590865M	tsd0	9bxc021	49.895G	6.2398	3813700	5064	
1227	1457656_s_at	0.004548	6474	WN29	11443.13	4.282123008E	14162	2833700	001	---	ta	
1228	1438096_at	0.004548	961.	WN30	947910	519600AV	330CUC	02.383M	0.47736	893400.0	ta	
1229	1450938_at	0.00456	1029	WN31	86520	WN82.4	2247C03M	1435833C	284M	040191	453400.0	
1230	1450938_at	0.00456	1029	WN32	86520	WN82.4	2247C03M	1435833C	284M	040191	453400.0	

6 elpva
30 cu
47
KTR1088240364
1.549
2.994
647400.0
ta
9150541
2221

Table 9

1322	1439971_at	0.004999	2558.8	1646.53	6330466709371	NM_053089	AV328193	---		
1323	1418023_at	0.007777	96	609.4	1888197931	NM_053099		262500.0	ta	5330971
1324	1448111_at	0.005000	450030	280.9	38096811	NM_053137		522500.0	ta	5330971
1325	1417155_at	0.007777	80.87	221.5	5817070	NM_053153		522500.0	ta	5330971
1326	1458385_at	0.005021	913.3	2505.0	2809515	NM_053191		522500.0	ta	5330971
1327	1425487_at	0.005037	16.16	383920	336.36	NM_053191		522500.0	ta	5330971
1328	1455886_at	0.005037	82987.1	992010	752.07	NM_053191		522500.0	ta	5330971
1329	1427407_s_at	0.007777	814010	72.37	8671074	NM_053191		522500.0	ta	5330971
1330	1434120_s_at	0.005058	1594	2258.3	2590.9	NM_053191		522500.0	ta	5330971
1331	14552953_at	0.005058	1594	2258.3	2590.9	NM_053191		522500.0	ta	5330971
1332	1455805_x_at	0.005058	1594	2258.3	2590.9	NM_053191		522500.0	ta	5330971
1333	1439971_at	0.005058	1594	2258.3	2590.9	NM_053191		522500.0	ta	5330971
1334	1450076_s_at	0.005058	1594	2258.3	2590.9	NM_053191		522500.0	ta	5330971
1335	1433547_at	0.005058	1594	2258.3	2590.9	NM_053191		522500.0	ta	5330971
1336	1428333_at	0.005082	3209.17	668081	750.47	NM_053191		522500.0	ta	5330971
1337	1424431_at	0.005092	766	658	9	NM_053191		522500.0	ta	5330971
1338	1426382_at	0.005092	766	658	9	NM_053191		522500.0	ta	5330971
1339	1434768_at	0.005097	875.5	991096	1572.7	NM_053191		522500.0	ta	5330971
1340	1434503_s_at	0.005112	875.5	991096	1572.7	NM_053191		522500.0	ta	5330971
1341	1456087_at	0.005124	2147.9	1592	190	NM_053191		522500.0	ta	5330971
1342	1418968_at	0.005129	1144	169610	779.7	NM_053191		522500.0	ta	5330971
1343	1440891_at	0.005143	784	086075	615	NM_053191		522500.0	ta	5330971
1344	1454984_at	0.005143	784	086075	615	NM_053191		522500.0	ta	5330971
1345	1452366_at	0.005145	607.2	897064	373.93	NM_053191		522500.0	ta	5330971
1346	1434354_at	0.005151	607.2	897064	373.93	NM_053191		522500.0	ta	5330971
1347	1418188_a_at	0.005164	607.2	897064	373.93	NM_053191		522500.0	ta	5330971
1348	1419879_s_at	0.005164	607.2	897064	373.93	NM_053191		522500.0	ta	5330971
1349	1419879_s_at	0.005164	607.2	897064	373.93	NM_053191		522500.0	ta	5330971
1350	1417082_at	0.005173	382.2	2008347	1071.1	NM_053191		522500.0	ta	5330971
1351	1417082_at	0.005173	382.2	2008347	1071.1	NM_053191		522500.0	ta	5330971
1352	1434566_a_at	0.005191	807.93	1545918	60.63	NM_053191		522500.0	ta	5330971
1353	1423672_at	0.005191	807.93	1545918	60.63	NM_053191		522500.0	ta	5330971
1354	1419400_at	0.005206	619.00	1855638	1	NM_053191		522500.0	ta	5330971
1355	1424410_at	0.005225	2245.63	607800	725.17	NM_053191		522500.0	ta	5330971
1356	1425966_x_at	0.005225	2245.63	607800	725.17	NM_053191		522500.0	ta	5330971
1357	1435879_at	0.005225	2245.63	607800	725.17	NM_053191		522500.0	ta	5330971
1358	1460335_at	0.005232	559.63	330510	99	NM_053191		522500.0	ta	5330971

Table 9
continued

1364	1437782_at	0.005235	483.87	305.93	65952	BE651445	NM_001004357	///	NM_025771		3071
1365	1451411_at	0.005249	1228186	157.87	53951	HC02004	NM_022420				6198371
1366	1455978_a_at	0.005249	188130	820938	17240	BR4444	NM_016762				5031471
1367	1424136_a_at	0.005288	409010	13.87	10910	IKN01064	NM_14214090				8510055
XM_484589	///	XM_485828			65600	IKN94599					6952271
1368	1447500_at	0.005299	60995	1067	47993	BF29438	NM_03005				1665371
1369	1452713_a_at	0.005277	405810	106.87	47993	AK002371	NM_02545				1704271
1370	1428468_at	0.005288	817610	055.0	11083	AKN1475	NM_0222				138871
1371	1423230_at	0.005288	617500	100	11083	AKN1475	NM_0222				138871
1372	1434664_at	0.005288	617500	100	11083	AKN1475	NM_0222				138871
1373	1455072_at	0.005288	617500	100	11083	AKN1475	NM_0222				138871
1374	1460359_at	0.00529	601469	1287.5	11083	AKN1475	NM_0222				138871
1375	1423444_at	0.00529	1147	37	4554	RG06788	NM_177				625871
1376	1434935_at	0.005294	024510	93.64	177	625871					1375000
1377	1435705_at	0.005299	6447600	93.64	177	625871					1375000
1378	1436015_s_at	0.005315	2033.13	879	586	61489	NM_177				1375000
1379	1420196_s_at	0.005318	28666	2120.6	3	17742	NM_1339				1526671
1380	1456054_a_at	0.005332	481.3	809	182	631455	NM_030				1298271
1381	1460004_x_at	0.005332	809	182	631	625871					1759571
1382	1460004_x_at	0.005332	809	182	631	625871					1759571
1383	652528	0.005332	28666	2120.6	3	17742	NM_1339				1526671
1384	1424683_at	0.005356	846.5	1125	63	631455	NM_030				14851
1385	1448212_at	0.005362	846.5	1125	63	631455	NM_030				14851
1386	1456573_x_at	0.005362	846.5	1125	63	631455	NM_030				14851
1387	1428624_at	0.005362	846.5	1125	63	631455	NM_030				14851
1388	1419925_s	0.005362	846.5	1125	63	631455	NM_030				14851
1389	1445574_at	0.005362	846.5	1125	63	631455	NM_030				14851
1390	1431232_a_at	0.005362	846.5	1125	63	631455	NM_030				14851
1391	1455603_at	0.005362	846.5	1125	63	631455	NM_030				14851
1392	1433668_at	0.005362	846.5	1125	63	631455	NM_030				14851
1393	1424114_s	0.005362	846.5	1125	63	631455	NM_030				14851
1394	1448405_a	0.005362	846.5	1125	63	631455	NM_030				14851
1395	1435923_at	0.005362	846.5	1125	63	631455	NM_030				14851
1396	1450706_a_at	0.005362	846.5	1125	63	631455	NM_030				14851
1397	1438310_at	0.005362	846.5	1125	63	631455	NM_030				14851
1398	1424071_s	0.005362	846.5	1125	63	631455	NM_030				14851
1399	1435991_at	0.005362	846.5	1125	63	631455	NM_030				14851
1400	149820	0.005362	846.5	1125	63	631455	NM_030				14851
1401	1449138	0.005362	846.5	1125	63	631455	NM_030				14851
1402	1441305_at	0.005362	846.5	1125	63	631455	NM_030				14851
1403	1438619_x_at	0.005362	846.5	1125	63	631455	NM_030				14851

Table 9

Table 9

1404	1450928_at	0.005516	1765.6	1051.43	Id4	33221406	NM_031166	57.500	0	6414341	2471
1405	1423641_s_at	0.005518	3676.43	2719.2	RC006071	NM_011135	48.500	0	4133541	1441	
1406	1454074_a_at	0.005520	652.2	1992.4	RC005206	NM_030521	48.500	0	4133541	1441	
NM_001005525	/// NM_025438										
1407	1457743_s_at	0.005523	1401.07	1058.9	RC005206	NM_030521	48.500	0	4133541	1441	
1408	1436729_at	0.005539	2614.99	4061.02	RC005206	NM_030521	48.500	0	4133541	1441	
1409	1452038_at	0.005544	990.10	810.9	RC005206	NM_030521	48.500	0	4133541	1441	
1410	1452197_at	0.005544	2162.8	225.73	RC005206	NM_030521	48.500	0	4133541	1441	
1411	1415872_at	0.005541	2210.30	444.7	RC005206	NM_030521	48.500	0	4133541	1441	
1412	1438677_at	0.005547	1541.10	507.1	RC005206	NM_030521	48.500	0	4133541	1441	
1413	1454879_s_at	0.005551	537.80	553.47	RC005206	NM_030521	48.500	0	4133541	1441	
1414	1417600_at	0.005551	9620.2	5851.5	RC005206	NM_030521	48.500	0	4133541	1441	
1415	1438276_at	0.005554	1174.07	5882.02	RC005206	NM_030521	48.500	0	4133541	1441	
1416	1422711_at	0.005554	2022.53	1592.77	RC005206	NM_030521	48.500	0	4133541	1441	
1417	1424214_at	0.005554	3221.10	2022.53	RC005206	NM_030521	48.500	0	4133541	1441	
1418	1423045_at	0.005563	940.1	99.17	RC005206	NM_030521	48.500	0	4133541	1441	
1419	1418401_a_at	0.005579	486.17	435.27	RC005206	NM_030521	48.500	0	4133541	1441	
1420	1421196_at	0.005580	865.00	435.27	RC005206	NM_030521	48.500	0	4133541	1441	
1421	1452380_at	0.005580	45.5	535.7	RC005206	NM_030521	48.500	0	4133541	1441	
1422	1435576_at	0.005580	2286.00	402	RC005206	NM_030521	48.500	0	4133541	1441	
1423	1417685_at	0.005580	68.22	4883.50	RC005206	NM_030521	48.500	0	4133541	1441	
1424	1433476_at	0.005580	183.07	435.27	RC005206	NM_030521	48.500	0	4133541	1441	
1425	1436152_a_at	0.005580	509.07	414.53	RC005206	NM_030521	48.500	0	4133541	1441	
1426	1452769_at	0.005582	509.07	414.53	RC005206	NM_030521	48.500	0	4133541	1441	
1427	1444615_x_at	0.005582	804.7	414.53	RC005206	NM_030521	48.500	0	4133541	1441	
1428	1421425_a_at	0.005582	679.9	414.53	RC005206	NM_030521	48.500	0	4133541	1441	
1429	1421196_at	0.005582	679.9	414.53	RC005206	NM_030521	48.500	0	4133541	1441	
1430	1456223_at	0.005589	455.1	414.53	RC005206	NM_030521	48.500	0	4133541	1441	
1431	1433581_at	0.005591	1752	1361.8	RC005206	NM_030521	48.500	0	4133541	1441	
1432	1456135_s_at	0.005591	2955.1	1752	RC005206	NM_030521	48.500	0	4133541	1441	
1433	1427886_at	0.005595	402.0	1042.0	RC005206	NM_030521	48.500	0	4133541	1441	
1434	1424005_at	0.005595	402.0	1042.0	RC005206	NM_030521	48.500	0	4133541	1441	
1435	1421017_at	0.005595	402.0	1042.0	RC005206	NM_030521	48.500	0	4133541	1441	
1436	1453421_at	0.005575	215.4	215.4	RC005206	NM_030521	48.500	0	4133541	1441	
1437	1423117_at	0.005752	199.92	802.9	RC005206	NM_030521	48.500	0	4133541	1441	
1438	1456336_at	0.005753	987.3	647.73	RC005206	NM_030521	48.500	0	4133541	1441	
281029	1447877_x_at	0.005771	300.2	142.9	RC005206	NM_030521	48.500	0	4133541	1441	
1440	1447877_x_at	0.005771	300.2	142.9	RC005206	NM_030521	48.500	0	4133541	1441	
1441	1447877_x_at	0.005771	300.2	142.9	RC005206	NM_030521	48.500	0	4133541	1441	
1442	1434149_at	0.005775	3068.33	2075.13	RC005206	NM_030521	48.500	0	4133541	1441	
1443	1434149_at	0.005775	3068.33	2075.13	RC005206	NM_030521	48.500	0	4133541	1441	
1444	1434149_at	0.005775	3068.33	2075.13	RC005206	NM_030521	48.500	0	4133541	1441	
1445	1434149_at	0.005775	3068.33	2075.13	RC005206	NM_030521	48.500	0	4133541	1441	

6 tabs

91110 NM 904121BB49 FBI 471501 9.5911

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Table 9

1445	1436597_at	0.005785	718.97	560.67	ANK64909E	BM243710	---	420900.0	ta	420817	9871
1446	1417938_at	0.005817	80.63	39.7	6805505MNP1	T602005B3	168881.5	6.648	ta	420900.0	5871
1447	1434819_at	0.005818	80.63	39.7	6805505MNP1	T602005B3	168881.5	6.648	ta	420900.0	5871
1448	1434376_at	0.00582	80.63	39.7	6805505MNP1	T602005B3	168881.5	6.648	ta	420900.0	5871
1449	1448005_at	0.005825	80.63	39.7	6805505MNP1	T602005B3	168881.5	6.648	ta	420900.0	5871
1450	1439255_s_at	0.005825	80.63	39.7	6805505MNP1	T602005B3	168881.5	6.648	ta	420900.0	5871
1452	1419100_at	0.005832	969.2	697.13	0584000XK3144.4	ETK3280DZ2	32.43176	1.181856	ta	16181857	0871
1453	1438024_at	0.005832	1591	408600	MNP112	408600	MNP230	4.978	ta	66500732	6471
1454	14501_574800	0.005832	1591	408600	MNP112	408600	MNP230	4.978	ta	66500732	6471
1455	1417770_s_at	0.00584	411	2662	LTWNP3532	78954EVAR	3.691	AW208	ta	486500.0	4471
1456	1449465_at	0.00584	411	2662	LTWNP3532	78954EVAR	3.691	AW208	ta	486500.0	4471
1457	1434313_at	0.005842	509.67	164	LTWNP	16699087	1.17	BB039	ta	9965007509	5471
1458	1429899_at	0.005857	655800	6	35803	MNP5	TPMNS4M17R11	4.7	ta	456500.0	7471
1459	1439387_x_at	0.005899	896	270	MNP56	693900XV	7.0	121	ta	466500.0	4471
1460	1454826_at	0.005891	215	1150	LTWNP61	11501ECPMNPZFP148	1.1	BB039	ta	66500732	6471
1461	1449068_at	0.005891	215	1150	LTWNP61	11501ECPMNPZFP148	1.1	BB039	ta	66500732	6471
1462	1438069_a_at	0.005917	206	620	MNP94	1435695B	1.4	RBms	ta	66500732	6471
1463	1416082_at	0.005923	424	620	MNP246	0391841V	10859	7.8	ta	66500732	6471
1464	1429585_s_at	0.005944	59	620	MNP	59256M	2.6	BB628	ta	416500	8971
1465	1418854_at	0.005957	202	50	MNP7	08802ZMBB	1.0	BB628	ta	16500	4971
1466	1433906_at	0.005968	381	59	4700	MNP329	594700	MNP2	ta	66850002894	9971
1467	1455242_at	0.005968	381	59	4700	MNP329	594700	MNP2	ta	66850002894	9971
1468	1416488_at	0.005971	424	620	MNP246	0391841V	10859	7.8	ta	66500732	6471
1469	1453289_at	0.005973	424	620	MNP246	0391841V	10859	7.8	ta	66500732	6471
1470	1425508_s_at	0.005973	424	620	MNP246	0391841V	10859	7.8	ta	66500732	6471
1471	1448167_at	0.005994	51	56	MNP3	51561MB3	1.1	BB129	ta	168500.0	1971
1472	1456464_x_at	0.005994	51	56	MNP3	51561MB3	1.1	BB129	ta	168500.0	1971
1473	1421	0.005994	51	56	MNP3	51561MB3	1.1	BB129	ta	168500.0	1971
1474	1448208_at	0.005957	1037	732	6E0BB771.3	KTR41MNP10E45M	3.5	7539	ta	172.84	7539
1475	1442381_at	0.005966	43	29	LBEB57.17	KTR2TDL0703E3971	1.2	592	ta	49.605	248500.0
1476	1436135_at	0.005968	1389	47	802MVA	1163.9	7.6	247	ta	49500.0	0863
1477	1449429_at	0.005987	2191	630	620	MNP1814	2254	11	ta	6620250	4
1478	1435196_at	0.005989	2191	630	620	MNP1814	2254	11	ta	6620250	4
1479	1416430_a	0.005991	252	60	MNP148	252600	MNP	0.0	ta	283500.0	4
1480	1458134_at	0.005991	252	60	MNP148	252600	MNP	0.0	ta	283500.0	4
1481	1430137_at	0.006003	958	110	MNP	958110	MNP	2	ta	628500.0	0885
1482	1438606_a	0.006019	551	51	MNP7	6688591B7	1.7	584	ta	528500.0	6471
1483	1433985_at	0.006022	240	15	8600	MNP1625	6019	1	ta	945433	8471
1484	1428433_at	0.006023	628	2	MNP3	21660	BB3	2	ta	818500.0	4471
1485	1424033_at	0.006023	628	2	MNP3	21660	BB3	2	ta	818500.0	4471
1486	1418024_at	0.006024	873	10	600	MNPARG	832	003	ta	587500.0	5471

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Table 9

1487	1434831_a_at	0.006027	592.9	492.27	Foxo6b3o4E	BB364488	NM_019740	ta_e	019914T	825T
1488	1438629_x_at	0.006042	1792.	1111.00	F8-0682301755	5193E3NM_0193900.0	ta_e	006634T	425T	
1489	1439990_62318T_NM161111	0.006129	439.	200920	200920	200920	ta_e	288434T	415T	
1490	1434721_at	0.006066	00694T	00694T	00694T	00694T	ta_e	288434T	415T	
1491	1439862_at	0.006083	25454T	25454T	25454T	25454T	ta_e	288434T	415T	
1492	1442143_at	0.006102	359.	306.4	306.4	306.4	ta_e	288434T	415T	
1493	1428355_at	0.006105	1594.	439552	439552	439552	ta_e	288434T	415T	
1494	1429431_at	0.00611	12086T	12086T	12086T	12086T	ta_e	288434T	415T	
1495	1433752_647029_TMX	0.006118	42424T	42424T	42424T	42424T	ta_e	288434T	415T	
1496	1455244_at	0.006164	439.	200920	200920	200920	ta_e	288434T	415T	
1497	1448499_a_at	0.006178	1801.	51984T	51984T	51984T	ta_e	288434T	415T	
1498	1420003_at	0.00618	103.	889600	889600	889600	ta_e	288434T	415T	
1499	1456088_at	0.006195	103.	889600	889600	889600	ta_e	288434T	415T	
1500	1434173_s_at	0.006195	41544T	41544T	41544T	41544T	ta_e	288434T	415T	
1501	1459366_at	0.006207	52825T	52825T	52825T	52825T	ta_e	288434T	415T	
1502	1435404_at	0.006224	432.	30324T	30324T	30324T	ta_e	288434T	415T	
1503	1439438_a_at	0.006233	432.	30324T	30324T	30324T	ta_e	288434T	415T	
1504	1434882_at	0.006244	432.	30324T	30324T	30324T	ta_e	288434T	415T	
1505	1424949_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1506	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1507	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1508	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1509	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1510	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1511	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1512	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1513	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1514	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1515	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1516	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1517	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1518	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1519	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1520	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1521	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1522	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1523	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1524	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1525	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1526	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1527	1434602_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	
1528	145534_s_at	0.006259	046400	046400	046400	046400	ta_e	288434T	415T	

047610_TMN 888 3761. Foxo3
 047610_TMN 888 3761. Foxo3
 047610_TMN 888 3761. Foxo3

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7.292.625 720900.0 420900.0 587554T 884T

Table 9

1653	1456320_at	0.007117	2673.13	1901.3	BC0407014	BB701297	NM_172513			6491		
1654	1452090_a_at	0.01	617482	W3323.1	.947862AV50.5PBW	(C9)186/BB6671	47.2911NM_11104700/p/112.127951T			6491		
1655	1452110_01786T_MW117	539310_WW117.1	584633EBWC	1458B7579	LC9C5NM_166480	382700.0				6491		
1656	1420091_s_at	0.01	0980CT_WW584	0980CT_WW	63PK0RC3	32705216	66.8006505	.693200	(022)79	6491		
1657	1422638_s_at	0.007139	530.1	64T1TWB	Rassfs LL	062NM_018	43.413NM_0	893200.0		1591		
1658	1436503_at	0.01	14220_WW659	380620CBB1331.1	163410BC0485	327	678F30251	31.829NM_0	15520070	6491		
1659	1437639_at	0.00718	1484	02654T_WW	35L300XWYG2CWAJK	13740333	215NM_0	253200.0		6491		
1660	1435382_at	279520_WW37	267210XW	KIR01063001926NDN	1	LC.94721	9.922NM_011	532700.0		8891		
1661	1441682_s_at	0.007192	1812.9	507101QBKpot	C796645	37.0833M6	.947902	233200.0		8891		
1662	1421849_at	0.007196	278600_WW	512691AV3	15PJ03tag2	1	37.3254	5.929NM_0	133200.0	9891		
1663	1411813LTC_WW0	0.01528613B4663.	.:KR2CN050011E3	C9.1422NM_001	32.3062NM_003	332700.0				9891		
1664	1415751_at	0.01429871TWNN1524	325961B4151.4	3diploPp	6911	LC.747124	523200	0470		8891		
1665	1434752_at	0.007212	317211_WW	914800XW	322dr	129.72924	1.41118751	513200.0		8891		
1666	1416799_at	0.007215	1012.43	478323AV	K5500A127032941	5.766NM_7	925450	313200.0		8891		
1667	1419583_at	0.007215	1451102	W3934	.220900C0B1	1402NM_00	37.1273	603200.0		1891		
1668	1424464_s_at	160129_WW2	460598BB	961844IV	33	38.79110105R11	1.514	134222	303200.0	NM_133		
1669	1445171_WW	15783T_WW332	15783T_WW09.97	470000313036317	31323B7364	22	8503NM_1	662700.0		6491		
1670	1437511_x_at	0.01	139320_WW521	139320_WW	4XOV21CC1	1	30.32151	1	47.882543	6491		
1671	1437744_at	0.01	122120_WW2218	1022810C0B175	W4C7	39.7574	47.240179	482700.0	0740	7491		
1672	1424159_at	0.007251	297.1	834844BB	1300010	39.8428	1.79.20539	382700.0	0501	7491		
1673	1421883_at	0.007255	568110_WW	568110_WW	165532B	3d7775.13	31.5471813	1.70	58811	492700.0	0811	
1674	1436762_x_at	118820_WW54	116155BB	3d7775.13	31.5471813	1.70	58811	492700.0	0811	7491		
1675	1436762_x_at	118820_WW54	116155BB	3d7775.13	31.5471813	1.70	58811	492700.0	0811	7491		
1676	1436762_x_at	118820_WW54	116155BB	3d7775.13	31.5471813	1.70	58811	492700.0	0811	7491		
1677	1423736_a_at	0.04870_WW34	645753BB	KIR30M010003031	1	37.3923895	1	8.906395	552700.0	7491		
1678	1419215_at	0.007297	34554T_WW	198001BB	1001A0X4	1	36.9435	2	125NM_0	632700.0	7491	
1679	1420514_at	0.01	90593T_WW3058	474927B2313	0120C3115NM47	66	602NM_138	33.232NM_1	932700.0	7491		
1680	1419258_at	0.007309	3421	52920_WW72	52920_WW	1	32.16296	-35.4394	-22700.0	0091	7491	
1682	1440831_at	0.007313	054120_WW97	1	12023AV11	47621	1	37.06514	37	2101	512700.0	7491
1683	1460430_at	0.007315	154110_WW	423833AV	1	40274ZAKO	(23116	1.41	.392413	212700.0	7491	
1684	1434176_x_at	0.047010_WW5	420020C07	3d7775.13	31.5471813	1.70	58811	492700.0	0811	7491		
1685	1428418_s_at	0.01	142800_WW90	142800_WW	16X043	36	138330N2R11	47.4254NM_1	802700.0	7491		
1686	1456085_x_at	0.01	594720_WW576	594720_WW	2621SCD151	35	407115	1	6.1861342	961700.0	7491	
1687	1456904_at	0.007332	20952T_WW380.43	54966200	--.10dX3Q	.59105	6	2181	261700.0	7491		
1688	1428483_a_at	0.01	288010_WW226	4	02034LVW	10006100	33.1439K	37	399452	781700.0	16647	7491
1689	1429447_at	0.01	036620_WW512	150822BB	KIR0D101071233353	1W	.291192	(4841	81700.0	7491		
1690	1451364_at	0.01	647100100_WW538	155203F4897	955840C0B0133	66	1331BC02701	3	6591NM_02	81700.0	7491	
1691	1457342_at	0.01	054810_WW114	054810_WW	33030	77	535542	.035---	637700.0	7491		
1692	1417269_60L229_WW1	509684T_WW3	947254IV	3d7775.13	31.5471813	1.70	58811	492700.0	0811	7491		
1693	1422881_s_at	0.007383	084271_WW536	806457BB5Y	1472388	8	7485NM_1	471700.0		7491		
1694	14_85E35T_WW	45151T_WW1162	568499BB7	1	47409AV	2987433	23	8XM_2	221700.0	7491		
1694	14_85E35T_WW	45151T_WW1162	568499BB7	1	47409AV	2987433	23	8XM_2	221700.0	7491		

Table 9

1777	1436844_at	0.007974	3400.83	2289.37	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1778	1430820_at	0.007983	341.2	253.63	Bbx	67017	NM_027444	283800.0	ta	~01171T	8181
1779	1416145_at	0.007993	309.3	220.5	BCO2024449	64044	NM_027444	283800.0	ta	~01171T	8181
1780	1428312_at	0.008002	1542.2	1139.1	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1781	1426895_at	0.008012	1542.2	1139.1	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1782	1436070_at	0.008021	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1783	1428915_at	0.008030	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1784	1460053_at	0.008039	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1785	1440859_at	0.008048	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1786	1416408_at	0.008057	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1787	1447849_s_at	0.008066	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1788	1416938_at	0.008075	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1789	1422402_at	0.008084	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1790	1427959_at	0.008093	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1791	1437071_at	0.008102	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1792	1417757_at	0.008111	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1793	1423508_at	0.008120	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1794	1424769_s_at	0.008129	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1795	1457494_at	0.008138	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1796	1435335_a_at	0.008147	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1797	1452767_at	0.008156	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1798	1453000_at	0.008165	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1799	1445684_s_at	0.008174	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1800	1429403_x_at	0.008183	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1801	1433642_at	0.008192	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1802	1452982_at	0.008201	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1803	1415761_at	0.008210	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1804	1423295_at	0.008219	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1805	1417872_at	0.008228	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1806	1418893_at	0.008237	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1807	1450784_at	0.008246	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1808	1451113_a_at	0.008255	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1809	1419914_s_at	0.008264	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1810	1418760_at	0.008273	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1811	1431050_at	0.008282	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1812	1429108_at	0.008291	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1813	1440413_at	0.008300	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1814	1426582_at	0.008309	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1815	1427233_at	0.008318	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1816	1418308_at	0.008327	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1817	1423796_at	0.008336	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181
1818	1417710_at	0.008345	1447.8	1079.7	AV257745	---	NM_027444	283800.0	ta	~01171T	8181

1819	1416679_at	0.008389	2200.3	2028.3	Abcd3	BC009119	NM	008991	947800.0	ta	391531	0981			
1820	1440396_at	0.008389	439800	22.53	MR1W2I9030693	NM	472271	450611	947800.0	ta	391531	0981			
1821	1424993_at	0.008436	1929.07	507.89098	1605590T	AK020R1K	LL	885	BCU8.6929	ta	11031951	6581			
1822	1423322_at	0.008439	2118.77	3074.10KX	Lin7c	BU1/8612	NM	58096	4538699	ta	7582531	8581			
1823	1427253_s_at	0.008459	126854.39	434.113	Suz12	BG066534	NM	159199	297800.0	ta	132151	7581			
1824	1438637_x_at	0.008459	9870.72	474.34V3	4	AV305219	NM	030109	154900.0	ta	1563331	9581			
1825	1423171_at	0.008468	571.8	414.35	BE947345	NM	0224	27831	47800.0	ta	471041	5581			
1826	1455988_a_at	0.008475	47420.97	5346.4	30	Oct6	NM	45801	84800.0	ta	159671	5581			
1827	1431822_a_at	0.008492	126800	12924.07	1791.21	39	70	1981	17800.0	ta	190671	5581			
1828	1427670_a_at	0.008492	1843.03	090010KX	1308.3	Azi1	AK004592	NM	011592	ta	1098271	2581			
1829	1455189_at	0.0085	891842	MR1076000066V	8030451	AK1K	LL	41	314	ta	806371	1581			
1830	1417410_s_at	0.008511	1082894	1864.2	47	4781	PKC1	NM	50857	ta	1271371	0581			
1831	1416923_a_at	0.008533	474810	2356	39	4501	AKU18656	NM	009761	ta	1321371	6781			
1832	1429722_at	0.008533	216211V	AKR410804	3387	Zb1b4	BB10806	NM	23680	ta	1353371	8781			
1833	1418565_at	0.008535	39927	09110	32	6661	BC00060592	NM	0258150	ta	1715571	4781			
1834	1449979_a_at	0.008545	260410KX	MR10250200399	gm111	LL	209	3602656	828	ta	023680	9781			
1835	1451331_at	0.008555	260410KX	MR10250200399	gm111	LL	209	3602656	828	ta	023680	5781			
1836	1423599_a_at	0.008558	260410KX	MR10250200399	gm111	LL	209	3602656	828	ta	023680	5781			
1837	1428573_a_at	0.008577	1205.83	881.4	LI10KX	BB55102	NM	466044	465800.0	ta	134871	4781			
1838	1455570_x_at	0.008577	16934V	346.01	MR1060E2E10336	BB332918	NM	355754	827	ta	1518271	4781			
1839	1456505_at	0.008582	488610	933668	2524	Uba52	BM05236	NM	019383	ta	5059471	6381			
1840	1435389_at	0.008596	778	454552	93	33	EB09R1K	LL	0.94	AV35891	ta	28371	8381		
1841	1438407_at	0.008596	47020	566.03	93	33	EB09R1K	LL	0.94	AV35891	ta	28371	8381		
1842	1428639_at	0.008597	47020	566.03	93	33	EB09R1K	LL	0.94	AV35891	ta	28371	8381		
1843	1418843_at	0.008627	94520	865000X	2	CHD	AKU17510	NM	17510	ta	755571	4381			
1844	1428751_at	0.008628	94520	865000X	2	CHD	AKU17510	NM	17510	ta	755571	4381			
1845	1429633_at	0.008628	94520	865000X	2	CHD	AKU17510	NM	17510	ta	755571	4381			
1846	1449876_at	0.008628	94520	865000X	2	CHD	AKU17510	NM	17510	ta	755571	4381			
1847	1455317_at	0.008653	418520	AK1	030900	BB1992.61	NM	1160	8102	U13835	777	NM	011160	4381	
1848	1433537_at	0.008679	051921	4140	48334	AKU1K	LL	31	5811	NM	112512	3381			
1849	1437233_x_at	0.008679	194600	899810	3	Eding3	3	2	2001	BB276158	ta	609271	2381		
1850	1453722_s_at	0.008679	458800	47.9	981	3	Eding3	3	2	2001	BB276158	ta	609271	2381	
1851	1439086_at	0.008689	234004	1874.4	72	9981	3	Eding3	3	2	2001	BB276158	ta	609271	2381
1852	1428607_at	0.008689	234004	1874.4	72	9981	3	Eding3	3	2	2001	BB276158	ta	609271	2381
1853	1449061_a_at	0.008689	424564.43	932668	51	11	AKU100003	3	381	---	264800.0	ta	609271	2381	
1854	1416465_a_at	0.008689	424564.43	932668	51	11	AKU100003	3	381	---	264800.0	ta	609271	2381	
1855	1440177_at	0.008744	738.23	450.13	5160.03	4	9439	Vapa	BB0575117	NM	015933	9281			
1856	1433959_at	0.008751	961661	612503AV	950	3	Zma14	AV357574	NM	2177086	ta	1713271	2281		
1857	1451237_s_at	0.008766	669110	760.63	1991	103	AKU110103	NM	1442948	ta	3527271	3281			
1858	1452854_at	0.008766	669110	760.63	1991	103	AKU110103	NM	1442948	ta	3527271	3281			
1859	1456130_at	0.008773	669110	760.63	1991	103	AKU110103	NM	1442948	ta	3527271	3281			
1860	1435163_at	0.008776	1730.57	388.7	MR10250200399	gm111	LL	209	3602656	828	ta	023680	5781		

Table 9

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Table 9

1861	1434843_at	0.008806	3645.73	2502.33	A4306497Rik	BG070968	XM_484151	921600.0	ta	063471	2061	
1862	1455486_at	0.008808	591.57	416.97	KIR42C6020E2B	Piassi	NM_1106563	59.19093	ta	595868	1061	
1863	1435160_at	0.008809	704.87	919471W	443 ZQOL	1100041P04R1	NM_172326	511600.0	ta	704.87	1061	
1864	1455063_at	0.008812	71.9	30.17	NM061290	NM_201751	6.9504	811600.0	ta	100161	1061	
1865	1428565_at	0.008813	1054.67	994600	NM061290	hpbm_8.707	3.5566	211600.0	ta	1054.67	1061	
1866	1457133_at	0.008822	729.07	994600	NM061290	hpbm_8.707	3.5566	211600.0	ta	729.07	1061	
1867	1432000_at	0.008825	1408.52	KIR1202E240E64	Pmi052117	NM_025557	39.5638	111600.0	ta	1408.52	1061	
1868	1417057_at	0.008825	526655BB	KIR5111000051	Relay1	NM_025557	39.5638	111600.0	ta	526655BB	1061	
1869	1433726_at	0.008828	163310100	3625.12	gfsqd	NM_025557	39.5638	111600.0	ta	163310100	1061	
1870	1434578_x_at	0.008828	956.00	1442.2	18810X	44.4	4.4	61000.0	ta	956.00	1061	
1871	1436681_x_at	0.008829	1106	011910	NM061290	hpbm_8.707	3.5566	211600.0	ta	1106	1061	
1872	1433851_at	0.008894	1172.7	011910	NM061290	hpbm_8.707	3.5566	211600.0	ta	1172.7	1061	
1873	1434099_at	0.008916	2440.63	910270	NM	NM_173525	75.832	2.573	ta	2440.63	1061	
1874	1426614_at	0.008916	193.4	1274868	NM	NM_173525	75.832	2.573	ta	193.4	1061	
1875	1438688_at	0.008922	795	698800	NM	NM_173525	75.832	2.573	ta	795	1061	
1876	1421870_at	0.008934	181C	63520	NM	NM_173525	75.832	2.573	ta	181C	1061	
1877	1439824_at	0.008935	509.57	63520	NM	NM_173525	75.832	2.573	ta	509.57	1061	
1878	1456499_at	0.008935	571510X	KIR22M1E00051	NM	NM_173525	75.832	2.573	ta	571510X	1061	
1879	1435164_s_at	0.008946	461498	NM	NM_173525	75.832	2.573	ta	461498	1061		
1880	1438106_at	0.008946	539610	NM	NM_173525	75.832	2.573	ta	539610	1061		
1881	1439459_x_at	0.008948	871.53	110910B	KIR22M1E00051	NM	NM_173525	75.832	2.573	ta	871.53	1061
1882	1435307_at	0.008952	92688W	KIR22M1E00051	NM	NM_173525	75.832	2.573	ta	92688W	1061	
1883	1439541_at	0.008952	707.73	779928	NM	NM_173525	75.832	2.573	ta	707.73	1061	
1884	1418512_at	0.009016	710.43	441.77	0558468	NM	NM_173525	75.832	2.573	ta	710.43	1061
1885	1436223_at	0.009016	710.43	441.77	0558468	NM	NM_173525	75.832	2.573	ta	710.43	1061
1886	1426290_at	0.009024	441.77	0558468	NM	NM_173525	75.832	2.573	ta	441.77	1061	
1887	1418737_at	0.009034	818810	NM	NM_173525	75.832	2.573	ta	818810	1061		
1888	1448558_a_at	0.009034	818810	NM	NM_173525	75.832	2.573	ta	818810	1061		
1889	1424349_a_at	0.009034	818810	NM	NM_173525	75.832	2.573	ta	818810	1061		
1890	1402221_at	0.009034	818810	NM	NM_173525	75.832	2.573	ta	818810	1061		
1891	1415799_at	0.009066	334.1	110C1	NM	NM_173525	75.832	2.573	ta	334.1	1061	
1892	1418152_at	0.00907	375.2	238.57	NM	NM_173525	75.832	2.573	ta	375.2	1061	
1893	1428619_at	0.009077	1510.7	152531B	NM	NM_173525	75.832	2.573	ta	1510.7	1061	
1894	1429021_at	0.009077	1510.7	152531B	NM	NM_173525	75.832	2.573	ta	1510.7	1061	
1895	1428232_at	0.009111	835.63	723.57	NM	NM_173525	75.832	2.573	ta	835.63	1061	
1896	1433818_x_at	0.009111	835.63	723.57	NM	NM_173525	75.832	2.573	ta	835.63	1061	
1897	1433818_x_at	0.009111	835.63	723.57	NM	NM_173525	75.832	2.573	ta	835.63	1061	
1898	1434625_at	0.009111	835.63	723.57	NM	NM_173525	75.832	2.573	ta	835.63	1061	
1899	1435387_at	0.009113	4323	193102	NM	NM_173525	75.832	2.573	ta	4323	1061	
1900	1435387_at	0.009113	4323	193102	NM	NM_173525	75.832	2.573	ta	4323	1061	
1901	1448667_x_at	0.009115	163271	73502	NM	NM_173525	75.832	2.573	ta	163271	1061	
1902	1434590_at	0.009126	399610	NM	NM_173525	75.832	2.573	ta	399610	1061		

1514844_WX 8966070GB 6 elpab

2502.33 74.5493 908800.0 3484341

1981

Table 9

1943	1455447_at	0.009465	3133.23	2586.73	D43067987GR1K	BML16882	---	487600' 0	ta	4168271	3861									
1944	1447936_at	0.009472	1134.	333600KX14.9	KR1114P1001E25H16R1J	L9744VJ 5.56819	487600' 0	ta	5952271	2861										
1945	1441598_at	0.009474	15194_TMN	536470B	2ksaJmefF2	E27E31VW24671	317112NM_01	547600' 0	ta	9452271	2861									
1946	1420486_at	565520J1MN6	815650AV	1 TtaadJ	N 8.038E1W060'	L3.2025NM_02	447600' 0	ta	s_4585571	1861										
1947	1455925_at	0.009481	1059.23	489620_TMN	6982908AV	qrda34	T.657W_4.01947	854600' 0	ta	6262371	0861									
1948	1420626_at	0.009489	689.93	554.9	241016R19R1K	BF782285	NM_026113	557600' 0	ta	4820571	661									
1949	1450287_at	0.009755	055471_TMN	46.2	388823AV	LOC5	atlltqz	LOC54	E5.0231	T.9974	467600' 0	ta	3078171	92271	112	6671				
1978	1436900_x_at	0.009755	055471_TMN	46.2	388823AV	LOC5	atlltqz	LOC54	E5.0231	T.9974	467600' 0	ta	3078171	92271	112	6671				
1979	1450287_at	0.009755	055471_TMN	46.2	388823AV	LOC5	atlltqz	LOC54	E5.0231	T.9974	467600' 0	ta	3078171	92271	112	6671				
1980	1437329_at	0.009758	466620_TMN	59.1	932673AV	8mpd43	N 40.729587	3276501	ta	5255571	461									
1981	1459854_s_at	0.009758	466620_TMN	59.1	932673AV	8mpd43	N 40.729587	3276501	ta	5255571	461									
1982	1426546_at	0.009774	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6
1983	1428914_at	0.009784	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6	619666AV	44.6

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Table 9

1984	1455240_x_at	0.009788	55.97	49.1	---	BG066fj06f	---
1985	1428512_at	0.009791	3105.9	2479.87	Bhhb9	AK012577	NM_198161
1986	1434310_at	0.009794	6427.83	5700.8	Emprr2	AW546137	NM_007561
1987	1426578_s_at	0.009796	558.23	357.83	Snapshot	BB667523	NM_133854
1988	1437400_at	0.009797	909.9	741.27	Nedd41	BB309512	NM_031881
1989	1451494_at	0.009804	3133.7	2345.03	Wac	AW556980	NM_153085
1990	1448125_at	0.009813	2888.27	2323.6	Rlt2	BB271919	NM_009065
1991	1434628_a_at	0.009817	113.57	60.23	Rhprr2	BF228009	NM_027897
1992	1416958_at	0.009838	7617.93	5252.17	Nrld2	NM_011584	NM_011584
1993	1423050_s_at	0.009838	6165.33	5356.53	Hmrp	BF228203	NM_016805
1994	1425846_a_at	0.00984	1306.9	1028.93	Caln1	AF282251	NM_021371
1995	1437350_at	0.009843	226.73	167.03	MGI:2179725	AV290046	NM_027136
1996	1434556_at	0.009871	1935.03	1753.17	---	BI437942	---
1997	1417252_at	0.00988	795.5	552.4	Nt5c	NM_015807	NM_015807
1998	1419662_at	0.009894	340.9	206	Ogn	BB542051	NM_008760
1999	1417372_a_at	0.009907	927.63	755.97	Pel11	BC016515	NM_023324
2000	1450941_at	0.009907	606.87	467.67	sdcbp	AV227603	NM_016807
2001	1434219_at	0.009935	1505.63	1258.27	Stim2	BB004503	XM_132038
2002	1420127_s_at	0.009935	1505.63	1258.27	Stim2	BB004503	XM_132038
2003	1434207_at	0.009920	539920	539920	---	---	---
2004	1429193_at	0.009953	965956	982810	---	---	---
2005	1437087_at	0.009955	3295.63	892640	---	---	---
2006	1428854_at	0.009955	3295.63	892640	---	---	---
2007	1416633_a_at	0.005	62702.5	634.7	---	---	---
2008	1448635_at	0.01	181820	113.13	---	---	---
510060 MN ///							
96	L720 MH	940062	AV. 576	6172	IGM	03.0791	
171	L210 MN	12225	152	201	6.9031	48800.0	at
80	910 MN	22203	BF228203	udrhp	535	88800.0	at
58	1110 MN	4584	45110	plr	71.2525	88800.0	at
97	020 MN	228009	228009	2	0.9	4719800.0	at
65	009065 MN	6161	161	112	3232.6	4719800.0	at
85	151 MN	0	6698	5AW	4322	49800.0	at
188	130 MN	1512	60	BB	414	6.06	at
23	597 MN	23	BB	66	357.83	967600.0	at
56	13 MN	161	13	AW	67055	887279	at
51	00 MN	77	257	AK	99	6.0513	at
191	81 MN	77	257	AK	99	6.0513	at
85	1981 MN	77	257	AK	99	6.0513	at
51	00 MN	77	257	AK	99	6.0513	at
99	81 MN	77	257	AK	99	6.0513	at
86	131 MN	77	257	AK	99	6.0513	at
61	51 MN	77	257	AK	99	6.0513	at
81	131 MN	77	257	AK	99	6.0513	at
61	51 MN	77	257	AK	99	6.0513	at
81	131 MN	77	257	AK	99	6.0513	at
61	51 MN	77	257	AK	99	6.0513	at

Table 9

Table 10 (continued)

#	ID	p	data	cont	Gene			trans	x	y	z	score	adj	cat	sig
					chr	start	end								
1	1450910_at	0.000001	4879.97	687910	113853	209721	11	5.582	8.612	60000	0	ta	3336341	3	
2	1425608_at	0.000005	195.99	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
3	1420839_at	0.000007	925.51	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
4	1421754_at	0.000007	572.2	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
5	1415824_at	0.000012	1461	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
6	1454159_at	0.000012	1461	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
7	1453732_at	0.000012	1461	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
8	1415795_at	0.000015	412.	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
9	1422145_at	0.000019	265	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
10	1415953_s_at	0.000021	567.67	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
11	1460498_a_at	0.000022	129.73	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
12	1451007_at	0.000022	129.73	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
13	1415964_s_at	0.000022	129.73	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
14	1460390_at	0.000038	409.63	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
15	1422733_at	0.000045	691.67	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
16	1433899_x_at	0.000049	1803	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
17	1418370_at	0.000052	442.67	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
18	1421327_at	0.000062	595.6	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
19	1424476_at	0.000063	319.93	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
20	1420610_at	0.000066	2030.33	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
21	1421789_s_at	0.000077	358.43	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
22	1428123_at	0.000072	113.27	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
23	1422605_at	0.000074	1485	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
24	1431030_a_at	0.000076	1327	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
25	1444513_at	0.000077	358.43	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
26	1428322_a_at	0.000079	3899	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
27	1454671_at	0.000088	439.23	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
28	1449960_at	0.00009	192.53	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
29	1459722_at	0.00009	219.8	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
30	1436642_x_at	0.000099	387.27	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
31	1450408_at	0.000102	311.9	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
32	1455479_a_at	0.000106	2466.47	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
33	1430529_at	0.000106	201.93	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	
34	1439333_at	0.000108	1506.43	687910	209721	113853	11	32.998	5.261	60000	0	ta	5052943	3	

Table 10

35	1428697_at	0.000109	666.5	1277.53	Dpp8	BN939621	NM_028906		
36	1421862_a_at	0.000112	158	403.77	Vamp1	AK018783	NM_009496		
37	1433961_at	0.000117	187.9	285.87	BC023814	BG068266	NM_153562		
38	1422560_at	0.000119	210.37	361.73	Dd12	NM_023544	NM_001017966		
39	1440455_at	0.000119	4258.07	5955.83	AT848599	AT848599	---		
40	1422580_at	0.000134	643.67	1257.23	My14	NM_010858	NM_010858		
41	1436393_a_at	0.000135	2449.13	3206.37	Trim37	BG065227	NM_197987		
42	1449063_at	0.000146	1163.37	1396.17	Sec2211	BC009024	NM_011342		
43	1425781_a_at	0.00015	514.13	799.47	P1cb1	U85714	NM_019677		
44	1429533_at	0.000152	687.63	904.57	Immt	BB22675	NM_029673		
45	1417963_at	0.000161	696.37	1278.1	P1tp	NM_011125	NM_011125		
46	1419344_at	0.000169	321.03	641.97	Tt-e1	NM_013688	NM_013688		
47	1416754_at	0.000171	4459.33	8472.7	Ptkar1b	NM_008923	NM_008923		
48	1419223_a_at	0.000171	961.67	1492.2	Dtna	AF143542	NM_010087	///	NM_207650
49	1420507_a_at	0.000174	404.03	545.3	3110031B13R1k	NM_026075	NM_026075		
50	1433630_at	0.000176	1010.27	1304.27	LOC208158	BE762333	NM_198599		
51	1422994_at	0.000177	203.6	304.37	P1p5k3	NM_011086	NM_011086		
52	1423560_at	0.000179	973.4	2468.47	Ne112	AI838010	NM_016743		
53	1454037_a_at	0.000181	127.33	272.3	Flt1	AK055502	NM_010228		
54	1436464_at	0.000183	63.17	92.2	---	BE943617	---		
55	1450319_at	0.000186	985.53	1644.3	Gahrb2	NM_008070	NM_008070		
56	1421176_at	0.000189	956.27	1580.03	Rasgrp1	BB354696	NM_011246		
57	1458932_at	0.000192	232.97	319.67	Pe2	BB639093	NM_021483		
58	1421090_at	0.000204	1832.57	2965.8	Epb4.111	NM_013510	NM_001003815	///	NM_001006664
59	1430514_a_at	0.000213	364.1	598.6	2410026K10R1k	AK002762	NM_025584		
60	1458539_at	0.000225	339.6	690.67	R3hdml	BB462088	NM_181750		
61	1417133_at	0.000227	849.83	1097.67	Pmp22	NM_008885	NM_008885		
62	1418187_at	0.00023	423.17	579.1	Ramp2	AF146523	NM_019444		
63	1454045_a_at	0.000235	923.87	1296.87	4933424M23R1k	LOC260345	AK016901		
64	1428937_at	0.000235	4753.63	6371.1	Atp2b1	BI080417	NM_026482		
65	1424570_at	0.000238	188.1	275.93	Dxx45	BF023426	NM_145975		
66	1431749_a_at	0.000241	423.27	903.3	Rasgrp1	AK013548	NM_011246		
67	1417330_at	0.000245	281.33	467.17	Sic23a2	NM_018824	NM_018824		
68	1426066_a_at	0.000245	777.43	1181.17	Dtna	AF143544	NM_010087	///	NM_207650
69	1418079_at	0.000246	739.93	1176.2	Psmc3	U60330	NM_011192		
70	1422967_a_at	0.000246	127.7	254.43	Tfrc	BB810450	NM_011638		
71	1427054_s_at	0.000246	244.3	503.3	D930038M13R1k	BC026627	NM_001014399	///	NM_001014422
72	1420575_at	0.000248	2687.07	8257.33	Mt3	NM_013603	NM_013603		
73	1449503_at	0.000253	748.67	1105.1	Kpna1	U20619	NM_008465		

Table 10

74	1418616_at	0.000257	252.1	371.18	4.56	WXWafk	88.19	88.57	1010.44	.663	49.032	283000	0	ta	6211371	511		
75	1419137_at	0.000261	2962.67	4036.03	Shank3	83.99	84.23	---N	8.8914	4.096	476000	0	ta	1275271	211			
76	1427735_a_at	0.000262	693.97	4266100	Shank3	83.99	84.23	---N	8.8914	4.096	476000	0	ta	16814271	111			
77	1419425_at	0.000263	251.17	55.610	926991	IVANM	241726	1.43	9417	3.65	893000	0	ta	14729571	011			
78	1421396_at	0.000265	278.25	9861000	67.52	84	2676	3.55	55	0.09	3.74	38.62	393000	0	ta	19897571	601	
79	1415893_at	0.000267	443.20	431.20	3080	361	20	99	44	44	44	44	44	0	ta	13748171	801	
80	1451427_a_at	0.000272	047110	44.12	833001	IBB3	zevqW10	37	89	94	44	44	44	19872	ta_x	11769371	101	
81	1420403_at	0.000273	328.4	414120	73.91	4042	40	84	72	3	1.38	4.01	7.93	847	ta	293000	901	
82	1425576_at	0.00028	474010	739.91	0909	22	47	11	18	1	36	36	42	193000	0	ta	10543271	501
83	1433729_x_at	0.000296	14813	41	682	45	102	5	1	73	1	42	0	153000	0	ta	11968371	101
84	1421093_at	0.000296	85520	739.91	855	520	73	1	1	1	1	1	1	153000	0	ta	1488471	301
85	1425459_at	0.0003	332.87	448	20	610	10	1	1	1	1	1	1	53000	0	ta	19201271	201
86	1421459_a_at	0.000303	96.1	819	20	73	1	1	1	1	1	1	1	643000	0	ta	12889171	101
87	1425748_at	0.000307	110.14	8100	17	52	13	1	1	1	1	1	1	433000	0	ta_x	18364371	001
88	1426699_at	0.000307	308.9	431.23	46600	20	13	1	1	1	1	1	1	933000	0	ta	13380271	66
89	1418795_at	0.00031	225.6	411.23	869	97	44	1	1	1	1	1	1	533000	0	ta_x	15085571	86
90	1421123_at	0.00031	386.33	869	97	44	1	1	1	1	1	1	1	533000	0	ta	10945771	76
91	1424172_at	0.000312	1962	18	73	1	1	1	1	1	1	1	1	223000	0	ta	1710971	96
92	1449590_a_at	0.000314	130.53	509	1	73	1	1	1	1	1	1	1	233000	0	ta	17890971	56
93	1432910_at	0.00032	926.3	129	908	21	1	1	1	1	1	1	1	233000	0	ta	1811371	46
94	1434181_at	0.00032	298.93	429	800	73	1	1	1	1	1	1	1	233000	0	ta	1062371	36
95	1460687_at	0.000322	808.63	148	600	45	78	1	1	1	1	1	1	213000	0	ta	12717271	16
96	1460711_at	0.000325	80.14	8600	73	1	1	1	1	1	1	1	1	133000	0	ta	13211271	06
97	1445460_at	0.000335	1047.13	1598	1	73	1	1	1	1	1	1	1	133000	0	ta	15678171	68
98	1455305_x_at	0.000336	3051.17	656	1	988	3	1	1	1	1	1	1	103000	0	ta	1669271	88
99	1420833_at	0.000337	153.43	47	5	1	1	1	1	1	1	1	1	103000	0	ta	1847271	78
100	1437938_x_at	0.000349	1067.4	420	5	1	1	1	1	1	1	1	1	103000	0	ta	1847271	78
101	1416882_at	0.00035	250.33	858	3	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
102	1421026_at	0.000351	468	46	1	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
103	1448844_at	0.000351	140	4	1	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
104	1438361_at	0.000361	245	5	1	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
105	1423450_a_at	0.000362	448	3	2	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
106	1428195_at	0.000364	344	3	1	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
107	1436971_x_at	0.000364	79.83	176	8	2	1	1	1	1	1	1	1	3000	0	ta	6547271	98
108	1418743_a_at	0.000368	59.2	9	2	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
109	1454686_at	0.000371	466	9	9	1	1	1	1	1	1	1	1	3000	0	ta	6547271	98
110	1427189_at	0.000374	230.67	339	4	5	1	1	1	1	1	1	1	3000	0	ta	6547271	98
111	1425424_at	0.000382	230.67	339	4	5	1	1	1	1	1	1	1	3000	0	ta	6547271	98
112	1431129_at	0.000382	230.67	339	4	5	1	1	1	1	1	1	1	3000	0	ta	6547271	98

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Table 10
83f05

154	1418702_a_at	0.000548	950.47	1478.7	281042815R1k	NM_025577	NM_025577	43947471	561
155	1460286_at	0.000553	1380.97	1811.8	2981608B4	U30000	4717000	6968281	562
156	1452427_s_at	0.000556	1029011	02259004K	8175221S9	B151513	NM_021145	702000	563
157	1421622_a_at	0.00056	068310	0686000K	2xwdp4	NM_019688	NM_019688	207000	564
158	1421961_a_at	0.00056	440.4	865400	Wpappafa	NM_019688	NM_019688	869000	565
159	1417271_a_at	0.000565	332.4	832600	865400	NM_019688	NM_019688	869000	566
160	1419398_a_at	0.000579	86610	98634.4	807470B	NM_019688	NM_019688	869000	567
161	1426764_at	0.00057	2582.9	994610	3341.4	NM_019688	NM_019688	869000	568
162	1449504_at	0.000579	826610	0285515A	Wp1	NM_019688	NM_019688	869000	569
163	1451872_a_at	0.000586	275.87	465.4	NEU11	NM_019688	NM_019688	869000	570
164	1445518_at	0.00059	113.63	672213	NEU11	NM_019688	NM_019688	869000	571
165	1439740_s_at	0.000592	539.6	697110	NM_019688	NM_019688	NM_019688	869000	572
166	1425337_at	0.000596	1655.9	5529610	948162A	NM_019688	NM_019688	869000	573
167	1450247_a_at	0.000598	1020.8	979800	NM_019688	NM_019688	NM_019688	869000	574
168	1422407_s_at	0.000599	1945.93	3331.57	925209B	NM_019688	NM_019688	869000	575
169	1445004_a_at	0.000601	066610	99.3	933006L	NM_019688	NM_019688	869000	576
170	1444743_at	0.000604	533.13	42010	180581B	NM_019688	NM_019688	869000	577
171	1430615_at	0.000608	135.07	39221	WDC54L	NM_019688	NM_019688	869000	578
172	1423222_at	0.000611	1829.4	3021.2	NM_019688	NM_019688	NM_019688	869000	579
173	1448335_s_at	0.000613	3978.0	080351	W390.6	NM_019688	NM_019688	869000	580
174	1454769_at	0.000628	16.0	394330100	W5.7	NM_019688	NM_019688	869000	581
175	1451795_at	0.000647	416.3	493410	W2.1	NM_019688	NM_019688	869000	582
176	1449961_at	0.000653	789.33	92920	W3h3a	NM_019688	NM_019688	869000	583
177	1435741_at	0.000673	1906.23	16619	W331.4	NM_019688	NM_019688	869000	584
178	460519	0.000673	76.1	411622	W339.7	NM_019688	NM_019688	869000	585
179	1448956_at	0.000677	32.2	82800	W021	NM_019688	NM_019688	869000	586
180	1428048_at	0.000677	32.2	82800	W021	NM_019688	NM_019688	869000	587
181	1435234_at	0.000678	022020	022020	W2	NM_019688	NM_019688	869000	588
182	1425405_a_at	0.000679	33020	W6.33	W0894	NM_019688	NM_019688	869000	589
183	1449552_at	0.000681	823.13	081810	W0894	NM_019688	NM_019688	869000	590
184	1434222_at	0.000681	1013.07	354510	Wpal.	NM_019688	NM_019688	869000	591
185	1422735_at	0.000683	124.1	065120	W006	NM_019688	NM_019688	869000	592
186	1451917_a_at	0.000685	492.77	594800	W06	NM_019688	NM_019688	869000	593
187	1416601_a_at	0.000686	494.5	25610	W06	NM_019688	NM_019688	869000	594
188	1450863_a_at	0.000693	8651.0	478400	W06	NM_019688	NM_019688	869000	595
189	1419155_a_at	0.000695	570.4	76340	W06	NM_019688	NM_019688	869000	596
190	1417462_at	0.000698	478610	4744991Y	W06	NM_019688	NM_019688	869000	597
191	1432411_a_at	0.000704	889610	889610	W06	NM_019688	NM_019688	869000	598
192	1428964_at	0.000704	546120	30096	W06	NM_019688	NM_019688	869000	599
193	1447634_x_at	0.000714	94.43	21610	W06	NM_019688	NM_019688	869000	600
			775520	775520					

273	1429764_at	0.001102	342.73	586.33	150005K14Rik	BF101721	---
274	1422367_at	0.001103	49.37	71.53	O1fr70	NM_019485	NM_019485
275	1427685_a_at	0.001103	773.9	1114.2	Syntj2	AF041858	NM_011523
276	1420670_at	0.001106	372.47	786.4	Arnt2	AI428888	NM_007488
277	1420720_at	0.001113	475.67	1773.13	Nptx2	NM_016789	NM_016789
278	1450184_s_at	0.001113	852.57	1039.6	Tef	NM_017376	NM_017376 /// NM_153484
279	1436383_at	0.001116	4234.33	6456.23	Cplx2	BE946238	NM_009946
280	1439553_s_at	0.001116	921.5	1256.8	Nuff2	AU018817	NM_026532
281	1442883_s_at	0.001117	3416.2	5168.4	D10Bwg1364e	BI413749	NM_145421
282	1434595_at	0.00112	1660.63	2646.97	Trims	BQ174474	NM_053167
283	1415801_at	0.001121	1109.23	1675.33	Gjal	M63801	NM_010288
284	1447945_at	0.001126	98.2	218.7	Maf	BI466869	NM_001025577
285	1428158_at	0.001149	992.37	1273.27	Akt1s1	BW068933	NM_026270
286	1428356_at	0.001149	458.9	705.37	Osbp2	AI326285	NM_152818
287	1425671_at	0.00116	126.33	421.53	Homef1	AF093257	NM_011982 /// NM_147176 /// NM_152134
288	1444723_at	0.001166	623.87	832.6	6530418L2Rik	BB049759	NM_175398
289	1415978_at	0.001167	2596.5	3659.23	Tubb3	NM_023279	NM_023279
290	1435780_at	0.001167	2572.2	3756.47	Psd	BG966595	NM_028627
291	1422799_at	0.001174	1762.17	3188.1	Balc2	AK019427	NM_020027
292	1448817_at	0.001175	359.87	746.9	Otub1	NM_134150	NM_134150
293	1423550_at	0.001176	674.83	993	Sic1a4	BB277461	NM_018861
294	1422167_at	0.001178	48.93	137.47	Semasa	NM_009154	NM_009154
295	1450520_at	0.001188	2207.5	3136.17	Cacng3	NM_019430	NM_019430
296	1448346_at	0.0012	6945.37	12597.07	Cfil1	NM_007687	NM_007687
297	1451630_at	0.001201	684.8	970.77	Tt1	BC018513	NM_027192
298	1421349_x_at	0.001212	3452.53	4773.77	150000IH12Rik		NM_021316
299	1448207_at	0.001217	417.7	776.03	Lasp1	BC010840	NM_010688
300	1418181_at	0.001222	610.37	898.4	Ptp4a3	AK014601	NM_008975
301	1449980_a_at	0.001225	1320.77	1904.63	Gabrd	NM_008072	NM_003072
302	1429038_at	0.001239	1172.87	1492.87	1500034J0Rik	BI904336	XM_356085
303	1455462_at	0.001246	3133.73	4038	Adcy2	AV025455	NM_153534
304	1436381_at	0.001246	2173.7	3260.27	Dlgap3	BQ175774	NM_198618
305	1429884_at	0.001249	690.33	809.43	Srgap2	AK005172	XM_129445
306	1435868_at	0.001249	389.27	725.53	Ankrd13c	BI794218	NM_001013806
307	1426128_a_at	0.00125	268.6	399.83	Kcng2	AB000502	NM_001003824 /// NM_001003825 /// NM_001006668 ///
308	1455896_a_at	0.00126	1511.83	2037.43	Kcnnk1	AU043100	NM_008430
309	1434932_at	0.001273	534.47	919.53	Adarb1	BI734168	NM_001024837 /// NM_001024838 /// NM_001024839 ///
309	1434932_at	0.001273	534.47	919.53	Adarb1	BI734168	NM_001024837 /// NM_001024838 /// NM_001024839 ///
NM_001024840	/// NM_130895						

Table 10

Table 10

310	1437037_x_at	0.001286	1154.3	842192_TMN	859540A_BQ_49954	1.8	365326607	587100.0	ta_e	1201571	836	
311	1435367_at	0.001289	1822.87	2325_4960889_Mutcl1	KIR2DL210023D93	1.4	611130272	1747100	ta_e	16911371	476	
312	1435902_at	0.001291	334.956	3084102B1_kx1d3	AF167139_769NM_01338371L3	1.7	8266716	47100	ta_e	1747171	493	
313	1425212_a_at	0.001291	950671_TMN3	KIR2DL1000232YA1327K32_T2L	NM_172896101	1.7	4896101	337100	ta_e	12615571	576	
314	1433886_at	0.001292	930.379	0108381A_Kir2dl1n	6.653939	4.5	1567716	817100	Q45703	11953271	145734	
315	1425870_a_at	0.001293	244.678	674910_TMN1326	KIR2DL1000232YA1327K32_T2L	1.3	8216611	607100	ta_e	2961271	476	
316	1460186_at	0.001297	450.47	61981_TMN	KIR2DL1000232YA1327K32_T2L	1.1	5817961	607100	ta_e	1928371	243	
317	1426310_at	0.001299	156.77	638790_TMN	4.0971980	3.2	2301	663100	ta_e	740671	173	
318	1442404_at	0.0013	776.68	68110_TMN081	6134200204h1 QB_7a135_9_303NM	0.26	387661	963100.0	ta_e	1201271	076	
319	1455400_at	0.001332	471.2	631.03	BC06_692137BBBV287	KIR2DL20087015.56	9.95	683100	ta_e	429071	633	
320	1434381_at	0.001335	162	390.67	808800_TMN	BG612781L EBGM	ra3ppd808	32798	6.679	183100	0	
321	1415988_at	0.001339	258220_TMN	499010333	335409B2069L307586NM	1.26	307332	621100.0	ta_e	0970971	433	
322	1428354_at	0.001343	761.186	800_TMN011	186800_TMN	C_5ddqNM_031_10789NM	0.31	10789NM	0.31	10789NM	0.31	
323	1419473_a_at	0.001346	57.8	108.812	812330_TMN	mem_33132121MBB1498L23pqs	NM_144_49766	9.115	1.447	559819	621100	
324	1431422_a_at	0.001354	544.93	7256_07963913YA930	KIR2DL1000232YA1327K32_T2L	1.5	395113	493100	0	17589571	133	
325	1457968_at	0.001362	79.1	141.093	120_TMN	Arhba_03061388B	l_7a5	0.65	113	397151	493100	
326	1434325_x_at	0.001367	2535.42	1010_TMN	4939493	421010_TMN	Arp1a2	139900	Bi_39105	1.376NM	1.493100	
327	1429455_at	0.001375	151.63	604520_TMN	10.0132121MBB63000	l_7a5	0.65	113	397151	493100		
328	1440347_at	0.001376	511.6	992.266	1471_TMN	Arhba_03061388B	l_7a5	0.65	113	397151	493100	
329	1452308_a_at	0.001379	387.19	1130_TMN	68110_TMN	068110_TMN	0133	387661	387661	1.376NM	1.493100	
330	1420749_a_at	0.001381	649.9	861.23	808331_TMN	B337_488990BGM	dq1ppd808	497066	291	563100	563100	
331	1456854_at	0.001389	56.6	95.1	004771_TMN	7171_09782A	VB43_1339090B	30739	2.147	233100	233100	
332	1458123_at	0.001379	199.36	6920	303_4580473B	thppd802435	1801NM	0.11	4895	927	3100	
333	1460426_at	0.001399	1032.23	088010_TMN	064429BGM	I_2p963	147_332363	77.951	662100	662100	662100	
334	1419077_at	0.001409	541.48	84430_525132NM	59111250	147_365119	77.951	662100	662100	662100	662100	
335	1440673_at	0.001441	1011.59	27121	500231YA	A23007_522118K	47355716	387801	056	162100	162100	
336	1442102_a_at	0.001444	72.2	531351_TMN	613319070_289NM	007_38733	162100	0	ta_e	1215271	476	
337	1431169_at	0.001445	109.23	23927_TMN	8113pnm	BG8031_475232	782281	682100	0	ta_e	2065371	476
338	1451072_a_at	0.001447	944613_TMN	480023B8	413307YA	9H07R1_47	762	BQ1739L	77	111NM	1.547100	0
339	1424990_at	0.001447	944613_TMN	480023B8	413307YA	9H07R1_47	762	BQ1739L	77	111NM	1.547100	0

Table 10

Table with columns for sequence IDs (e.g., 350-388), coordinates, and various identifiers (e.g., AFXX-TransRecMur, D2Bwq0891e, BC019947). Includes a '///' marker at the bottom of the sequence list.

Table 10

549	1439359_x	at	0.002613	100.37	210.03	Nixn1	BK465348	NM_020252	53.291	688200.0	883331	885
550	1416235_at		0.002617	804.33	945310X	KR140M200062	AK476171	NM_133880	53.291	88200.0	1683241	885
551	1426458_at		0.002622	181.53	317400_TN	595330AF	BK473571	NM_032008	6.119	88200.0	1683241	885
552	1442752_at		0.002629	267.33	290400100_TN	3847968B	BK473571	NM_032008	39.526	6.012	1683241	885
553	1434459_at		0.00263	725.4	298810_TN	081525B7	BK473571	NM_032008	35.036	398200.0	1683241	885
554	1423224_at		0.002642	691	1151.5	Mest	AK055073	NM_020542	9.152	48200.0	1683241	885
555	1453111_a	at	0.002655	204.33	945310X	KR140M200062	AK019336	NM_020542	7.285	382800.0	1683241	885
556	1443805_at		0.002655	204.33	687610_TN	0808030FA	AK019336	NM_020542	7.285	382800.0	1683241	885
557	1434160_at		0.00266	154.33	291820_TN	197042MV	BK478535	NM_178707	6.896	528200	1683241	885
558	1460724_at		0.002663	997.5	2125.53	694710_TN	KR1300000051	NM_007458	39.1981	428200	1683241	885
559	1441902_x	at	0.002667	414.33	000461_TN	310431_TN	NM_007458	NM_178707	5.118	208200	1683241	885
560	1425326_at		0.002668	734.33	000461_TN	310431_TN	KR1300000051	NM_007458	5.118	208200	1683241	885
561	1437197_at		0.002671	2599.9	054210_TN	349473VA	KR1300000051	NM_007458	5.118	208200	1683241	885
562	1457040_at		0.002676	398.77	687400_TN	10116236MB	BK473571	NM_144945	6.896	24200	1683241	885
563	1424734_at		0.002679	289.37	414.6	Rasgr	AK169840	NM_032008	5.031	94200	1683241	885
564	1451913_a	at	0.002681	76.9	223.17	61800_TN	KR1300000051	NM_032008	5.031	24200	1683241	885
565	1428429_at		0.002682	383.33	006610_TN	777.8	AK004310	NM_178615	7.63231	82200	1683241	885
566	1450654_a	at	0.002686	252.17	584010_TN	6460	AK004310	NM_178615	7.63231	82200	1683241	885
567	1455011_at		0.002686	161.53	956601_TN	9878710B	hdds	BK473571	8.75444	82200	1683241	885
568	1420140_at		0.002687	3688.1	51351_TN	8338978B	BK473571	NM_133714	48.099	7200	1683241	885
569	1435019_at		0.00269	1208.33	674921_TN	565700VA	AK007593	NM_144253	6.8021	69200	1683241	885
570	1425175_at		0.002699	460.33	446.6	Rasgr	BK473571	NM_032008	1.8893	69200	1683241	885
571	1427261_at		0.0027	355.37	446.6	Rasgr	BK473571	NM_032008	1.8893	69200	1683241	885
572	1445521_at		0.002728	679.43	1922	5198710MN	haddn4	NM_177900	6.97	189200.0	1683241	885
573	1435650_at		0.002738	42.33	94.2	563120_TN	AK014849	NM_032008	4.3	62200.0	1683241	885
574	1451708_at		0.002742	91.87	130.33	542110_TN	BK473571	NM_032008	4.3	62200.0	1683241	885
575	1432918_at		0.002746	3688.33	501984_TN	5633	AK014849	NM_032008	4.3	62200.0	1683241	885
576	1444020_at		0.002771	240.33	501984_TN	5633	AK014849	NM_032008	4.3	62200.0	1683241	885
577	1437918_at		0.002772	499.4	748.9	450810MN	AK014849	NM_032008	4.3	62200.0	1683241	885
578	1438402_at		0.002786	606.07	811.5	5633005_TN	BK473571	NM_032008	4.3	62200.0	1683241	885
579	1426824_at		0.002802	1233.5	1861	500000_TN	AK014849	NM_032008	4.3	62200.0	1683241	885
580	1450007_at		0.002824	807.57	968.9	7078710MN	AK014849	NM_032008	4.3	62200.0	1683241	885
581	1443896_at		0.002825	587.27	970.77	968610X	AK014849	NM_032008	4.3	62200.0	1683241	885
582	1449129_a	at	0.002833	254.5	254.5	968610X	AK014849	NM_032008	4.3	62200.0	1683241	885
583	1421348_a	at	0.002834	340.53	739.03	065800_TN	AK014849	NM_032008	4.3	62200.0	1683241	885
584	1452484_at		0.002863	210.9	325.33	1398610_TN	AK014849	NM_032008	4.3	62200.0	1683241	885
585	1458443_at		0.00287	162.33	28.3	408331_TN	AK014849	NM_032008	4.3	62200.0	1683241	885
587	1423849_a	at	0.00288	162.33	28.3	408331_TN	AK014849	NM_032008	4.3	62200.0	1683241	885
588	1433388_at		0.002889	162.33	28.3	408331_TN	AK014849	NM_032008	4.3	62200.0	1683241	885

Table 10.83.09

589	1441312_at	0.002889	475700	618106V	---	Isudtd	7/0991	35.5011	11300.0	ta_e	986917T	929
590	1431191_a_at	0.002891	180600	821837	1	821837	7.572123	33.3333	11300.0	ta_e	740917T	529
591	1427110_at	0.002911	192.	094810	76	7415593	2441454	29.001	0.2757	6.528	590300.0	429
592	1451803_a_at	0.002915	158541	2335.	1647998	Yegld	229192	37.50697	4.1917	1.18	640300.0	229
593	1427895_at	0.002922	327.57	662029	29.0	3310004	122224	36.811256	4.1917	1.18	640300.0	229
594	1422622_at	0.002922	497.	932920	1053	2370758	844201	35.52001	3.658	940300.0	129	
595	1434761_at	0.00293	660619	28241	3	660619	600619	35.52001	6.474	403000.0	029	
596	1426314_at	0.002931	311.27	670065	8	670065	670065	35.52001	6.474	403000.0	619	
597	1452377_at	0.002933	412.9	671000	11	AK017541	XM_110671	37.53904	41.616	220300.0	819	
598	1423363_at	0.002948	422.47	711.93	Sox1	AV247637	NM_019972	37.53904	41.616	220300.0	819	
600	1426667_a_at	0.002954	1197.9	3275108	309510	3275108	3275108	37.53904	41.616	220300.0	819	
601	1437398_a_at	0.00296	335.	170317	821837	821837	821837	37.53904	41.616	220300.0	819	
602	1449273_at	0.00296	5277.47	236441	1191208	1191208	1191208	37.53904	41.616	220300.0	819	
603	1436167_at	0.002963	549.53	278920	671700	671700	671700	37.53904	41.616	220300.0	819	
604	1436780_at	0.002963	233.1	597.	646320	1579965	5441391	37.53904	41.616	220300.0	819	
605	1421580_at	0.002968	166.83	268310	0951838	0951838	0951838	37.53904	41.616	220300.0	819	
606	1437882_s_at	0.002975	103.	906820	48.5	1286148	119191	37.53904	41.616	220300.0	819	
607	1447863_s_at	0.002977	336.43	390810	1165.	1165.	1165.	37.53904	41.616	220300.0	819	
608	1450982_at	0.002989	26951	1165.	1165.	1165.	1165.	37.53904	41.616	220300.0	819	
609	1437311_at	0.003003	4187.23	030210	0029908	0029908	0029908	37.53904	41.616	220300.0	819	
610	1423816_at	0.003013	3581.	6870.	317.	317.	317.	37.53904	41.616	220300.0	819	
611	1431299_at	0.003017	6795	282910	282910	282910	282910	37.53904	41.616	220300.0	819	
612	1416965_at	0.003017	524.27	944.	441661	441661	441661	37.53904	41.616	220300.0	819	
613	1420998_at	0.003017	423.17	628310	672861	672861	672861	37.53904	41.616	220300.0	819	
614	1424281_at	0.003017	179.	692317	692317	692317	692317	37.53904	41.616	220300.0	819	
615	1424651_at	0.00302	3481	666610	671.	671.	671.	37.53904	41.616	220300.0	819	
616	1435558_at	0.003021	15720.	671.	671.	671.	671.	37.53904	41.616	220300.0	819	
617	1441607_at	0.003021	266610	671.	671.	671.	671.	37.53904	41.616	220300.0	819	
618	1456043_at	0.003022	919.17	406400	179011	179011	179011	37.53904	41.616	220300.0	819	
619	1426577_a_at	0.003033	477.	829871	108422	108422	108422	37.53904	41.616	220300.0	819	
620	1455436_at	0.00304	7675.	18810	18810	18810	18810	37.53904	41.616	220300.0	819	
621	1452162_at	0.003046	859.3	1056.	31806	31806	31806	37.53904	41.616	220300.0	819	
622	1427019_at	0.003049	81381	931600	931600	931600	931600	37.53904	41.616	220300.0	819	
623	1452307_at	0.003061	525.97	669110	669110	669110	669110	37.53904	41.616	220300.0	819	
624	1452071_at	0.003065	875.	16620	100.	100.	100.	37.53904	41.616	220300.0	819	
625	1416074_a_at	0.00311	903600	391810	7	7	7	37.53904	41.616	220300.0	819	
626	1416986_a_at	0.00311	1105.53	1660.7	3275108	3275108	3275108	37.53904	41.616	220300.0	819	

Table 1083a041

627	1423075_at	0.00311	1001	1210.47	517540	AKK004	828	42.211	9.99	143000.0	ta	423331T	999	
628	1426341_at	0.003123	8555847	116354	63	BB3575	575	72.961	NM 148	593000.0	ta	143331T	999	
629	14271408_at	0.003135	004610	468.	684842	AKK004	146	37.653		193000.0	ta	143331T	999	
630	1452714_at	0.003142	300	396	316	AKK004	198	37.659	8.214	53000.0	ta	143331T	999	
631	1447295_at	0.003148	116.13	184	413800	BM2	986	77.331	983.79	643000.0	ta	143331T	999	
632	1450086_at	0.003154	172	4184	226.	AKK004	25	47.591	273	44.5111	ta	143331T	999	
633	1440407_at	0.003159	514.13	960	468010	AKK004	23	6.429	38.054	433000.0	ta	143331T	999	
634	1452801_at	0.003166	0.00317	304520	979	AKK004	02	5.981	NM 025	133000.0	ta	143331T	999	
635	1419385_at	0.003174	1204.77	509020	3	AKK004	22	7.011	NM 013	823000.0	ta	143331T	999	
636	1429554_at	0.003174	35.57	88.73	7518	AKK004	194	39.049	NM 026	72.757	ta	143331T	999	
637	1451484_at	0.0	41154	7	518	AKK004	22	37.011	NM 013	38.058	ta	143331T	999	
638	1440282_at	0.003187	35.57	88.73	7518	AKK004	194	39.049	NM 026	72.757	ta	143331T	999	
639	1422694_at	0.003202	3296.4	478	4542	AKK004	198	77.524	3.122	662000.0	ta	143331T	999	
640	1453222_at	0.00321	277.03	478	4542	AKK004	198	77.524	3.122	662000.0	ta	143331T	999	
641	1447883_x_at	0.003223	43.03	124.57	160	AKK004	66	47.4	NM 355	735	ta	143331T	999	
642	1429545_at	0.003223	43.03	124.57	160	AKK004	66	47.4	NM 355	735	ta	143331T	999	
643	1454400_at	0.003231	172.23	300.33	825455	AKK004	02	5.981	NM 025	133000.0	ta	143331T	999	
644	1456547_at	0.003232	884700	1092	63	AKK004	22	37.011	NM 013	38.058	ta	143331T	999	
645	1426509_s_at	0.003238	2883.87	478	4542	AKK004	198	77.524	3.122	662000.0	ta	143331T	999	
646	1429416_at	0.003246	330.3	458	07855	AKK004	66	47.4	NM 355	735	ta	143331T	999	
647	1455744_at	0.003254	110	420	1542	AKK004	66	47.4	NM 355	735	ta	143331T	999	
648	1433604_x_at	0.003259	615.37	58110	28	AKK004	22	37.011	NM 013	38.058	ta	143331T	999	
649	1434045_at	0.003259	615.37	58110	28	AKK004	22	37.011	NM 013	38.058	ta	143331T	999	
650	APFX-b-ActinMur/W12481_5_at	0.0	0.0	06455	1232	APFX-b	393	30.112		523000.0	ta	143331T	999	
651	1460400_at	0.003279	537520	744	995662	AKK004	01	2.75091	55.51201	312300.0	ta	143331T	999	
652	1460101_at	0.003279	221.3	425	19861	AKK004	172	46.847	30.772	123000.0	ta	143331T	999	
653	1456304_at	0.003299	727	7	454100	AKK004	138	44.4	4.9623	202000.0	ta	143331T	999	
654	1423392_at	0.003315	679	040450	883	AKK004	66	47.4	NM 355	735	ta	143331T	999	
655	1452742_at	0.003317	850	089310	1170	AKK004	66	47.4	NM 355	735	ta	143331T	999	
656	1423032_at	0	551030	771	395920	AKK004	50	32.931	0.55	415000.0	ta	143331T	999	
657	1423210_a_at	0	432251	771	28920	AKK004	20	6.6	NM 403	475000.0	ta	143331T	999	
658	1447703_x_at	0	91084	771	299520	AKK004	44	37.823	33	72.94215	991000.0	ta	143331T	999
659	1438067_at	0.003334	450.83	624.9	NFI1	AKK004	52	37.922	NM 144	75.721	ta	143331T	999	
660	1424633_at	0.003349	1115.77	32020	7	AKK004	28	37.922	NM 144	75.721	ta	143331T	999	
661	1422207_at	0.00335	412.8	659	462861	AKK004	02	5.981	NM 025	133000.0	ta	143331T	999	
662	1451344_at	0.00335	359	35194	103	AKK004	8	8.94	NM 3.74	3.400	ta	143331T	999	
663	1426023_a_at	0.003361	149	83684	196	AKK004	66	47.4	NM 355	735	ta	143331T	999	
664	1436337_at	0.003365	66.6	112.27	828520	AKK004	73	47.0121	1001	115000.0	ta	143331T	999	
665	1433324_at	0.003371	66.6	112.27	828520	AKK004	73	47.0121	1001	115000.0	ta	143331T	999	

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667	1434256_s_at	0.003375	110600	78881	6352	778	311	1622651	60	4191	24900	0	ta	6060571	707	
668	1447392_s_at	0.003379	98	98268	84	83	5020	9888	33	710	33754	411	ta	8785471	307	
669	1444472_at	0.003383	128	592	83	83	592	83	83	83	83	83	ta	62900	207	
670	1460383_at	0.003386	61.43	153	0.2858	48	5.72	3308	82	3308	308	3.749	514	29000	107	
671	1416719_a_at	0.003398	871	26	147	6686	888	24	71	66	25	5	4	1900	007	
672	1426617_a_at	0.003403	2392.53	95	147	6686	888	24	71	66	25	5	4	1900	007	
673	1421673_s_at	0.003408	524	9888	10	98	8	8	8	8	8	8	8	8	869	
674	1416568_a_at	0.003441	246.67	64	700	2	3	2	3	2	3	2	3	2	769	
675	1437944_at	0.003414	238	58	8	10	92	2	62	85	772	1	5	809	772	
676	1449511_a_at	0.003429	238	58	8	10	92	2	62	85	772	1	5	809	772	
677	1425368_a_at	0.003439	277.77	405	62	402	2	3	2	3	2	3	2	3	2	
678	1447229_x_at	0.003442	124.77	258	64	700	2	3	2	3	2	3	2	3	2	
679	1424952_at	0.003448	325	64	700	2	3	2	3	2	3	2	3	2	3	
680	1451667_at	0.003456	1151	59	8	10	92	2	62	85	772	1	5	809	772	
681	1418214_at	0.003461	69.77	246.6	Phosphol	1810013	124	81	4	38	57	846	5	3	2053	43
682	1452485_at	0.003468	317.4	438.57	1810013	124	81	4	38	57	846	5	3	2053	43	
683	1456875_at	0.003485	122.03	220.97	NC022	AF000582	NM	008678	62	52	279	0	ta	6355271	889	
684	1428826_at	0.003517	140	127	140	127	140	127	140	127	140	127	140	127	140	127
685	1450458_at	0.003529	6725.93	8465.43	285000	AF	2800	2800	2800	2800	2800	2800	2800	2800	2800	2800
686	1434612_s_at	0.003541	3143.07	464	70	15	800	2	3	2	3	2	3	2	3	2
687	1460279_a_at	0.003546	175	15	800	2	3	2	3	2	3	2	3	2	3	2
688	1425539_a_at	0.003573	172	62	4	320	3	46	6	2	6	2	6	2	6	2
689	1455760_at	0.003586	590	64	80	10	92	2	62	85	772	1	5	809	772	
690	14222969_s_at	0.003587	2179.5	2361	61	15	21	8	6	2	6	2	6	2	6	2
691	1423053_at	0.003610	55	88	2	6	2	6	2	6	2	6	2	6	2	6
692	1422661_at	0.003629	114	62	13	114	62	13	114	62	13	114	62	13	114	62
693	1451724_at	0.003633	1614.03	1598	8	1	2	3	2	3	2	3	2	3	2	3
694	1438619_MX	0.003632	415	643	73	122	0	1	2	3	2	3	2	3	2	3
695	1438363_at	0.003629	1064.6	122	0	1	2	3	2	3	2	3	2	3	2	3
696	1417969_at	0.003633	62.13	114	62	13	114	62	13	114	62	13	114	62	13	114
697	1445878_at	0.003642	1614.03	1598	8	1	2	3	2	3	2	3	2	3	2	3
698	1450903_at	0.003642	1614.03	1598	8	1	2	3	2	3	2	3	2	3	2	3

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Table 10

705	1454051_at	0.003653	339.63	526.77	2600011E07Rik	AK011185	NM_028113
706	1438686_at	0.003656	200.07	329.67	Eif4g1	LOC547244	BB551220 NM_001005331 /// NM_145941 ///
	XM_622620						
707	1451738_at	0.003658	1274.7	1502.9	Ogt	AF363030	NM_139144
708	1436703_x_at	0.003662	1681.1	2970.6	Snappc2	BB461550	NM_133968
709	1433417_at	0.003663	64.2	122.7	8030497021Rik	AK020225	---
710	1440676_at	0.00367	59.6	116.03	A830043J08Rik	BB269760	NM_173425
711	1448657_a_at	0.003678	1192.1	1392.3	Dnaib10	NM_020266	NM_020266 /// NM_178055
712	1450202_at	0.003681	1292.4	2031.03	Grim1	NM_008169	NM_008169
713	1425617_at	0.003684	353.4	510.33	Dhx9	U91922	NM_007842
714	1426620_at	0.003686	904.3	1114.77	Chuft10	BB549997	NM_145142
715	1423343_at	0.003694	2129.87	3094.77	Sicolc1	BB667135	NM_021471
716	1416521_at	0.003701	9417.9	15441.67	Segv1	NM_009156	NM_009156
717	1460278_a_at	0.003706	947.3	1249.83	D15Wsu75e	NM_134095	NM_134095
718	1442021_at	0.00371	806.4	1063.2	Gnal1	BB502545	NM_010307 /// NM_177137
719	1423544_at	0.003721	1290.53	2015.4	Ptpn5	BB188812	NM_013643
720	1451480_at	0.003728	270.37	418.33	E2f4	BC026649	NM_148952
721	1422972_s_at	0.003738	657	920	Gcnf12	NM_020004	NM_020004
722	1448171_at	0.00374	180.2	271.67	Siah2	AA414485	NM_009174
723	1455215_at	0.003746	701.83	1352.77	C530023U021Rik	AU067746	NM_175696
724	1416475_at	0.003762	774.47	1160.13	Ube2d2	NM_019912	NM_019912
725	1421126_at	0.003776	146.13	318.97	Ryr2	NM_023868	NM_023868
726	1421520_at	0.003778	100.77	153.87	Uchl1	NM_020604	NM_020604
727	1426641_at	0.003786	270.63	415.87	Crib2	BB354684	NM_144551
728	1421263_at	0.003793	277.2	407.03	Gabra3	NM_008067	NM_008067
729	1452440_at	0.003807	274.67	346.63	Thfsf12	Thfsf12	BI730298 NM_001034097 /// NM_001034098
	/// NM_011614						
730	1422801_at	0.00381	1308.37	1528.07	Mgi	1351465	BC021156 NM_013716
731	1460034_at	0.00382	641.4	1003.1	BC042901	BG063745	NM_175021
732	1423630_at	0.00383	553.3	830.47	Cygb	BM899392	NM_030206
733	AFFX-PyruCarbmur/L09192_MA	0.003834	217.8	337.67	Pck	AFFX-PyruCarbmur/L09192_MA	NM_003797
734	1450183_a_at	0.003834	215.27	303.8	lnk	NM_008507	NM_008507
735	1449018_at	0.00384	2575.17	3193.53	Pfml	NM_011072	NM_011072
736	1431385_a_at	0.003845	144.63	209.23	Mdtps1	AK002809	NM_019709
737	1424468_s_at	0.003854	577.13	707.77	Phldb1	BC025856	NM_153537
738	1453920_a_at	0.003855	122.87	179.87	Mospd2	BB000068	XM_136156
739	1435867_at	0.003855	1060.37	1518.8	A630082K20Rik	3M244697	XM_145254
740	1421324_a_at	0.003865	467.5	775.27	Akt2	NM_007434	NM_007434
741	1460652_at	0.003867	610.73	828.7	Bstru	NM_007953	NM_007953
742	1449380_at	0.003874	4496.9	7426.67	Pacsln1	BI731319	NM_011861 /// NM_178365

743	1450379_at	0.003876	120.5	184.5	268.0	1168.6	200062	0.10193	49.172	241800.0	ta	4021341	184
744	1421869_at	0.003888	225.1	309.1	200.0	1168.6	1218.1	0.00267	47.904	41400.0	ta	0585241	084
745	1450971_at	0.003899	224.33	422.57	422.57	1168.6	1168.6	0.00863	46.862	901400.0	ta	7862241	644
746	1456682_at	0.003911	150.77	251.87	251.87	1168.6	1168.6	0.00197	46.021	901400.0	ta	9362241	844
747	1442824_at	0.003914	31.13	58.1	58.1	1168.6	1168.6	0.00181	45.204	401400.0	ta	0031441	444
748	1449183_at	0.003918	1362.7	1033.1	1033.1	1168.6	1168.6	0.00744	44.032	401400.0	ta	2028441	944
749	1439120_at	0.00392	114.33	155.2	155.2	1168.6	1168.6	0.00817	43.032	401400.0	ta	6106541	544
750	1428141_at	0.003925	664.53	860.57	860.57	1168.6	1168.6	0.00439	42.409	5486241	ta	2864441	644
751	1448812_at	0.003925	209.6	328.6	328.6	1168.6	1168.6	0.00152	41.018	980400.0	ta	1809241	744
752	1425187_at	0.003947	828.1	1008.6	1008.6	1168.6	1168.6	0.00117	40.181	470400.0	ta	6106541	744
753	1439954_at	0.00395	221.07	446.1	446.1	1168.6	1168.6	0.00339	39.775	630400.0	ta	1125541	744
754	1423365_at	0.003951	446.1	183.1	183.1	1168.6	1168.6	0.00278	39.575	630400.0	ta	1125541	744
755	1443851_at	0.003956	154.1	332.1	332.1	1168.6	1168.6	0.00505	38.775	550400.0	ta	0839241	894
756	1415921_at	0.003961	332.1	116.1	116.1	1168.6	1168.6	0.00619	38.175	150400.0	ta	2651541	494
757	1421480_at	0.003962	645.4	116.1	116.1	1168.6	1168.6	0.00995	37.251	150400.0	ta	2651541	494
758	1434403_at	0.003971	2621.7	1824.63	1824.63	1168.6	1168.6	0.02292	36.966	930400.0	ta	4082241	594
759	1433446_at	0.003987	1824.63	426.2	426.2	1168.6	1168.6	0.01559	36.898	530400.0	ta	1013441	494
760	1457758_at	0.004022	312.07	484.2	484.2	1168.6	1168.6	0.00323	35.882	130400.0	ta	0581241	694
761	1431081_at	0.004035	868.1	1133.1	1133.1	1168.6	1168.6	0.00564	35.742	220400.0	ta	0058441	694
762	1438500_at	0.004036	936.1	1747.1	1747.1	1168.6	1168.6	0.00798	34.791	510400.0	ta	5811541	194
763	1421535_at	0.004036	936.1	1747.1	1747.1	1168.6	1168.6	0.00798	34.791	510400.0	ta	5811541	194
764	1423101_at	0.004036	936.1	1747.1	1747.1	1168.6	1168.6	0.00798	34.791	510400.0	ta	5811541	194
765	1422807_at	0.004036	936.1	1747.1	1747.1	1168.6	1168.6	0.00798	34.791	510400.0	ta	5811541	194
766	APFX-b-ActinMur/M12481_M_at	0.004045	15085.87	25266.6	25266.6	1168.6	1168.6	0.00817	34.032	1168600.0	ta	4021341	184
767	1436380_at	0.004055	571.1	698.1	698.1	1168.6	1168.6	0.01173	33.822	296000.0	ta	0811241	454
769	1460617_at	0.004063	577.8	938.67	938.67	1168.6	1168.6	0.01214	33.791	196000.0	ta	1265141	954
770	1455271_at	0.004074	1464.2	810.03	810.03	1168.6	1168.6	0.01025	33.637	956000.0	ta	1585441	554
771	1459019_at	0.004091	270.1	602.7	602.7	1168.6	1168.6	0.01173	33.475	156300.0	ta	5932241	654
772	1447982_at	0.004096	602.7	955.1	955.1	1168.6	1168.6	0.01214	33.311	156300.0	ta	5932241	654
773	1423845_at	0.004098	7074.27	8637.1	8637.1	1168.6	1168.6	0.01173	33.147	563000.0	ta	2188441	154
774	1421990_at	0.004103	402.87	573.93	573.93	1168.6	1168.6	0.01025	32.982	526300.0	ta	1418241	054
775	1448302_x_at	0.004106	173.1	87.8	87.8	1168.6	1168.6	0.00995	32.816	266000.0	ta	0216341	644
777	1441300_at	0.004106	173.1	87.8	87.8	1168.6	1168.6	0.00995	32.651	266000.0	ta	0216341	644
778	1422936_at	0.004106	173.1	87.8	87.8	1168.6	1168.6	0.00995	32.486	266000.0	ta	0216341	644
779	1422984_at	0.004106	173.1	87.8	87.8	1168.6	1168.6	0.00995	32.321	266000.0	ta	0216341	644
780	1425850_a_at	0.004142	217.67	341.1	341.1	1168.6	1168.6	0.00995	32.156	883000.0	ta	6981241	444
781	1431207_at	0.004142	217.67	341.1	341.1	1168.6	1168.6	0.00995	31.991	928000.0	ta	6703541	344

Table 10 88c 40 02

Table 1083j09c

Table with 10 columns: ID, Name, Type, Value 1, Value 2, Value 3, Value 4, Value 5, Value 6, Value 7, Value 8, Value 9. Rows 978-1017. Includes identifiers like 14227100_at, 1422758_at, etc.

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Table 10

1018	1420807_a_at	0.005891	515.7	809.57	Egfl9	NM_134120	NM_134120	///	NM_207666
1019	1441089_at	0.005893	167.17	247.4	Eif2c3	BB205493	NM_153402		
1020	1417440_at	0.005912	1160.23	1904.1	Ar1d1a	NM_033566	NM_033566		
1021	1419656_at	0.005927	398.53	573.87	Slc25a3b	BB503267	NM_138756		
1022	1455023_at	0.00593	1165.67	1554.37	N28178	BB171181	NM_172690		
1023	1458077_at	0.005933	58.33	95.07	---	BB525358	---		
1024	1450718_at	0.005939	115.93	195.87	MGI:1345171	NM_018825	NM_018825		
1025	1451743_at	0.005943	242.13	319.5	D19wsul62e	BC026369	NM_146099		
1026	1458364_s_at	0.005945	473.2	732.53	---	EM068979	---		
1027	1435115_at	0.005949	548.07	852.73	Fndc5	AW556555	NM_027402		
1028	1427481_a_at	0.005951	7507.27	11909.77	Actp1a3	BC027114	NM_144921		
1029	1428777_at	0.005978	868.77	1191.9	Sprea1	AK017680	NM_033524		
1030	1421198_at	0.005981	399.57	576.3	Itgav	NM_008402	NM_008402		
1031	1449448_at	0.005983	539.33	664.13	Med9	BC019367	NM_138675		
1032	1437032_x_at	0.006	247.47	383.1	Rbm14	BB790829	NM_019869		
1033	1436547_at	0.006002	741.5	903.2	Dgke	AV274554	NM_019505		
1034	1423854_a_at	0.006008	4972.4	6307.23	Rasl11b	BC008101	XM_355606		
1035	1451583_a_at	0.006022	228.77	337.83	BC025076	BC025076	XM_618882		
1036	1433625_at	0.006036	1254.43	1477.23	S830434P21R1k	AV316216	NM_172661		
1037	1444660_at	0.00604	135.07	208.4	4932438A13R1k	BB486179	XM_619889	///	XM_622891
1038	1454750_a_at	0.006044	263.13	355.53	BC057552	BG069746	NM_172502		
1039	1450871_a_at	0.006045	1380.9	1633.57	Bcat1	X17502	NM_001024468	///	NM_007532
1040	1454712_at	0.006052	833.97	1008.1	Mcart1	AW212577	NM_001009949		
1041	1430498_at	0.006053	55.37	89.67	9130009I01R1k	AI448485	---		
1042	1427344_s_at	0.006065	821.33	1021.2	Rasd2	BC026377	XM_204287		
1043	1433720_s_at	0.006081	6895.53	9718.13	MGI:2143558	AI647775	NM_175329		
1044	1451192_a_at	0.006091	663.07	764.13	Ttc4	BC025435	NM_028209		
1045	1432848_a_at	0.006102	307.1	443.37	1200004M23R1k	AK016489	NM_026169		
1046	1432181_s_at	0.006103	389.03	567.77	Ecgf1	AK013765	NM_138302		
1047	1450955_s_at	0.006108	722.47	1146.83	Sort1	AV247637	NM_019972		
1048	1433556_at	0.00611	2211.27	3182.27	Cental	AV264037	NM_172723		
1049	1450720_at	0.006111	1027	1233.7	Acpi1	AW554436	NM_021330		
1050	1431946_a_at	0.006117	745.67	1057.57	Apba2bp	AK013520	NM_021546		
1051	1419377_at	0.006123	362.37	448.13	Med9	BC019367	NM_138675		
1052	1423334_at	0.006147	485.63	918.03	1200007D18R1k	AK003239	NM_026170		
1053	1429708_at	0.006154	5074.1	5952.37	Ndufa11	AA596846	XM_128696		
1054	1420506_a_at	0.006157	2646.6	3941.93	Strxpb1	AF326545	NM_009295		
1055	1423252_at	0.006157	1563.33	1754.77	Hggfrp3	BB291880	NM_013886		
1056	1452913_at	0.006158	496.57	719.37	Pcp411	AV337888	XM_484933		
1057	1417303_at	0.006161	299.7	500.23	Mvd	NM_138656	NM_138656		

Table 10

1098	1454995_at	0.006436	1357.6	2024.67		Ddahl	AW556888	NM_026993
1099	1422564_at	0.006443	540.8	976.63	Act16b	NM_031404	NM_031404	
1100	1415589_at	0.006452	120.53	241.93	C1qr1	BB039247	NM_010740	
1101	1430613_at	0.006461	287.03	436.97		1520402A1SR1k	BS749015	XM_204182
1102	1439029_at	0.006462	383.93	486.47	Gpt2	BG069993	NM_173866	
1103	1460650_at	0.006488	1428.07	2496.6	Atpv0a1	U13836	NM_016920	
1104	1419188_s_at	0.006497	4437.57	5179.5	CG127	NM_011336	NM_011336	
1105	1446536_at	0.006499	77.1	143.3	Sema6d	BB482394	NM_172537	/// NM_199238 /// NM_199239 /// NM_199240 ///
NM_199241								
1106	1451830_a_at	0.006503	139.77	228.83	SpmB2	AF016040	NM_009260	/// NM_175836
1107	1426152_a_at	0.006504	148	224.73	Kit1	M64262	NM_013598	
1108	1459903_at	0.006507	2156.87	2779.77	Sema7a	AA144045	NM_011352	
1109	1431137_at	0.006526	994.87	1656.37	Rusc1	A1614077	NM_028188	
1110	1455228_at	0.00653	1267.93	1444.73	Whscl	BQ177743	XM_132006	
1111	1420825_at	0.006542	216.6	278.13	Letm1	BG060855	NM_019694	
1112	1450623_at	0.006564	5857.37	8698.9	Gnb2	NM_010312	NM_010312	
1113	1446729_at	0.006564	111	211.13	Disp2	BB179083	NM_170593	
1114	1416960_at	0.006577	1199.33	1805.23	B3gat3		NM_024256	NM_024256
1115	1428690_at	0.006581	270.47	482.6	Tynd1	BF466063	XM_125636	
1116	1425567_a_at	0.006587	1574.73	1879.77	Arxa5	D63423	NM_009673	
1117	1452248_at	0.006601	888.3	1466.07	PlekH5	BC023181	NM_001004156	
1118	1416949_s_at	0.006638	1406.9	1722.33	S1c39a7	NM_008202	NM_008202	
1119	1447222_at	0.006639	211.73	354.07	Hspa12a	AI854582	NM_175199	
1120	1437564_at	0.006649	59.4	113.37	Pc1g	AV351762	NM_017462	
1121	1421975_a_at	0.00665	204.97	351.13	Add2	AF189769	NM_013458	
1122	1440841_at	0.006663	221.53	345.2	Ywhae	BF714941	NM_009536	
1123	1426118_a_at	0.006673	1033.03	1437.2	Tomn40	AF109918	NM_016871	
1124	1426885_a_at	0.006678	3115.5	4613.1	Cdk2ap1	AK004852	NM_013812	
1125	1452085_at	0.006691	851.43	1075.67	Gatad1	BE134386	NM_026033	
1126	1416554_at	0.006697	240.8	375.33	Pdlim1	NM_016861	NM_016861	
1127	1417326_a_at	0.006706	1608.57	2216	Anapc11	NM_025389	NM_025389	
1128	1449111_a_at	0.006716	1369.1	1823.83	Grb2	BG064712	NM_008163	
1129	1424608_a_at	0.006718	199	272.13	LOC432458	BM225255	NM_001013789	/// XM_483895 /// XM_483912 ///
XM_483913	/// XM_483946	/// XM_483977	/// XM_484125	/// XM_484291	/// XM_484292	/// XM_484319	/// XM_484376	/// XM_484407 ///
XM_484447	/// XM_484454	/// XM_484559	/// XM_484561	/// XM_484562	/// XM_484693	/// XM_484695	/// XM_484802	/// XM_484847 ///
XM_485243	/// XM_485319	/// XM_485360	/// XM_485467	/// XM_485504	/// XM_485614	/// XM_485615	/// XM_485810	/// XM_486086 ///
XM_486091	/// XM_486098	/// XM_486135	/// XM_486202	/// XM_486237	/// XM_486341	/// XM_486444	/// XM_486448	/// XM_486472 ///
XM_486521	/// XM_486669	/// XM_486713	/// XM_486724	/// XM_486813	/// XM_488765	/// XM_489354	/// XM_489607	/// XM_489716 ///
XM_489745	/// XM_618759	/// XM_618771	/// XM_618822	/// XM_618838	/// XM_618869	/// XM_618937	/// XM_618968	/// XM_618987 ///
XM_619019	/// XM_619110	/// XM_619111	/// XM_619121	/// XM_619158	/// XM_619270	/// XM_619283	/// XM_619300	/// XM_619339 ///

Table 10

Table with 16 columns and 31 rows. Columns include alphanumeric codes, numerical values, and alphanumeric strings. Rows 1-15 are grouped by 'U', rows 16-31 by 'H'.

Table 108c.10.5c

Table with multiple columns containing alphanumeric strings, including identifiers like '1319 1451820' and '168595COT', and various numerical values and symbols.

Table 10

1433	1454784_at	0.009943	1094.47	1584.4	HS3ST2	AV340742	XM_112440
1434	1449474_a_at	0.009951	2340.87	3213.33	NEIF	NM_020276	NM_020276
1435	1421097_at	0.009968	528.43	697.73	Endog	NM_007931	NM_007931

Table 11

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33	1455398_at	0.000062	113.698881	MNF67.1428152BEJLITLJL	62.640239	66.9562397	41000.0	tt_s_x	6389371	17						
34	1448434_at	0.000071	195152251	WNI490.4657202QRNF102.FTR20D585036543	149.1435417266	149.1435417266	651000.0	tt	18661571	07						
35	1423666_s_at	0.000072	485351	WNI915.59995455	138.762980	138.762980	55190000	tt_s	5370171	14						
	XM_620340			99110 MN 907121B 4PI	37.1501	37.1501	951000.0	tt	18260571	89						
36	1448208_at	0.000073	104:325471	WNI71.1424920BBQ46.27	122.94339	15.13423357143	451000.0	tt_x	10008371	79						
37	1452974_at	0.000075	375.804102	WNI52.189430AVXKSDU651	243.834255	47.434	251000.0	tt_v	5004371	99						
38	1435749_at	0.000081	4879.7	WNI334.004676BQ46.2665829120	15.4351266	48.4261	151000.0	tt_l	18062971	59						
39	1436051_at	0.000081	274.088920	WNI356.126163AVX	126.32565	46.656	641000.0	tt_l	17861771	49						
40	1429178_at	0.000082	1746.13	WNI22.2	1324.2	996083AV	941000.0	tt_s	1661771	38						
41	1460545_at	0.000083	2896	2251622971	WNI7000.689507BBR	BC019:39.842	541000.0	tt_l	17800771	29						
42	1424223_at	0.000091	198613	WNI235808B	131:4513B31164	48.8471	241000.0	tt_s	18874771	09						
43	1433593_at	0.000093	2056.93	1453.83	47.65891	WNI20	831000.0	tt	0791771	85						
44	1420127_s_at	0.000093	2844.53	2940803	WNI04.43	585964	483719911	231000.0	tt_s	14976371	95					
45	1434539_at	0.0001	0.000104	875884	WNI090842	AVX	0108134811	331000.0	tt_v	12021771	75					
46	1448788_at	0.0001	1121:066010	WNI04.43	585964	WNI100	133	3301	483719911	231000.0	tt_x	14976371	95			
47	1451145_s_at	0.000117	1121:066010	WNI04.43	585964	WNI100	133	3301	483719911	231000.0	tt_x	14976371	95			
48	1441224_at	0.000119	908	628110	WNI25.7	63247	103	43	8197788	2	1112	621000.0	tt_x	14976371	95	
49	1417719_at	0.000124	1437436_s_at	0.0149	474	WNI325	710667	3461	43	8197788	2	1112	621000.0	tt_x	14976371	95
50	1448708_at	0.000125	1631	866110	WNI314	69219	49	43	8197788	2	1112	621000.0	tt_x	14976371	95	
51	1437436_s_at	0.000129	2111.2	884120	WNI03	304	1477	1000.0	tt	19374771	15					
52	1451113_a_at	0.000132	6493.57	3603	433963	WNI05	30	621	831000.0	tt	0791771	85				
53	1435464_at	0.000132	6493.57	3603	433963	WNI05	30	621	831000.0	tt	0791771	85				
54	1426852_x_at	0.000133	118:818010	WNI548	1132	0400	47	8197788	2	1112	621000.0	tt_x	14976371	95		
55	1439464_s_at	0.000138	129.03	3301	483719911	231000.0	tt_x	14976371	95							
56	1417702_a_at	0.000141	181820	WNI1	1015	837	13	43	8197788	2	1112	621000.0	tt_x	14976371	95	
57	1441640_at	0.000142	2091	99110	WNI348	95491	1	33	43	8197788	2	1112	621000.0	tt_x	14976371	95
58	1436935_x_at	0.000145	1603	474	WNI278	50261	00	2	1112	621000.0	tt_x	14976371	95			
59	1447788_s_at	0.000146	635	35197	WNI31	10281	3	56	2	1112	621000.0	tt_x	14976371	95		
60	1455665_at	0.000146	535	4658110	WNI761	6052	4	7	9	10	11	12	13	14	15	16
61	1440084_at	0.000149	959	93	8157	470	8	9	10	11	12	13	14	15	16	17
62	1441937_s_at	0.000151	1927.87	992010	WNI	40811	6	7	8	9	10	11	12	13	14	15
63	1452908_at	0.000151	737.27	55278	WNI	155	4	5	6	7	8	9	10	11	12	13
64	1434003_a_at	0.000152	371	463	5800	WNI	6	7	8	9	10	11	12	13	14	15
65	1438000_x_at	0.000154	1882.63	1051.43	Id4	BB121	406	NM_0311	166							
66	1450928_at	0.000156	492	375	600	WNI	59	14	15	16	17	18	19	20	21	22
67	1451998_at	0.000159	492	375	600	WNI	59	14	15	16	17	18	19	20	21	22
70	1436833_x_at	0.00017	492	375	600	WNI	59	14	15	16	17	18	19	20	21	22
71																

Table 11

72	1423144_at	0.000171	636.17	488.77	Pik3ca	AI528567	NM_008839
73	1416041_at	0.000175	5184.03	2560.33	Sgk	NM_011361	NM_011361
74	1454752_at	0.000177	848.77	566.4	AI606861	AV307961	---
75	1418304_at	0.000178	242.27	87.67	Pcdh2l	NM_130678	NM_130678
76	1428287_at	0.000179	821.47	622	Cul5	BB702210	NM_027807
77	1439768_x_at	0.00018	1056.77	780.4	Sema4f	BB271145	NM_011350
78	1434429_at	0.000181	2973.37	1548.9	Sytl6	AV348245	NM_172804
79	1434688_x_at	0.000183	1614.03	1390.43	Drg1	BM506525	NM_007879
80	1417948_s_at	0.000184	1147.2	849.43	Ilf2	NM_026374	NM_026374
81	1448863_a_at	0.000185	946.87	667.33	Tnfrsf1	AK004593	NM_009395
82	1458802_at	0.000185	1945.77	1280.2	Hivep3	BB164127	NM_010657
83	1437466_at	0.00019	2848.57	2098.13	Alcam	AV315205	NM_009655
84	1456464_x_at	0.000191	5931.73	3449.87	Sytl1	BB129990	NM_018804
85	1435203_at	0.000193	2022.33	1539.97	Man2a2	BB794673	NM_172903
86	1415948_at	0.000196	837.33	576	Creg1	BC027426	NM_011804
87	1454782_at	0.000196	3274.63	2520.9	Bai3	BE979636	NM_175642
88	1423159_at	0.000197	2225.27	1826.23	Dld	AI647805	NM_007861
89	1423069_at	0.0002	5457.9	4690.5	Idmp	AK004270	XM_619846
90	1444615_x_at	0.0002	746.93	411.8	Cbfa2t1h	AV327778	NM_009822
91	1454809_at	0.000203	2435.4	1664.47	Ncoa1	BE686893	NM_172495
92	1435818_at	0.000206	515.2	352.63	---	BB357312	---
93	1436407_at	0.000208	866.83	680.9	9430069J07R1k	BB099635	NM_213727
94	1417508_at	0.000211	1592.73	1209.73	Rnfl19	AF120206	IM_013923
95	1451310_a_at	0.000217	6312.07	4589.7	Cts1	J02583	NM_009984
96	1418330_at	0.000219	1588.83	1199.97	Ctcf	BB836888	NM_007794
97	1418505_at	0.000225	5713.2	5031.1	Nudt4	NM_027722	NM_027722
98	1434565_at	0.000227	796.53	609.43	Cgrrf1	AV305616	NM_026832
99	1455584_at	0.000227	2318.2	1605.57	Sdf4	BG064675	NM_011341
100	1434581_at	0.000232	1874.33	1359.7	---	BB167663	---
101	1417960_at	0.000233	622.97	513.93	Cpeb1	NM_007755	NM_007755
102	1429615_at	0.000234	3273.67	2852.7	Zfp91	AI430439	---
103	1423817_s_at	0.000235	2367.07	1736.67	2010315I10R1k	AF353245	NM_025917
104	1454699_at	0.000235	1659.67	1030.33	Sem1	BG076160	NM_001013370
105	1434260_at	0.000237	910	731.07	Fchs2	BF461848	NM_099012
106	1422624_at	0.000243	558.43	417.67	Rev11	NM_019570	NM_019570
107	1429167_at	0.000244	482.4	304.17	8430438M01R1k	BM221159	XM_140320
108	1416709_a_at	0.000247	1157.4	964.93	Ngrn	NM_031375	NM_031375
109	1436390_a_at	0.000248	512.9	311.87	C1cc1	BI412445	NM_145543
110	1427167_at	0.000249	1499.83	1167.83	AT443196	BB865094	XM_62091
111	1421048_a_at	0.00025	1080.13	844.5	Ypel1	NM_023249	NM_023249

Table 11

192	1429129_at	0.000515	309.37	215.63	Lrrcc1	AK004646	NM_028915
193	1422886_a_at	0.000516	1024.87	713.63	C1k4	NM_007714	NM_007714
194	1440215_at	0.000516	634.3	482.23		BG068916	NM_173746
195	1434645_at	0.000518	992.63	737.97		C530008M17R1k	BB493717 XM_287460
196	1437524_x_at	0.000518	1834.37	1542.43		Ccr07	BB534801 NM_030205
197	1460038_at	0.000523	1030.87	779.97	Pou3f1	BG065255	NM_011141
198	1423956_at	0.00053	3405.57	2870.1	Smapi	BC006946	NM_028534
199	1440880_at	0.000534	759.57	593.4	Mgpel	BI648107	NM_172630
200	1433767_at	0.000539	2302.77	2031.3		1110018G07R1k	AV257687 NM_178065
201	1448972_at	0.000547	3176.4	2474.6	Grial	NM_008165	NM_008165
202	1419406_a_at	0.000548	3189.1	2125.13	Hcl11a	NM_016707	NM_016707
203	1428656_at	0.00055	1432.07	1175.23	Rnaseh	BG072418	NM_026799
204	1455437_at	0.000551	2510.8	1683.37	BC033915	AV369969	NM_027498
205	1428219_at	0.000553	2788.97	2098	Rybp	AK010548	NM_019743
206	1435028_at	0.000558	5995.1	4535.8	Wdr7	BB795506	XM_140391
207	1455047_at	0.000562	1459.23	1110.8	Fbxo3	AV024918	NM_020593 /// NM_212433
208	1434521_at	0.000568	1055.43	800.23	Rfxdc2	BB148972	---
209	1440825_s_at	0.000572	946.4	530.27	Ccdc28a	AV100366	NM_144820
210	1459838_s_at	0.000584	1140.27	798.47	Btbd11	BB230894	NM_001017525 /// NM_028709
211	1423819_s_at	0.000587	6112.67	4225.67	Arl6ip1	AF133669	NM_019419
212	1418594_a_at	0.000589	3384.43	2614.67	Ncoa1	NM_010881	NM_010881
213	1434692_at	0.00059	779.57	480.27		1110034E05R1k	AW544518 XM_283610
214	1426851_a_at	0.000596	6019.07	3069.07	Nov	X96585	NM_010930
215	1456377_x_at	0.000596	3040.1	2123.77		0610025L06R1k	AV010467 NM_172397
216	1424824_at	0.000597	915.13	710.9		9630044O09R1k	BB704967 NM_198014
217	1448111_at	0.000611	803.1	621.5	Ctpps2	NM_018737	BB431503 NM_145599
218	1426628_at	0.000617	4269.33	3300.73	Tmem34		BB431503 NM_145599
219	1451669_at	0.000624	5742.4	4506	Pgm1b	AJ271836	NM_011151
220	1425484_at	0.000625	623.4	320.07	Tox	BB547854	NM_145711
221	1452734_at	0.000625	2474.53	2039.03	Rnaset2	BI410170	NM_026611
222	1419668_at	0.000628	1591.57	1141.97	Sgcb	AK014381	NM_011890
223	1422695_at	0.000628	4048.8	3097.07	Ftyh1	Taf1	NM_021324 NM_001001454 /// NM_021324 /// XM_194622
224	1452945_at	0.000629	665.9	575.53		2610020C11R1k	AK011480 NM_028130
225	1422638_s_at	0.000634	652.73	365.27	Rassf5	NM_018750	NM_018750
226	1451499_at	0.000636	4427.7	3684.33	Cadps2	AF000969	NM_153163
227	1429723_at	0.00064	2637.57	2254.6		6330409N04R1k	AK018153 NM_025697
228	1454687_at	0.000642	2058.33	1533.67	Lrfrn5	BB371739	NM_178714
229	1418183_a_at	0.000644	1897.73	1423.33	Pscd1	FB013464	NM_011180
230	1426925_at	0.000646	302.03	197.7	Mnab	AA709668	XM_130233
231	1415841_at	0.000648	2858.1	2237.73	Dnctc2	NM_010064	NM_010064

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232	1439117_at	0.000651	598.7	120800	100011	99952108	58355	47.0	8689	51.6018	62000	0	jp_s	1205371	122
233	1448702_at	0.000652	1963.47			9330326B	OS328	28789	4.9	1011	025	22	jp_s	1053371	02
234	1443960_at	0.000652	1337.8			68110	61552	277	3012	3	2205		jp_x	1769371	692
235	1417848_at	0.000652	1129	2264	140000	9051200B	4136	35	8581	35.9422	22000	0	jp	14861571	892
236	1436941_at	0.000668	476.03			8653000	1175	0	3551	05060	992000	0	jp	1558171	792
237	1428570_at	0.00067	450.7			998832	817	0	10	05746	77	2262	jp	1558171	792
238	1436027_at	0.00067	536.97			585920	431	17	998832	817	75	4932	jp_a	9509571	992
239	1456393_at	0.000671	4448.83			4501200	517	52	111	6181	52	6181	jp_b	17016371	592
240	1421840_at	0.000675	2220.1			1076	605651	44	6916	2545	58	2.051	jp	8217471	392
241	1452870_at	0.000688	379.1			1378.4	498564	88	9159	188	84	59.0602	jp	1467271	292
242	1447894_x_at	0.000692	768.1			613920	16	613920	16	42	439	1726	jp	2768171	192
243	1426961_at	0.000695	1932.47			554720	17	2947	6262	17	2947	6262	jp	1925371	092
244	1455507_s_at	0.000696				946460B	390	1	59	25	6	54	jp	1925371	092
245	1434389_at	0.000702	243.60			243.60							jp_s	1362571	752
246	1455161_at	0.000704	1949			554520	554520	554520	554520	554520	554520	554520	jp	14706271	552
247	1438295_at	0.000706	335.07			57382	57382	57382	57382	57382	57382	57382	jp	14706271	552
248	1434704_at	0.000707	2733			456.7	456.7	456.7	456.7	456.7	456.7	456.7	jp	13916371	552
249	1434392_at	0.00071	2948.43			868.7	868.7	868.7	868.7	868.7	868.7	868.7	jp_x	13916371	552
250	1417182_at	0.000711	1057.4			2947	2947	2947	2947	2947	2947	2947	jp	13216371	552
251	1455729_at	0.000715	3542.17			996.2	996.2	996.2	996.2	996.2	996.2	996.2	jp	13216371	552
252	1427923_at	0.000719	1359.2			702.2	702.2	702.2	702.2	702.2	702.2	702.2	jp	16215571	152
253	1436135_at	0.00072	702.2			456.7	456.7	456.7	456.7	456.7	456.7	456.7	jp	1281171	052
254	1449123_at	0.000722	456.7			634.97	634.97	634.97	634.97	634.97	634.97	634.97	jp	12664371	042
255	1437163_x_at	0.000724	634.97			1182.5	1182.5	1182.5	1182.5	1182.5	1182.5	1182.5	jp	12664371	042
256	1429047_at	0.000727	2208.1			878.8	878.8	878.8	878.8	878.8	878.8	878.8	jp	15628371	742
257	1452937_s_at	0.000728	787.8			2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	jp	1191571	542
258	1453473_a_at	0.000732	2988.8			2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	2273.3	jp	1684371	542
259	1451222_at	0.00074	2232.33			2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	jp_s	1405571	742
260	1435266_at	0.000743	2112.5			888.7	888.7	888.7	888.7	888.7	888.7	888.7	jp	11969271	342
261	1418942_at	0.000747	888.7			2090.63	2090.63	2090.63	2090.63	2090.63	2090.63	2090.63	jp_x	1468771	242
262	1424394_at	0.000749	2090.63			150.2	150.2	150.2	150.2	150.2	150.2	150.2	jp	10782571	142
263	1441258_at	0.000749	150.2			1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	1554.4	jp	1081271	042
264	1454805_at	0.000753	1554.4			0.000755	0.000755	0.000755	0.000755	0.000755	0.000755	0.000755	jp	13639571	632
265	1439107_a_at	0.000755	0.000755			3367.57	3367.57	3367.57	3367.57	3367.57	3367.57	3367.57	jp	12209371	832
266	1456056_a_at	0.000762	3367.57			2622.77	2622.77	2622.77	2622.77	2622.77	2622.77	2622.77	jp	1458271	732
267	1415855_at	0.000766	2622.77			2246	2246	2246	2246	2246	2246	2246	jp	1469371	932
268	1451984_at	0.000772	2246			3022.3	3022.3	3022.3	3022.3	3022.3	3022.3	3022.3	jp	1884171	532
269	1439271_x_at	0.000774	3022.3			1322	1322	1322	1322	1322	1322	1322	jp	175000	432
270	1433501_at	0.000777	1322			8109.13	8109.13	8109.13	8109.13	8109.13	8109.13	8109.13	jp	207871	332
271	1435021_at	0.000779	8109.13										jp	1716371	232

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272	1423073_at	0.000787	505602	44845403	501700	511575	521710	NM	025587	968000.0	ta_x	0836371	018
273	1428561_at	0.00079	500584	48449985	219516	565001	410632	NM	410632	568000.0	ta_l	5540971	603
274	1433564_at	0.000798	1279	51271	1087	901820	964	NM	51532	668000.0	ta_e	~3207371	803
275	1437556_at	0.000798	127.8	75.8	ZFHx	91474	93	NM	50768	668000.0	ta_e	~4338271	703
276	1423671_at	0.000804	4114	67	2847	8303	1270	NM	53915	888000.0	ta_e	0.63471	903
277	1448527_at	0.000808	9474	1493	2854	1493	5094	NM	01974	988000.0	ta_l	8809371	503
278	1438976_x_at	0.000809	1438976	1058	1650	1650	5094	NM	145569	988000.0	ta_x	6968371	303
279	1451019_at	0.00081	1202.3	706	706	83	333	NM	01974	668000.0	ta_l	1101671	603
280	1415981_at	0.000812	2042.03	5283	5283	1000	229	NM	02558	288000.0	ta_e	1101671	203
281	1449628_s_at	0.000812	2042.03	5283	5283	1000	229	NM	02558	288000.0	ta_e	1101671	103
282	1424670_s_at	0.000826	206910	8683	2069	1000	229	NM	02558	288000.0	ta_e	1101671	003
283	1451264_at	0.000828	8683	2069	1000	229	52	NM	02558	988000.0	ta_e	1101671	662
284	1424604_s_at	0.000836	376	469	469	1000	229	NM	02558	588000.0	ta_e	1837171	862
285	1436441_at	0.000839	387.17	044	044	1000	229	NM	02558	688000.0	ta_e	7483371	762
286	1443779_s_at	0.000842	777	898	01	814	1	NM	02558	788000.0	ta_l	1333571	962
287	1423236_at	0.000847	1152.9	808	97	662	90	NM	02558	988000.0	ta_l	7335571	562
288	1415929_at	0.000849	8181	993	993	1000	229	NM	02558	988000.0	ta_e	0366271	462
289	1439102_x_at	0.00085	9840	10	866	90	23	NM	02558	858000.0	ta_e	2881271	662
290	1440148_at	0.00085	299.53	1050	1050	1000	229	NM	02558	658000.0	ta_e	6255371	262
291	1427432_a_at	0.000852	2962.83	2130	33	83	87	NM	009186	2588000.0	ta_e	234271	162
292	1435529_at	0.000853	328.27	850	61	47	501	NM	02558	588000.0	ta_e	841071	062
293	1421882_a_at	0.000858	5642.07	324	35	2	9	NM	02558	588000.0	ta_e	207665	682
294	1428930_at	0.00086	566	091	920	42	7	NM	02558	648000.0	ta_e	1626171	882
295	1455334_at	0.00086	626	4	193	10	9	NM	02558	748000.0	ta_e	932371	782
296	1455333_at	0.00087	516	6	2	9	9	NM	02558	688000.0	ta_e	67171	982
297	1434384_at	0.000873	2068.47	1490	33	66	5	NM	02558	688000.0	ta_e	149371	582
298	1417438_at	0.000875	1397.5	46	54	1	9	NM	02558	968000.0	ta_e	149371	482
299	1417707_at	0.000876	1103.97	657	65	1820	97	NM	02558	828000.0	ta_l	14921571	382
300	1416919_a_at	0.000882	803	65	1	2	3	NM	02558	928000.0	ta_e	029771	282
301	1415160_at	0.000882	3850	20	25	6	2	NM	02558	218000.0	ta_e	1865171	082
302	1417471_s_at	0.000883	1773	77	198	6	10	NM	02558	18000.0	ta_e	6101571	62
303	1440910_at	0.000883	1773	77	198	6	10	NM	02558	18000.0	ta_e	6101571	62
304	1438969_x_at	0.000886	695	54	1	2	3	NM	02558	608000.0	ta_x	9468371	82
305	1436088_at	0.000886	2904	63	54	1	2	NM	02558	808000.0	ta_l	428871	42
306	1454930_at	0.000888	969	2	855	9	1	NM	02558	408000.0	ta_e	173271	92
307	1428334_at	0.000893	2398	97	1844	08	11	NM	02558	864000.0	ta_l	9554371	52
308	1434073_at	0.000893	2866	23	63	1	1	NM	02558	864000.0	ta_e	7953371	42
309	1460455_at	0.000895	3447	3	63	1	1	NM	02558	64000.0	ta_l	1958271	22
310	1443830_x_at	0.000896	1568	65	49	520	10	NM	02558	788000.0	ta_e	2370371	22

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311	1435698_at	0.000903	882720	TNN	691566	DB	501111	8	78.618834	77.333168	720100.0	ta	4889241	646	
312	1421750_a_at	0.000905	4007.67	608i	624510	MN---	4164608	94	Vbp1	M_011692	M_011692	ta	8099141	846	
313	1435968_at	0.000906	7180	608i	624510	MN---	4164608	94	Vbp1	M_011692	M_011692	ta	8099141	846	
314	1452332_at	0.000907	1012.2		616621	MN	630514	8	OTPOD	M_06075	66.094	ta	8099141	846	
315	1424283_at	0.000908		181420	MN		663241	14	OTPOD	M_06075	66.094	ta	8099141	846	
316	1448397_at	0.000914	2191.33		638321	MN	638321	14	OTPOD	M_06075	66.094	ta	8099141	846	
317	1427640_a_at	0.000922		496547	MN		106213	14	OTPOD	M_06075	66.094	ta	8099141	846	
318	1424872_at	0.000924		182920	MN		202100	14	OTPOD	M_06075	66.094	ta	8099141	846	
319	1438018_at	0.000925	2194	646110	MN	661	04647	14	OTPOD	M_06075	66.094	ta	8099141	846	
320	1435694_at	0.000927	1691	451800	MN	1117	451800	14	OTPOD	M_06075	66.094	ta	8099141	846	
321	1434620_s_at	0.000934	1801	204920	MN	296	608010	14	OTPOD	M_06075	66.094	ta	8099141	846	
322	1434313_at	0.000934	534.3	265	040617	MN	331	040617	14	OTPOD	M_06075	66.094	ta	8099141	846
323	1426345_at	0.000939	1081	644820	MN	995	908026	14	OTPOD	M_06075	66.094	ta	8099141	846	
324	1421088_at	0.00094	326.87		928800	MN						ta	8099141	846	
325	1435991_at	0.000941	557.93		3671	804610	MN	3671	804610	MN	3671	ta	8099141	846	
326	1448368_at	0.00095	2071	285367	MN	771	985482	14	OTPOD	M_06075	66.094	ta	8099141	846	
327	1425914_a_at	0.000952	170	295800	MN	6	650553	14	OTPOD	M_06075	66.094	ta	8099141	846	
328	1422725_at	0.000952	3977.43		528610	MN						ta	8099141	846	
329	1435187_at	0.000957	2443.47		864110	MN	244	864110	MN	244	864110	ta	8099141	846	
330	1418025_at	0.000958	1551	864110	MN	244	864110	MN	244	864110	MN	244	ta	8099141	846
331	1423374_at	0.00096	102	412420	MN	5.1	964790	14	OTPOD	M_06075	66.094	ta	8099141	846	
332	1441178_at	0.000963	2017.83		495800	MN						ta	8099141	846	
333	1456243_x_at	0.000974		990030	MN		221710	14	OTPOD	M_06075	66.094	ta	8099141	846	
334	1435805_at	0.000975	2203.23		660953	MN	92	660953	MN	92	660953	ta	8099141	846	
335	1415708_at	0.000981	2849.7		051800	MN	92.4	229900	14	OTPOD	M_06075	66.094	ta	8099141	846
336	1416267_at	0.000981	298	051800	MN	92.4	229900	14	OTPOD	M_06075	66.094	ta	8099141	846	
337	1457252_x_at	0.000988	121	865471	MN	39.5	865471	14	OTPOD	M_06075	66.094	ta	8099141	846	
338	1438941_x_at	0.000988	3391	860517	MN	013	464297	14	OTPOD	M_06075	66.094	ta	8099141	846	
339	1415915_at	0.000989	480947	MN			531114	14	OTPOD	M_06075	66.094	ta	8099141	846	
340	1448993_at	0.000996	49154	MN			590422	14	OTPOD	M_06075	66.094	ta	8099141	846	
341	1421756_a_at	0.000998	159.73		410030	MN	815493	14	OTPOD	M_06075	66.094	ta	8099141	846	
342	1457302_at	0.000998		042029	MN	67	686621	14	OTPOD	M_06075	66.094	ta	8099141	846	
343	1452664_a_at	0.001013	1884	426900	MN	356	611800	14	OTPOD	M_06075	66.094	ta	8099141	846	
344	1459853_x_at	0.001018	44518	MN	60	5	466090	14	OTPOD	M_06075	66.094	ta	8099141	846	
345	1417857_at	0.001027	2450.27		66910	MN	43	66910	MN	43	66910	ta	8099141	846	
346	1426905_a_at	0.001027	1967.43		269110	MN	43	269110	MN	43	269110	ta	8099141	846	
347	1435343_at	0.001027		891030	MN		669910	14	OTPOD	M_06075	66.094	ta	8099141	846	
348	1416408_at	0.001027		891030	MN		669910	14	OTPOD	M_06075	66.094	ta	8099141	846	
349	1426884_at	0.001027		891030	MN		669910	14	OTPOD	M_06075	66.094	ta	8099141	846	

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390	1454609_x_at	0.00785561	WX116	618928B46	162892C0T430527	3379251	B_3072688	722100.036	ta_x	6410471	424	
391	1448765_at	0.00117	1614	654820_WN299	347199_4F4BYT	158199	WX108	7623154	ta_w	1621251	424	
392	1416046_a_at	0.001174	010584_WX	705920CB	WX108	7623154	WX108	7623154	ta_w	1621251	424	
393	1424189_at	0.001178	640	884010_WH55.7	2000CTBBK	24366	6	78.081778	ta_w	1621251	424	
394	1435524_at	0.001178	2570.53	852584_WX	05447_WN	888824VA	V0306	55.024	ta_w	1621251	424	
395	1424697_at	0.001187	2233	1862	635800_WN3301	6317568	TPM52	81	ta_w	1621251	424	
396	1456480_at	0.001187	327	643331_WN	643331_WN	F12R1	2000CTBBK	78	ta_w	1621251	424	
397	1440413_at	0.001189	2660	890350_WN032	890350_WN032	890350_WN032	890350_WN032	1771	ta_w	1621251	424	
398	1424413_at	0.001193	1489	410620_WN118	752600KV19WSU1	47144M	I66363	358	ta_w	1621251	424	
399	1433702_at	0.001196	4858.43	347138_WN	30592(VASOR)	308	WX108	33	ta_w	1621251	424	
400	1426924_at	0.001198	594	2658	ET_WN49.0	085947BBU	UJ	4	ta_w	1621251	424	
401	1433969_at	0.001199	1297	675882	WX120	895520	WN09	A7	ta_w	1621251	424	
402	1423641_s_at	0.001201	846471_WN	196854VA	4007	ET	95971	35	ta_w	1621251	424	
403	1424466_at	0.001206	1297	675882	WX120	895520	WN09	A7	ta_w	1621251	424	
404	1428154_s_at	0.00	633823	DMN18.1	44501	EVN02.73	TPM52	81	ta_w	1621251	424	
405	14	605110_WN	962600	WN107	605110_WN3	2444dms	000	TPM52	81	ta_w	1621251	424
406	1438413_at	0.001218	882.27	120661_WN	235471QB	V	OTddq8	8	ta_w	1621251	424	
NM_025483												
407	1436182_at	0.001225	2320	6070	3070	681	622503AV	233	ta_w	1621251	424	
408	1452000_s_at	0.001225	2900.97	2133.07	Sars1	BC008612	NM	011319	ta_w	1621251	424	
409	1438637_x_at	0.001226	613110_WN	219800CB	1845	609B	14	9189	ta_w	1621251	424	
410	1428756_at	0.001226	1153.1	916.23	Aasdppt	AK013111	NM	026276	ta_w	1621251	424	
///1	EL6E00100_WN	8773	166E00100DMN	869152AV	C	dms2	N	7975521	ta_w	1621251	424	
412	1422418_s_at	0.001233	1820.87	085671_B	WX108	7623154	WX108	7623154	ta_w	1621251	424	
413	1437143_a_at	0.00	6504ET	WX145	245700KV	573.4	TPM52	81	ta_w	1621251	424	
414	1448365_at	0.001235	1573.17	244621_WX	2493242VA	60dIM	0255	T	ta_w	1621251	424	
415	1451237_s_at	0.00124	531110_WN	120900CB	4700	dbm7	A	2	ta_w	1621251	424	
416	1437007_x_at	0.001242	1592.4	428790AV	428790AV	BA4658	30	64	ta_w	1621251	424	
417	1452239_at	0.001245	723.23	3320CT_WX	899607VA	2	qewM	79	ta_w	1621251	424	
418	1429054_at	0.001247	1166	823856	WX83.8	439399	ET	1R1	ta_w	1621251	424	
419	1422505_at	0.001249	681	608671	WX23.2	805059	ET	1R1	ta_w	1621251	424	
420	1415940_at	0.00125	3050	491471	WN333	366500	88B	fandz	ta_w	1621251	424	
421	1459843_s_at	0.00125	820725	870258	870258	870258	870258	870258	ta_w	1621251	424	
422	1440201_at	0.001256	4359.93	186920_WN	641020CB	1	TPM52	81	ta_w	1621251	424	
423	1426361_at	0.001258	553.2	420.53	Zc3h1	309030VA	V339983	N	ta_w	1621251	424	
424	1438930_s_at	0.001259	1884.87	870920_WN	960470VA	B1	561	2	ta_w	1621251	424	
425	1423672_at	0.001264	800	664520	WN90.5	992450	88B	2	ta_w	1621251	424	
426	1452193_a_at	0.001267	4513	450800	WN297	450800	WN297	450800	WN297	450800	WN297	
427	1440179_x_at	938547	WN7	856077_B	WX108	7623154	WX108	7623154	ta_w	1621251	424	

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468	1450350_a_at	0.001469	1789	604520	1711	67	MG1.1932002	MM_0300007	MM_0266987	229100	0	ta	1819171	405
469	1460580_at	0.001471	1552	1222	1222	1222	MM_0188114	MM_0188114	MM_0188114	29100	0	ta_e	1762431	905
470	1455222_042127	0	55820	959	267.5	145.03	MM_013	MM_013	MM_013	4922	0	ta_e	0888271	505
471	1416271_at	0.001476	1028	664	664	664	MM_020	MM_020	MM_020	909100	0	ta_e	9524771	405
472	1434285_at	0.001476	1028	664	664	664	MM_020	MM_020	MM_020	909100	0	ta_e	429171	305
473	1421870_at	0.001481	1197	788	788	788	MM_020	MM_020	MM_020	909100	0	ta_e	358271	205
474	1423570_at	0.001481	1197	788	788	788	MM_020	MM_020	MM_020	909100	0	ta_e	285471	105
475	1441682_s_at	0.00149	877	528	528	528	MM_025	MM_025	MM_025	65100	0	ta_s	406471	005
476	1421074_at	0.001493	877	528	528	528	MM_025	MM_025	MM_025	65100	0	ta_s	6217171	667
477	1447320_x_at	0.0015	301.23	1643	1643	1643	MM_031	MM_031	MM_031	895100	0	ta_s	681671	867
478	1455503_at	0.0015	301.23	1643	1643	1643	MM_031	MM_031	MM_031	895100	0	ta_s	5476271	467
479	1452106_at	0.001501	847	506	506	506	MM_036	MM_036	MM_036	45100	0	ta_s	648571	967
480	1437503_a_at	0.001506	4553.53	2285	2285	2285	MM_037	MM_037	MM_037	45100	0	ta_s	68571	567
481	1428651_at	0.001514	1352	630	630	630	MM_037	MM_037	MM_037	45100	0	ta_s	89271	467
482	1435196_at	0.001519	2432	1216	1216	1216	MM_037	MM_037	MM_037	45100	0	ta_s	635571	367
483	1421594_a_at	0.001531	2412	1206	1206	1206	MM_037	MM_037	MM_037	45100	0	ta_s	181671	267
484	1436920_at	0.001541	688.33	338	338	338	MM_037	MM_037	MM_037	45100	0	ta_s	282871	167
485	1452771_s_at	0.001541	665.37	338	338	338	MM_037	MM_037	MM_037	45100	0	ta_s	013971	097
486	1455150_at	0.001541	665.37	338	338	338	MM_037	MM_037	MM_037	45100	0	ta_s	621971	687
487	1437624_x_at	0.001544	2281	1140	1140	1140	MM_037	MM_037	MM_037	45100	0	ta_s	259871	887
488	1438652_x_at	0.001544	2281	1140	1140	1140	MM_037	MM_037	MM_037	45100	0	ta_s	429171	487
489	1416129_at	0.001553	1258.73	629	629	629	MM_037	MM_037	MM_037	45100	0	ta_s	051571	987
490	1456310_a_a	0.001566	332.2	166	166	166	MM_037	MM_037	MM_037	45100	0	ta_s	112471	587
491	1438782_at	0.001566	332.2	166	166	166	MM_037	MM_037	MM_037	45100	0	ta_s	026971	487
492	1449181_at	0.001568	1670	835	835	835	MM_037	MM_037	MM_037	45100	0	ta_s	165171	387
493	1455534_s_at	0.001568	1670	835	835	835	MM_037	MM_037	MM_037	45100	0	ta_s	159871	187
494	1428368_at	0.00157	2790	1395	1395	1395	MM_037	MM_037	MM_037	45100	0	ta_s	159871	187
495	1448584_183920	0.001577	858	429	429	429	MM_037	MM_037	MM_037	45100	0	ta_s	305471	087
496	1453849_s_at	0.001577	858	429	429	429	MM_037	MM_037	MM_037	45100	0	ta_s	102471	087
497	1433749_a_0	0.001592	23	11.5	11.5	11.5	MM_037	MM_037	MM_037	45100	0	ta_s	102471	647
498	1439189_061817	0.001592	23	11.5	11.5	11.5	MM_037	MM_037	MM_037	45100	0	ta_s	305571	847
499	1417129_a_at	0.001592	528	264	264	264	MM_037	MM_037	MM_037	45100	0	ta_s	421071	947
500	1447904_s_at	0.001594	3556	1778	1778	1778	MM_037	MM_037	MM_037	45100	0	ta_s	2891771	547
501	1434582_at	0.001599	4411.07	2205	2205	2205	MM_037	MM_037	MM_037	45100	0	ta_s	053271	547
502	1428453_at	0.001603	1217	608	608	608	MM_037	MM_037	MM_037	45100	0	ta_s	021271	347
503	1416244_a_at	0.001606	574	287	287	287	MM_037	MM_037	MM_037	45100	0	ta_s	582471	247
504	1444256_at	0.001615	95.43	47.7	47.7	47.7	MM_037	MM_037	MM_037	45100	0	ta_s	129171	147
505	1428380_at	0.001617	2264	1132	1132	1132	MM_037	MM_037	MM_037	45100	0	ta_s	222571	047
506	1437377_a_at	0.00162	810	405	405	405	MM_037	MM_037	MM_037	45100	0	ta_s	085071	697
507	1416181_at	0.001622	6662	3331	3331	3331	MM_037	MM_037	MM_037	45100	0	ta_s	055071	897

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508	1448379_at	0.001631	432.67	324.97	Polr1	NM_133931	NM_133931	---
509	1434446_at	0.001637	527.23	317.23	D630014A15Rik	BM206023	---	---
510	1449679_s_at	0.001643	1808.17	1415.47	Stx5a	AU014962	NM_019829	---
511	1435424_x_at	0.001645	669.93	393.87	---	BB392681	---	---
512	1453593_at	0.001646	194.57	56.97	1700110N18Rik	BG066866	NM_283372	---
513	1424463_at	0.001649	3851.23	3232.53	2210010L05Rik	BF225441	NM_133829	/// NM_178081
514	1452996_a_at	0.001653	229.07	186.27	Aven	BG070815	NM_028844	---
515	1449373_at	0.001668	192.1	107.27	Dnajc3	BE624323	NM_008929	---
516	1451214_at	0.001672	2076.63	1825.5	Kbtbd2	BC022962	NM_145958	---
517	1456036_x_at	0.001673	1077.8	605.77	Gstc1	AV003026	NM_010362	---
518	1440273_at	0.001675	150.73	85.37	LOC545753	BS24346	XM_620195	---
519	1449444_a_at	0.001676	1445.13	1091.93	Mfap1	BB436326	NM_026220	---
520	1420427_a_at	0.00168	899.77	673.6	Dhxx3	NM_133941	NM_133941	---
521	1460345_at	0.00168	416.87	291.4	2610208M17Rik	B1104583	NM_145626	/// NM_181732
522	1417196_s_at	0.001683	545	317.33	D8Ert594e	NM_133791	NM_133791	---
523	1455720_at	0.001684	331.27	169.63	Adams2	BE177652	NM_175643	---
524	1434395_at	0.00169	3158.1	2372.9	Man1a2	AV325150	NM_010763	---
525	1452740_at	0.001692	5551.3	4838.67	Myh10	BQ176159	NM_175260	---
526	1419927_s_at	0.001695	1489.47	1230.23	Rab1f	AW549708	NM_145510	---
527	1439024_at	0.001703	1574.77	1336.57	---	BB082119	---	---
528	1435362_at	0.001704	3160.2	2554.9	Foxj3	BB026073	NM_172699	---
529	1447720_x_at	0.001734	4458.77	3062.13	Pckaca	AV023830	NM_008854	---
530	1459897_a_at	0.001736	880.43	535.57	Mt1	2446326	AI507307	NM_172205
531	1454617_at	0.001737	1004.63	540.7	Axydc3	BG072824	NM_178917	---
532	1456015_x_at	0.00174	5588.9	4825.43	Ndufv1	AW228218	NM_133666	---
533	1439435_x_at	0.001747	2067.87	1367.2	Pgk1	JB411302	NM_008828	/// XM_355086
534	XM_485239	/// XM_613563	1629.37	1275	Stpic2	BB127385	NM_009274	/// XM_484116
535	1443847_x_at	0.001751	565.9	454.5	---	BB342212	---	---
536	1437935_at	0.001752	40.47	18.97	4930486G11Rik	BB821151	NM_175213	---
537	1428252_at	0.001755	1832.93	1364.07	Camp2b	AA881383	NM_026879	---
538	1452953_at	0.001755	1510.17	1083.57	1810036124Rik	AK017572	NM_026210	---
539	1429251_at	0.001761	455.47	255.27	Pcdm2	BM226301	NM_204037	---
540	1447693_s_at	0.001761	2306.7	1651.5	Neol	BB350308	NM_008684	---
541	1455007_s_at	0.001768	653.73	471.53	Gpbt2	BI648645	NM_173866	---
542	1434996_at	0.001768	1192.1	823.67	SLC25a16	AV316233	NM_175194	---
543	1438835_a_at	0.00177	3766.53	3023.6	Eftud2	BB315355	NM_011431	---
544	1416814_at	0.001771	1527.47	1109.07	Tial	BG518542	NM_011585	---
545	1427882_at	0.001771	336.93	261.67	4930588M11Rik	AK016368	NM_153806	---
546	1436357_at	0.001776	287.43	225.63	---	AI875680	---	---

Table 11

547	1437009_a_at	0.001779	2773.33	2071.77	Zfp364	BB252481	NM_026406
548	1436004_at	0.001783	620.03	464.63	Usp27x	BB021271	NM_019461
549	1426712_at	0.001788	2428.83	1714.03	S1c6a15	BB129409	NM_175328
550	1438629_x_at	0.001794	1918.3	1381.43	Grn	AV166504	NM_008175
551	1439527_at	0.001801	2025.77	1308.3	BB114106	BB149026	---
552	1426698_a_at	0.001803	1011.37	673.63	Hnr3pm	AK011521	NM_029804
553	1452981_at	0.001809	9126.37	7808.9	Cttnl1	AK004399	NM_017727
554	1421664_a_at	0.001814	609.17	462.43	Slyx	NM_019537	NM_119637
555	1420711_a_at	0.001823	1062.87	760.63	Pxmp3	BC012404	NM_008994
556	1435260_at	0.001823	1985.2	1590.87	---	BG695418	---
557	1451077_at	0.001826	1599.4	950.33	Rpl15	BM114165	NM_016980
	XM_619831	XM_620340					XM_619552
558	1415916_a_at	0.001827	927.57	603.03	Mthfd1	NM_138745	NM_139745
559	1452371_at	0.001842	3348.5	2793.27	Sfcs11	AW261533	NM_026989
560	1426930_at	0.001844	2980.2	2086.57	Brumol4	AV327653	NM_133195
561	1420477_at	0.001848	2898.67	2308.23	Nap111	BG064131	NM_015781
562	1423134_at	0.001852	1031.03	853.3	BC003324	BG076340	NM_030259
563	1454109_a_at	0.001864	359.1	307.07	Pcdsr	AK017522	NM_033393
564	1451566_at	0.001867	462.27	377.3	BC005471	BC005471	NM_145612
565	1439906_at	0.001885	1649.9	914.73	---	BB184086	---
566	1443327_at	0.001886	1173.87	877.07	D130043K22R1k	BB436021	XM_111397
567	1417765_a_at	0.0019	402.43	226.97	Amy1	NM_007446	NM_007446
568	1423043_s_at	0.001903	8419.3	6670.87	Ddx3k	BF123067	NM_010028
569	1450344_a_at	0.001906	180	79.63	Ptger3	NM_011196	NM_011196
570	1451434_s_at	0.001906	778.47	586.77	5430405G24R1k	BC019948	XM_152907
571	1457260_at	0.001909	2232	1642.47	---	BI080487	---
572	1435705_at	0.001913	488.57	393.63	LOC232875	BB305660	XM_133185
573	1436301_at	0.001928	539.7	451.3	Ripk5	BB435342	NM_172516
574	1444956_at	0.001931	1235.27	1000.7	---	BB113018	---
575	1435174_at	0.001937	1038.07	686.23	Rsbm1	AW546080	NM_172684
576	1453310_at	0.001938	194.67	135.03	Ppil6	AK013818	---
577	1437773_x_at	0.00194	7307.87	5698.13	Ddx17	BB476615	NM_152806
578	1437696_at	0.001945	297.1	204	BC049307	BG071037	NM_01002008
579	1455377_at	0.001945	4845.9	4257.23	4921517B04R1k	BB795572	XM_357332
580	1435350_at	0.00196	225.5	138.6	Traf6	AV377471	NM_009424
581	1420859_at	0.001962	3851.07	2459.3	Pkia	AK010212	NM_003862
582	1424393_s_at	0.001962	375.4	266.3	Adhfe1	BC026584	NM_175236
583	1436684_a_at	0.001962	263.57	217	Riok2	AV066689	NM_023934
584	1422302_s_at	0.001965	4656.97	4015.57	Ft11	Ft12	NM_008049
	XM_620101						XM_008049
							XM_008049
							XM_010240
							XM_619122

Table 11

585	1438728	_at	0.001966	241.3	190.43	NIEF311	NVW22377	NM_023988	35.631E	39.6804	51200	0	te	264824T	329
586	1417647	_at	0.001969	1322.53		518620 MN	566800KY	NM_024225	4.530E	35.665E	241200	0	te	704324T	229
587	1418357	_at	0.001973	4344.4		056110 MN	589108BB	NM_008241	4.540E	30.1621	141200	0	te	569545T	129
588	1451783	_a_at	0.001978	6982.4		473110 MN	622119BB	NM_019529	2.42E	30.1621	611200	0	te	181554T	029
						5975.77	166170BB	NM_019529	0.154E	6.8447	611200	0	te_x	498547T	619
589	1455014	_at	0.001979	2884.83		213571 MN	614991BB	RM213104	69.84E	6.1114	412000	0	te	1523424T	819
590	1436034	_at	0.001989	552.13		192642BB	KIR1N50003BB	NM_008996	45.94E	47.0501	512000	0	te	156054T	119
591	1460430	_at	0.001989	761.1		124201 MN	725250 MN	NM_172413	1.069E	31.086E	801200	0	te	169934T	1919
592	1419829	_a_at	0.001991	645.1		021221 MN	228956MN	NM_172413	2.79E	32.1788E	401200	0	te	190754T	519
593	1434736	_at	0.001993	88.27		110920 MN	624332MN	NM_172413	1.97E	34.606E	860200	0	te	181284T	419
594	1436948	_a_at	0.001993	643.05		785.77	414542GB	NM_172413	4.97E	31.7933	560200	0	te_s	120934T	319
595	1432360	_a_at	0.002005	589.1		4748	414542GB	AK015064	30.51E	30.053E	680200	0	te	134784T	119
596	1434161	_at	0.002012	809		393871MN	H20R1K	NM_173756	30.21E	49.836E	580200	0	te	135424T	119
597	1423216	_a_at	0.002013	7902.03		891330BB	PV1TWD1K	AV109006	66.27E	39.36E	802000	0	te	555094T	019
598	1439971	_at	0.002013	2533		859841 MN	662422BB	AV109006	46.27E	39.36E	802000	0	te	144124T	609
599	1435748	_at	0.002025	7480		455920 MN	466242BB	NM_026445	1.16E	36.96E	620200	0	te	166147T	809
600	1455925	_at	0.002025	1041.77		002620 MN	400100KY	NM_173756	1.02E	36.96E	620200	0	te	166147T	809
601	1427982	_s_at	0.002032	222		498800 MN	559810BB	NM_019005	1.97E	47.61E	40200	0	te	147614T	109
602	1438975	_x_at	0.002048	405.27		554310 MN	656506BB	NM_173756	5.89E	38.1487E	640200	0	te_xj	156954T	509
603	1453421	_at	0.002049	2312.75		545421 MN	545421 MN	NM_173756	4.78E	31.92E	840200	0	te	12434T	039
604	1436951	_x_at	0.002053	583.1		200619 MN	604117	BM305933	38.85E	30.01E	424508	0	te_x	156884T	209
606	1417974	_at	0.002079	1861.57		2196.93	446201 MN	NM_023200	1.02E	47.1401	520200	0	te	152654T	009
607	1432144	_a_at	0.002084	1793.53		1627.5	651823AV	NM_026445	35.99E	37.35E	110200	0	te	176634T	855
608	1424532	_at	0.002085	938.67		300601AV	4242.97	NM_173756	1.02E	47.1401	520200	0	te	152654T	855
609	1448743	_at	0.002089	2350.03		490510KY	1815.33	NM_173756	3.68E	608	210200	0	te	191234T	165
610	1423902	_s_at	0.002095	3107.2		062611 MN	3107.2	NM_026445	35.99E	37.35E	110200	0	te	176634T	165
611	1428138	_s_at	0.002096	5500		395211 MN	6447.67	NM_026445	35.99E	37.35E	110200	0	te	176634T	165
612	1455706	_at	0.002098	309.43		102.5	685474BB	NM_011505	32.54E	166100	0	te	193744T	635	
616	1433666	_s_at	0.002104	3887		263.47	614991BB	NM_172120	2.79E	32.1788E	401200	0	te	169934T	265
617	1450095	_a_at	0.002108	980.13		776.57	966800 MN	NM_172120	2.79E	32.1788E	401200	0	te	169934T	155
618	1434352	_at	0.002135	1050.47		248.63	630300 MN	NM_011505	32.54E	166100	0	te	193744T	635	
619	1435846	_x_at	0.002137	411.17		248.63	630300 MN	NM_011505	32.54E	166100	0	te	193744T	635	
620	1455184	_at	0.002139	671.4		448.9	629034FI10	NM_172120	2.79E	32.1788E	401200	0	te	169934T	265
621	1455695	_at	0.002141	1291.03		503.5	629034FI10	NM_172120	2.79E	32.1788E	401200	0	te	169934T	265
622	1423470	_at	0.002142	3599.53		5252420 MN	5252420 MN	NM_029815	39.06E	3.14E	996100	0	te	827834T	585
623	1428792	_at	0.00215	4083.63		886220 MN	473230AV	NM_029815	39.06E	3.14E	996100	0	te	827834T	585

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624	1423870	at	0.002166	1096.93	905.73	69132898	1.519283	504200.81	32	6570471
625	1433935	at	0.00217	3365.97	248.87	00291343	1.91999	304200.0	01	1810471
626	1436114	at	0.002178	777.07	609.07	6630.46	6.6667	462200.0	00	20984371
627	1433453	at	0.002183	3248.7	805681	710056938	4.7861	682200.0	00	1224571
628	1427256	at	0.002185	369.5	239.1	18122424	3.8352	382200.0	00	9480471
629	1420046	at	0.002189	265.2	354800	24900	6.4221	472200.0	00	15300571
630	1449506	at	0.002199	68221.7	1895210	24900	6.4221	472200.0	00	6425571
631	1442180	at	0.002206	451.67	284	229600	1.7322	392200.0	00	5428171
632	1450410	at	0.002229	476	96595	982810	5.113	152200.0	00	7588271
633	1435092	at	0.002235	950.07	2221.7	550906	4.87	472200.0	00	19645571
634	1437080	at	0.002251	547420	478851	1	1.51	472200.0	00	8875171
635	1438931	at	0.002251	177	899520	803.1	0.582	372200.0	00	1512271
636	1426815	at	0.002253	86557	25810	598482	1.2892	422200.0	00	0861571
637	1437351	at	0.002261	1125.83	15310	22981	3.09	632200.0	00	5424371
638	1435801	at	0.002262	1223.73	22820	599961	5.05	432200.0	00	1854571
639	1433738	at	0.002265	1545.73	99110	55511	1.31	112200.0	00	652271
640	1441305	at	0.002268	5005	2882	90412	0.99	112200.0	00	6932271
641	1433534	at	0.002269	5155	8600	1	1.84	402200.0	00	7851571
642	1436681	at	0.002283	96810	96810	46.1	2.99	536	0.20	1071571
643	1455600	at	0.002283	591.18	915	02.1	1.18	862200.0	00	1071571
644	1435170	at	0.002298	1735	118.2	25020	0.2310	382200.0	00	0055571
645	1448252	at	0.002304	939200	80221	2	1.91	892200.0	00	1335371
646	1451587	at	0.002307	18810	8200	9387	1.21	892200.0	00	1501171
647	1428369	at	0.002311	2246	1315	2	1.91	592200.0	00	1832371
648	1423259	at	0.002334	2097.63	606	6	5.92	292200.0	00	1083371
649	1457587	at	0.002334	336.9	493	00100	0.2339	192200.0	00	1562371
650	1434245	at	0.00234	521	608	4	28	352200.0	00	518271
651	1451980	at	0.002343	9198	15	1	1.57	152200.0	00	1366371
652	1423215	at	0.002345	267.03	484	00	0.99	152200.0	00	804371
653	1415788	at	0.002347	843.5	702.1	61	0.42	622200.0	00	0140571
654	1455496	at	0.002351	521	608	4	28	352200.0	00	0140571
655	1428854	at	0.002363	279.1	519	0	0.88	902200.0	00	9056471
656	1455249	at	0.002374	279.1	519	0	0.88	902200.0	00	9056471
657	1450053	at	0.002389	6449.17	068	6	3.30	681200.0	00	9400271
658	1440849	at	0.002389	2675.8	098	8	1.1	581200.0	00	952271
659	1457423	at	0.002397	09888	67	9	0.69	81200.0	00	3546371
660	1434860	at	0.002403	1440187	0	0.002403	0.002403	81200.0	00	4119371
661	1440187	at	0.002403	9295	4	1	1.57	71200.0	00	1522371
662	1440187	at	0.002403	9295	4	1	1.57	71200.0	00	1522371
663	1440759	at	0.002403	9295	4	1	1.57	71200.0	00	0782271

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Table 11

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664	1436426_at	0.002407	512.071381	MN331..69868MB57305..	91871D18700111BF46417	38704NM..725274	E29200.0	16	1424971	107							
665	1434497_at	0.002422	1577.67	592810_MN3	870551QB	hdqM42	8.6291	E31661	419200.0	16							
666	1435304_at	0.002424	495.33	343 1502L1_MN3	3061L7BB4	ccmuJ..902434	2.2801	E09200.0	16								
667	1428793_at	0.002425	738.5 585..	521CLB1G1c36	91R21C10120318	1E..55139	E39911	109200.0	16								
668	14171310920_at	0.002425	3341 827600	MN2473	69262AVJ2	por0rs1	70.7671663	1 4.88861663	965200.0	16							
669	1449354_at	0.002429	4122.2	50520_MN3	1Tbr107	I..7.2911664	E14831	26200.0	16								
670	1418815_at	0.002442	2654.03	47554T_MN3	92E1203B1J06R1	681dfzAKR	5.7L1..T.482NM	01.885200.0	16								
671	1454074_at	0.00245	0.002452	124120_MN	06554ZAV	1 2TebdvV	699068	46.842NM	010..39.0333	16							
NM 025438																	
672	1451931_x_at	0.002455	2945.2	1571	958600_MN3	Pcd1	958600_MN54	E892543	E59666	1119171							
673	1417051_at	0.002459	1521.03	1148.53	Ash11	B669..	99267B8	MN1386	8.625 9.3118	2626371							
674	1450072_at	0.002468	263.5 160	589331	MN90	103	233	1..7.282034	995200.0	16							
675	1423197_a_at	0.002471	1671	295800_MN	1265	78474ZAVSt	1Tbr	RG0606	715145..8.2421	655200.0							
676	1426248_at	0.002488	3711	009020_MN	5594	45286AVV	Taf9	282fj135f	1.382	BB1449.36	8NM	01.355200.0	16				
677	1438250_s_at	0.00251	67.8	679	1442075	_at	0.00251	1301	566200_MN	75..	6053400B	3pr17	qr1xav20	1..3.77122538	46.7695	835200.0	16
678	1441945_s_at	0.002517	820	709800_MN	77..	947810XAV	281da	I..75.95278	E3.2201919	E3.2201919	235200.0	16					
679	1428725_at	0.002532	616547	MN3	827600AV	47PpqQK	AK0181	E1.465NM	008662	028	22522000.0	16					
680	1433725_at	0.002538	5694.97	183220100_MN	022333BB	L7tdpBQ	00435f	E1.52NM	007991	1031	415200.0	16					
681	14525669_at	0.002546	2175.7	1741.7	5711668B	2G03f	4099f3T	AK01272	20 93E	M6.215104	15200.0	16					
682	1438628_x_at	0.00255	1240.33	594.93	Chns3	BB559510	NM	008779		010029_MX	///	265420	MN	16			
683	1455381_x_at	0.002559	1247.594547	MN308	1190909DB	W.4234S	AV274	75.592NM	00f.39	9291	884200.0	16					
684	1455446_x_at	0.002566	2102.5	1801	424381_MN	3B12	689699B	1Tusv	E5.8411	E0.1251	654200.0	16					
685	1439732_at	0.002571	813.6 579	629831_MN	3B12	689699B	1Tusv	E5.8411	E0.1251	654200.0	16						
686	1416111_at	0.002573	336.53	E5120_MN	35	pqa	NM	009f	5.2451	E2.5462	554200.0	16					
687	1455362_at	0.002577	330	083010_MN	248.97	89069W	A 10.28	E5.8411	E0.1251	654200.0	16						
688	1417941_at	0.002583	1874.87	1579.87	Hhd4	NM	026086	NM	026086		254200.0	16					
689	1419111_at	0.002592	1347.13	499106MN	7012203NM	2ppj503	1 2.7333503	E0.7492	54200.0	16							
690	1453731_a_at	0.002599	932	112010_MN	69.23	64114M1	1Tuf	42.310288	1 9.86920255f	624200.0	16						
691	1453782_at	0.002601	1165.33	63135T_MN	816710XAV	12R..	1e93C	SB17371	E4.585	E5.862	524200.0	16					
692	1435554_at	0.002603	1082.2	E31110_MN	hmc	9720f	2M88	1p05NM	172f	73.346	424200.0	16					
693	1419375_at	0.002614	1991.33	1679.8	211575B	B145248	E3.701165	E9.4751	224200.0	16							
701	1442371_at	0.002623	44271	MN04..	591494	F411100	41LX6505	ELB	M8986	E1.733NM	183	74.215	404200.0	16			

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702	1426675_at	0.002627	4459206_WN	CC81L40B5	K1400V1000T1TBB22565.6502NM	13895E1.743E	848200.0	ta	08473T1	174		
703	1451542_at	0.002629	2398.5	489800_WN	866699BBAY1099B7	E9.692E11867//	71884J2427.278200.0	ta	1E643T1	047		
704	1424680_at	0.002632	181.0088E10	WN05.64884E3B804	.93369963	609NM.1783EJ8.578	6638200.0	ta	8.6696955T1	637		
705	1436844_at	0.002632	3206.84T600	WN281.84T600	WN...	.3696E2	E1.7426	ta	589222T1	837		
706	1424015_at	0.002633	9539.37	836E.16654T	WN246.0401112B3E2P2D1.5761NM	02144E1.692	628200.0	ta	88634T1	474		
707	1417253_at	0.002634	109.1743E1	WN986.4.6810200BBE	22995NM	0131438.154NM	0133E2.2001	628200.0	ta	87952T1	937	
708	1447223_at	0.002636	96984T_WN	9E4Z45NA	M185090J10	EBE...	LT1E191	6.8402	ta	60693T1	537	
709	1434397_at	0.00264	2965.97	2713.4	470800_WN	422E54J9.1128NM	5.545E.286	662200.0	ta	12291T1	537	
710	1450431_a_at	0.002641	593400E10	WN9069.022156BBNed44	11edq8390	MM.56689E54T1	687200.0	ta	59834T1	337		
711	1426976_at	0.002647	4577E10_WN	ZZ2Z2E1V	11ordr3B06099:47	653NM.1337E3.725	687200.0	ta	60693T1	537		
712	1433724_at	0.002649	1073.3	85E2E1_WN	6E339963B4.24464M235.3E9.9801NM	1433E4.88E1	892200.0	ta	111E3T1	137		
713	1437511_x_at	0.002654	497.070600	WN46.1J2570	EAVE.1sdu83B:50461	E3.2055443	892200.0	ta	42043T1	037		
714	1460595_at	0.002658	551.547920	WN980.3E3260F1B	...	9.042E	E1.048E	892200.0	ta	42043T1	627	
715	1423171_at	0.002668	4.4.248400	WN227.1656	48B3B88	3E1.2001427	E2.022E	652200.0	ta	82309T1	827	
716	1425458_a_at	0.002684	4849207_WN	L05E102V	K146015070E1GM	13.3E11.0701NM	134E3.56E1	662200.0	ta	48628T1	427	
717	1448104_at	0.002685	1049.6	61E4E1_WN	849E6E6B5.5ac0qW121.4E2	61E1NM.183E3.2E2E1	662200.0	ta	444E3T1	527		
718	1434187_at	0.002685	1406.6	204E8E_WN	31bp	8E180E3E91.1os0NM	0094E.39E	30.11E	ta	42324T1	427	
719	1460168_at	0.002696	2632.27	1968.37	4291E10	WN9E05:591LL10B3E:5gq4.6	78E2.11E	127200.0	ta	013E3T1	327	
720	1429938_at	0.002701	1689.27	58E2L5_WN	40Q002W2.5d4rE	E5.045E43	1445E2E345	12200.0	ta	86543T1	227	
721	1434598_at	0.00271	5480E1_WN	E4E61E3	K1402K2100E4Q4	4E.5E3585	4E.7E891	107200.0	ta	08853T1	127	
722	1423310_at	0.002721	411	284.190E5E2T	B3Q177	K1450E6000E6V27	4E.896E1	4E.2E9E2	ta	83662T1	027	
723	1424324_at	0.002727	411.03	263.3E1600	WN3E6E16E6Q_WN98	dq1SM6.886702	9.904T	569200.0	ta	89109T1	617	
724	1434474_at	0.002729	152.2E18E1	WN319.8E2T	T1MVA8ca.9516E8J48	1E2.5E4219	9.670T	589200.0	ta	48143T1	817	
725	1424707_at	0.002768	3870.13	3240.63	55E4E3E3	B1409E:3E.08E	026E3E.155	859200.0	ta	56509T1	417	
726	1452984_at	0.002739	132E.2E0E1	WN074E2E1	WN57304J5g	up1E	1E0.2E607	E3.494E484	889200.0	ta	40184T1	417
727	1448269_a_at	0.002751	54E910_WN	240E2E0F	olpqrK1113	E2.308NM	026E4E.086NM	0.899200.0	ta	48545T1	917	
728	1460324_at	0.002759	1220.23	4E4E2E_WN	5E4E4E5E	88d6B79544E4E	4E4E.4E3NM	007E5E.419	NM	199200.0	517	
729	1424707_at	0.002768	3870.13	3240.63	55E4E3E3	B1409E:3E.08E	026E3E.155	859200.0	ta	56509T1	417	
730	1437027_x_at	0.002768	3E95E1_WN	1E900J	VB84.1E2E1	AV3075E:3E.6.94E	3NM	009E3E.76E	559200.0	ta	115E3T1	317
731	1434111_at	0.002778	138E.6E5E54T	WN086.2E4E3E2W4E	al2E9E4E3E499	1E3E.3E8258	E3.3E01	649200.0	ta	472E3T1	217	
732	1420095_s_at	0.002789	527.8E5E3E1	WN959.4.1E2E690B2	4E4E4E	1E4.2E0E272	1E4.2E3E357	4E9200.0	ta	97692T1	117	
733	1443856_at	0.002789	117E.0E690E10_WN	0680E10_WN	4Pp99B3E951.3E.6905NM	01E0.0E3E6E	1E9200.0	ta	4E305E1	017		
734	1416221_at	0.002793	982.4E5E2E1	WN4E11E3E9E3E2W97	4E1P4E3047	5E1E2E	4E.596E	49200.0	ta	46343T1	607	
735	1436909_at	0.002812	2078.9	1613.17	B430E.4E8E0E1E	AA9.2E8E4E	1E8.2E0E396	9E9200.0	ta	3E247E1	807	
736	1425678_a_at	0.002829	100.2E2E10	WN451.2E2E10	WN51.1E6E4E30201E3E.7	988NM.133E4E.2E60T	4E9200.0	ta	3E247E1	407		
737	1443986_at	0.002829	269.4E6E1E0	WN97.1E6E1E2E0E3E	BB211.1E4E	qevNM	144E4E.4E9E8	4E.6E3E6	ta	51042E1	907	
738	1422685_at	0.002831	924.93	736.93	5E4E6E5E4E	NM.004E4E.68E2NM	00E0.4E902E	2E9200.0	ta	44854E1	507	
739	1455696_a_at	0.002839	875.8068E1	WN909	E68E5E2E2E	40E2E1E9E.9.501NM	013E3E0E.181	2E9200.0	ta	08942E1	407	
740	1434931_at	0.002844	2624E2E_WN	4.981E2E_WN	4E8E6E30AV3E.2E4E9E78	E3.3E8E1E84	5.86E2	6E9200.0	ta	25154T1	307	
741	1437480_at	0.002848	344.6E5E8E1	WN905.1E0E9E2E2E	BB4E11100.504E0E0E	4E4E5E4E3E	E2.384E3E77	4E9200.0	ta	54992E1	207	

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Table 11

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781	1452833_at	0.00298	642030_WN	66813228	12424411	2 69.79(2)8	67.00(1)99	291300.0	ta_s	2455341	618					
782	1456038_at	0.002981	798.13	643331_WN	90291010WNB003	e2puw3AM	1725	66.11L	4011	651300.0	ta	2046341	818			
783	1456567_x_at	0.002985	835551_WN	1708020WNB1M	BE chuc3Z5	E 0.162(1)75	63.74(95)51	54441133000.0	0	ta	10163341	178				
784	1452114_s_at	0.002987	2603	081030_WN097.	88561010VC	h5dsn	E 69.39(9)2	65.11(6)18	44441133000.0	0	ta	1528241	918			
785	1451974_at	0.002993	2033	908331_WN787.	4953111110S1	tsdn	E 48.59(9)4	68.258(1)00	99331133000.0	0	ta	9159541	518			
786	1434184_s_at	0.003007	413010_WN	606433AV	h5n3430080	66.86K	E 68.34(9)5	44221133000.0	0	ta_s	6991441	418				
787	1438619_x_at	0.003008	2503	604600_WN756.	2659911111	q2doL	L1.965(1)1	60.72(1)173	44221133000.0	0	ta	1529141	318			
788	1429159_at	0.003009	995.	122600_WN88	h21h231101	ecusL	2 8.682(1)5	62.74301	99111133000.0	0	ta	6389341	218			
789	1443119_at	0.003009	4724	655010_WN	3003304M	C 1pca3V3352	47.394(1)M	1773	8.1181	44111133000.0	0	ta	894841	118		
790	1448248_at	0.003025	4724	655010_WN	810320AVM203	h1e70d0100c75c	2.713	9.07	99011133000.0	0	ta	6129541	018			
791	1428963_at	0.003027	119204_WN	9051102B	h1R50412000L13	N 5.612(1)00	40.4631	501300.0	ta	6101241	608					
792	1434717_at	0.003032	938917_WN	269433AV	h1R5015801827	N 45.63(7)16	48.146	401300.0	ta	8822541	808					
793	1434773_a_at	0.003034	421920_WN	6112905B	h1e70d024338M2075c	69.22(1)N	6.761(1)00	401300.0	ta	9396141	408					
794	1428471_at	0.003038	2947.47	2034	025520_WN021	025520_WN01	5ms34	7.845(1)M	0010	69.98(1) //	260300.0	045(1)M	9598141	001	908964	///
795	1434864_at	0.003038	1724.43	545200_WN	545200_WN	rm-19	6.0882(7)8	62.9493	470300.0	ta	6090241	508				
796	1452713_a_at	0.00304	345120_WN	6689708M	h1p3d1	30.3823(4)5	63.7484	6690333000.0	0	ta_x	5284441	308				
797	1445897_s_at	0.00304	142.43	418200_WN	61135	403320M4	2st1N	6.259(3)20	3300.7478	990300.0	ta	1714141	208			
798	1426949_s_at	0.003041	1698.53	285441_WN	3995924M214	00.822M	4.733(4)7.4494	850300.0	ta	6469241	108					
799	1436363_a_at	0.003043	1192203_WN	114532M	h1e70d05000L71f1x	2 47.32(1)0	N 68.95(1)06	630300.0	ta_s	6484541	008					
800	1454879_s_at	0.003058	467.	084311_WN	2226	60142M	h24	33.45(1)82	63.506(1)1	242030.0	061	ta_s	6339241	664		
801	1426979_at	0.003058	467.	084311_WN	2226	60142M	h24	33.45(1)82	63.506(1)1	242030.0	061	ta_s	6469241	864		
802	1417783_at	0.003066	837.03	023220_WN	1152	450986M	7 5311M	9.88(1)7	64.241	40300.0	ta_s	4685441	764			
803	1447825_x_at	0.003069	4847.93	549520_WN	42320010M	451pM	7.744(1)M	618(4)3	40300.0	ta	6182441	964				
804	1420609_at	0.003073	3646.23	845311_WN	623923B	1e31M	75	17.82(1)75	6344.44241	8833330300.0	0	ta	9484441	564		
805	1421292_a_at	0.003081	1263.8	1112.97	A730008L03R1k	NM	021393	NM	02135	293811_WN	///	951600	118	WH		
807	1419636_at	0.003103	004116M	22.26	885402M	833442C	Te31s	E 7.976(1)9	67.65(2)27	430300.0	ta	6274441	684			
808	1452268_at	0.003104	941.87	9171910_WN	4888611M	IC 1100	Z 5.713(1)2	61.65(1)36	230300.0	ta	4174441	264				
809	1421019_at	0.003105	1634.07	001200_WN	633900M	F 2ppM	62.840(1)6	61.393(1)11	420300.0	ta	6368241	164				
810	1436213_a_at	0.003106	70.6	31.2	959331_WN	h07h	668020B	1V02	4.8	6.3488(1)07	4247	520300.0	ta	8428441	064	
811	1448468_a_at	0.003114	1811	823232	666046.3	122533AV	5	43.766(1)3	N 6.002(1)97	600300.0	ta	6113441	684			
812	1436853_a_at	0.003116	10347.23	509810M	h1R1008011394	4	889NM	0092	62.566	600300.0	ta	6516341	884			
813	1416731_at	0.003124	340941_WN	122813B	h1C2p3B	1665	63.954(1)M	005	41.8052	800300.0	ta	6195341	784			
814	1447669_s_at	0.003124	5065410B	h1R6190800063ng4	2 67.996(1)3	66.52(1)17	400300.0	ta_s	8114341	984						
815	1456516_x_at	0.003136	00547	6089202B	1	214p0B	11355(9)	4871M	1333(1)6	6302	666200.0	ta	5461541	584		
816	1428731_at	0.003144	815010_WN	208522AB	Uf	df31K	0195	65.7602(1)M	03(40.2092	486200.0	ta_s	4112541	844		
817	1433910_at	0.003145	1564.37	541800_WN	554000B	w5M	6.366(1)1	1 8.0933(1)38	586200.0	ta_x	4959541	384				
818	1449702_at	0.003159	1104	711.	886271M	nfanc	60L	600B	41K	63(1)864	186200.0	ta	8309541	284		
819	1435542_s_at	0.003162	666302_WN	800810M	236540M	1	1932	849597	66.936(1)49	86200.0	ta	6382541	184			

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859	1423241_a_at	0.003347	1287.4	1028.27	Tfdp1	EG075396	NM_009361	
860	1434422_at	0.003353	1257.37	926.97	AI4:33479	AV027153	---	
861	1415700_a_at	0.003362	3856.63	3408.4	Ssr3	BC011111	NM_026055	
862	1425194_a_at	0.003367	2405.67	1912.6		6330577E15Rik	BC024403	NM_026377
863	1416156_at	0.003379	1135.87	890.9	Vcl1	NM_009502	NM_009502	
864	1455323_at	0.00338	552	421.93	MGI:1927369	BB446066	NM_021326	
865	1456026_at	0.00339	229.5	181.77		8030451K01Rik	AV303159	NM_172501
866	1428845_at	0.003397	2867.47	2337.6	Bclaf1	BI965039	NM_001025392	/// NM_001025393 /// NM_001025394 ///
	NM_153787							
867	1429004_at	0.003406	1543.2	1098.2	Phip	AK012667	XM_358384	
868	1428351_at	0.003408	428.47	202.7	Ipmln	AK013113	NM_026447	/// NM_198931
869	1430515_s_at	0.00341	757.13	579.7	Aasdhpt	AK008554	NM_026276	
870	1450066_at	0.003418	1208.1	1072.23	Ubr1	BQ173927	NM_009461	
871	1422669_at	0.003421	1202.4	961.53	Ebag9	AY009091	NM_019480	
872	1434404_at	0.003441	2042.53	1525.63	C03001101ARik		BB375245	NM_174868
873	1436775_a_at	0.00345	2017.07	1733.03	A-krtd17-	AM557826	NM_030886	/// NM_198010
874	1441879_x_at	0.003454	210.6	141.83	Micrnl	AV218897	NM_018810	
875	1434314_s_at	0.003458	2357.4	1614.9	Rab11fip5	HQ177085	NM_001003935	/// NM_177466
876	1427271_at	0.00346	209.97	163.4	Bbdbi5	BC027138	NM_172765	
877	1452952_at	0.00346	4048.93	2927.6		9030418K01Rik	AK018518	---
878	1454876_at	0.003468	546.13	385.57	Rab23	BB771587	NM_008999	
879	1419176_at	0.003476	550.83	417.2	Vps37a	AK008752	NM_033560	
880	1434493_at	0.003481	413.97	268.67	U310022K09Rik		BG092222	---
881	1419420_at	0.003485	1403	1192.93	Stgaldhrc5	NM_012028	NM_012028	
882	1441876_x_at	0.003491	136.87	90	Zfp93	BB245574	NM_009567	
883	1455627_at	0.003492	240.27	117.73	Col8a1	AV292055	NM_007735	
884	1419645_at	0.003494	2676.23	2053.9	Gstf2	BM120662	NM_133196	
885	1451177_at	0.003499	3414.7	2499.63	Dnajb4	BC017161	NM_025926	/// NM_027287
886	1456739_x_at	0.003502	5254.1	3516.9	Atrmcx2		BB392869	NM_026039
887	1435207_at	0.003506	2126.2	1403.67	Dixd1	BB758432	NM_178118	
888	1460737_at	0.003508	540.6	466	Igdp1	AA960310	NM_008784	
889	1435545_at	0.003517	473.9	291.5	BC032203	BB242234	NM_140041	
890	1427382_a_at	0.003524	650	486.87	Suv39h1	AF193862	NM_015114	
891	1459840_s_at	0.003531	864	641.8	Ccdc28b	AV365721	NM_025455	
892	1444228_s_at	0.003537	162.2	134.63	Herc2	BB333568	NM_010418	
893	1434036_at	0.003546	1081.87	862	Mtsu1	AV024771	NM_144800	
894	1440253_at	0.003558	2522.87	1787.9	---	AV136581	---	
895	1428779_at	0.003562	1058.17	739.13	Zbtb41	BB526541	NM_172643	
896	1421014_a_at	0.003564	460.83	326.9	Clyb1	BC023398	NM_029556	
897	1426030_a_at	0.003567	650.43	469.03	Apeh	BC025494	NM_146226	

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898	1436997_x_at	0.00357	528195VV	KIR21D86003LVH3bgr	60.783	UB2485	62.184	TM_01	188	65000	0	ta	s	6699571	636											
899	1415749_a_at	0.003572	485L00_WM	046423BB	14pDaaagc	45.295	1175	N	8.0	442	75	N	8.0	442	75	636										
900	1456728_x_at	0.003572	421350_WM	61L199IB	1.2	20mswmsB5045	49.592	TM_007	48.524	1	L63	0	ta	1902424	636											
901	1417737_at	0.003574	751.7	627.43	Mp631	561LL1D6160	--	TM_0205	42.092	3.534			ta	1466441	636											
902	1434729_at	0.003583	1480.4	1158	923260_TMANK12	588490BB18	84rDW8	3.569	TM_81E1D10391	654300	0	ta	x	1938344	636											
903	1458163_at	0.003592	551.	449L00_WM	854901I48	1	24racsj3	39.606	TM_01180	38.2965		ta		1404541	636											
904	1427150_at	0.003593	585.47	476800_WM	468000_WM	1	7msd12	30.479	6379	60.593		ta	e	509141	636											
905	1419123_a_at	0.003600	246600_TM	32.8	188660BB	88.23	14	24racsj3	6.399	9771	N	1.359	771	454300	0	ta	e	911824	636							
906	1434450_s_at	0.003597	2684.2	523510_WM	534	--	E	1.850	619			ta	e	1046441	626											
907	1438636_s_at	0.003623	319.47	87.5018600	WMNB213	625070BB	--	3dsac	659	9.558		ta	e	1638441	826											
908	1416755_at	0.003627	10067.1	430581V	KIRJ2T20L03P9K00229	32.664	TM_0188	41.766				ta	e	1259341	626											
909	1434112_at	0.003652	1141	985.17	004400_TMNG9604700	WMJKM	1312	21	mapa	5.021	6.951		ta	2111241	626											
910	1437308_s_at	0.003658	2765.77	23403200H1MNB1C1	60528000BB	1	2msd	99	41.290	195	1021		ta	1511241	626											
911	1448299_at	0.003661	26697.0	WN	522962BB	KIR20M0150379C	E	9.443	36	48.998	234		ta	579514	626											
912	1433544_at	0.003661	902420100	WM	679829BB	1	3dsac	2	66.747	1556	1.1	104300	0	73155	626											
913	1452197_at	0.003668	316.	481600_WM	25.481600	WMNC413	12	r7xocjv1	2403	8	N	1.185	378	4300	0	ta	e	1271241	626							
914	1417062_at	0.003669	462.	52367.5	428224BB	810C	108055	W	N	3.4	34	016	TM_02	889600	0	ta	s	349554	626							
915	1416101_a_at	0.003676	2289.6	509247_WM	509247_WM	4	1E1030C	6	54	TM_0	604	86	N	9.5	47	86	489600	0	ta	e	1814241	616				
916	1433679_at	0.003676	544.47	970.	2110E1_W	61.663	BBE	64	q410	N	6.6	523	66	47.4	45	929	600	0	ta	e	1019141	616				
917	1438385_s_at	0.003687	987510_WM	987510_WM	195	1	24racsj3	4	5.04	7105	9.882		ta	e	1019141	616										
918	1424198_at	0.003687	430920_TM	10	430920_TM	1	24racsj3	25	36.96	TM_1773	35.294		ta	e	1290141	616										
919	1455643_s_at	0.0037	987510_WM	10	430920_TM	1	24racsj3	25	36.96	TM_1773	35.294		ta	e	1290141	616										
920	1421772_a_at	0.0037	987510_WM	10	430920_TM	1	24racsj3	25	36.96	TM_1773	35.294		ta	e	1290141	616										
921	1436019_a_at	0.003702	45251.7	WN	991847B	216672BB	KIR3E16040329C	E	3.4	04	19	N	3.35	43	242	199600	0	ta	e	1466441	616					
922	1457218_at	0.003705	1201	66160	0_TM	661600	WMNC0082E	1	24racsj3	010	44	042	E	3.2	0	15	199600	0	ta	e	1466441	616				
923	1415675_at	0.003705	4782.	691010_TM	615.	587420V	vt1	4	FM	0086	44.6	42	TM_008653	515	959	600	0	ta	s	1802441	616					
924	1421175_at	0.003707	156.9	120.5	Adar	852	E1	TM	0	6	33	96	BB	1	2msd	00	47	586	141	259	600	0	ta	e	2114341	606
925	1436552_at	0.003708	997.	808810_WM	39.2	062200KV	430702	1	q4	uq	42	108	U4	38	44	210	429	600	0	ta	e	5519141	806			
926	1449839_at	0.003711	855.6	659	Casp3	BG07C	594	E1	2	BB	1	05	8106	48	16	32	930	0	ta	s	938341	606				
927	1449410_a_at	0.003727	3956.13	69330BB	--	Gass	42	790	2125	--	2.7	4892		465	600	0	ta	s	054441	606						
928	1428116_a_at	0.003754	166610_WM	166610_WM	166610_WM	2292200BB	1	24racsj3	32	881	3	809	388	48	2	33	600	0	ta	e	1216141	606				
929	1416005_at	0.003755	3365.03	645555_W	2292200BB	1	24racsj3	32	881	3	809	388	48	2	33	600	0	ta	e	1216141	606					
930	1454704_at	0.003755	5962.83	081100100	WM	356823AV	8209900BB	1	9	29	4	1.155		665	600	0	ta	e	391841	606						
931	1443836_x_at	0.00375	91600100	TM	95.3	81021	WB	064	2036	1	TKM	026	49	851			608	47	1.155				624	6341	606	
932	1442994_at	0.003777	435.3	260.	095020	WM	--	095020	7	WMS				3	429	7.1	154	475	300	0	ta	e	162441	606		
933	1424206_at	0.003771	1425.	986400	TM	265.	045705	BB	1	05	1	05		E	38.7	49	19	475	300	0	ta	e	162441	606		
934	1456226_x_at	0.003773	547410_WM	547410_WM	547410_WM	48	692	2.0	33	3	55	84	84	475	300	0	ta	e	162441	606						
935	1456699_s_at	0.003773	698610	TM	481.	406842	BB	834.	1	3	4	3	305	47	4	82	55	84	475	300	0	ta	e	162441	606	

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938	1454722_at	0.003787	7273.8	6307.67	Herc1	BG792618	XM_620756		
939	1423103_at	0.003788	468.03	309.07	Rfx5	BB392192	NM_001025501	///	NM_017395
940	1425241_a_at	0.003797	1109.47	768.37	Nsb1	BC019601	NM_019653		
941	1423083_at	0.003819	1290.03	927.17	Rab33b	AK004974	NM_016858		
942	1455387_at	0.003827	885.13	565.73		1110001M19Rik	AV112972	NM_001024205	
943	1457440_at	0.003841	1371.57	1038.83	Sstt4	BB451927	NM_009219		
944	1429918_at	0.003843	1487.03	1243.57	Arhgap20	AK018317	NM_175535		
945	1454917_at	0.003844	730.47	635.83	Au045404	BB795206	XM_354869		
946	1458351_s_at	0.003844	1337.33	1164.87	K1h12	BB408573	NM_178633		
947	1420932_at	0.003848	2641.37	2274.93	Mapk8	BM940281	NM_016700		
948	1435964_a_at	0.003848	1481.1	992.4		BB194075	---		
949	1429335_at	0.00386	747.37	554.13	Shapc1	AK012317	NM_178392		
950	1438029_at	0.003864	530.13	496.97		4930535B03Rik	BB817800	XM_485279	
951	1428267_at	0.003866	547.87	458.17	Dhx40	AK010512	NM_026191		
952	1432164_a_at	0.003871	2282.4	1750.57	Gcsh	AK003189	NM_026572		
953	1433901_at	0.003872	2689.3	1912.17	Gpiap1	AV301998	NM_016739		
954	1433906_at	0.003872	1802.03	1130.63		4933402J24Rik	BB956483	NM_028940	
955	1419164_at	0.003873	1480.8	1128	Zfp260	DA5210	NM_011981		
956	1427269_at	0.003874	805.77	676.9	Sftr11	AW261583	NM_026989		
957	1429441_at	0.003881	160.2	121.07	Fbxo30	AK006369	NM_027968		
958	1437585_x_at	0.00389	537.97	306.33	Zfp161	BB329659	NM_009547		
959	1425864_a_at	0.003892	337.93	250.3	Sorcs1	AF284755	NM_021377		
960	1425030_at	0.003893	629.47	445.1	Zfp622	BC006964	NM_144523		
961	1436771_x_at	0.003902	904.03	661.13	Pgd	BB314208	XM_622094		
962	1455272_at	0.003906	3727.07	2671.3	Grm5	BB429139	XM_149971		
963	1447655_x_at	0.003913	533.13	368.9	Sox6	BB257593	NM_001023559	///	NM_001025560
964	1439571_at	0.003915	780.57	504.03		E230008J33Rik	BB820889	---	
965	1450964_a_at	0.00392	1129.83	782.5	Osbp19	BB826372	NM_133885	///	NM_173350
966	1455113_at	0.00393	833.13	675.2	Armc8	BM232782	NM_028768		
967	1436752_at	0.003935	256.1	207.03		5730478M09Rik	BI422930	XM_148441	///
968	1456512_at	0.003935	185.17	90.8	Pdzrn4	AV174487	XM_139540		
969	1439272_at	0.003936	667.4	451.97		AB30039H10Rik	BB183240	NM_172153	///
970	1425487_at	0.003941	319.43	252.07		D11Ert1730e	BC025870	NM_148673	///
971	1454625_at	0.003946	300.17	205.9	Phf6	BG073473	NM_027642		
972	1455189_at	0.003964	1242.77	1002.2		8030451N04Rik	BB400432	---	
973	1425344_at	0.003976	664.23	515.33		4430402O11Rik	BI452475	NM_026272	
974	1441880_x_at	0.003991	126.77	89.47	MGC30332	BB009770	NM_143580		
975	1437250_at	0.004006	316.1	185	MGI:2151839	AV2988358	NM_001005423		
976	1419081_at	0.004016	381	257.07	Atg10	NM_025770	NM_025770		
977	1459861_s_at	0.004021	896.17	447.97	Fpx110	AV221085	NM_001003953	///	NM_001005866
								///	NM_013910

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1096	1436533	at	0.004728	944.6	608	.904030	WN	9296382	55	zuri	WN	0135	.0099	4E-1555	66700	0	at	720171	5E11
1097	1423627	at	0.004734	178.93				114.73		143E1010	WN	V15	.15350	1E-3470	5.74	7.8	-2.6	726	5E11
1098	1459661	at	0.004742	118.37				1511109	WN	W49	.3381	172	35	3	6.9	6.6	1	726	5E11
1099	1419469	at	0.00475	866	.6965	11	0.65580	B	3b4	4212002	33			1E-9881531	17	243	at	590251	3E11
1100	1424025	at	0.00475	422	.0495	1		422	.0495	1	9	3	3	1E-3470	5.74	7.8	-2.6	726	5E11
1101	1436483	at	0.00475	4209	.83	86	547	1		85E3201	WN	3		410E100	29	6	0	1E-9126	3E11
1102	1449465	at	0.004761	2081	.83	4	59	3		86	547	1		94E347	6	61	1E-9881	5E11	
1103	1455070	at	0.004763	525	.4	376		88	1	10E4K	015			5	9	3	3	1E-9881	5E11
1104	1429050	at	0.004764	092	.02	WN		1E3	0					3	6	6	1E-9881	5E11	
1105	1426272	at	0.004767	098	.205	WN		4	26	9	4			4	5	7	1E-9881	5E11	
1106	1459797	at	0.004776	2785	.43			4	08	2	5	1		5	9	3	3	1E-9881	5E11
1107	1416765	s	at	441	.53			3	90	9	.07			5	8	2	90	9	07
1108	1452318	a	at	4625	.67			23	5	6	1	1	9	20	4	2	5	7	3
1109	1454851	at	0.004803	2963	.03			23	5	6	1	1	9	20	4	2	5	7	3
1110	1451074	at	0.00481	505	28	5	20	WN	3	71	.82	5	3	0	0	4	8	2	5
1111	1435177	a	at	506	3	9		0	3	1	9	6	1	1	9	20	4	2	5
1112	1448144	at	0.004846	503	6	9		0	3	1	9	6	1	1	9	20	4	2	5
1113	1417435	at	0.004855	323	.87			5	6	1	2	0	WN						
1114	1441276	at	0.004876	385	1	5	10	2	7	8	3			1	6	6	5	1	0
1115	1435060	at	0.00488	1285	.23			1	1	9	1	0	1	1	1	1	1	1	1
1116	1435930	at	0.004884	2518	.6			3	8	8	0	0	3	1	2	0	4	5	3
1117	1422442	at	0.004892	3116	.67			4	0	6	1	0	1	0	1	1	1	1	1
1118	1452718	at	0.004894	1490	.43			8	4	1	0	1	0	1	0	1	0	1	0
1119	1428883	at	0.004901	821	.43			3	8	8	1	0	1	0	1	0	1	0	1
1120	1454892	at	0.004911	595	.6	4	7	3		0	3	1	0	1	0	1	0	1	0
1121	1417844	at	0.004915	84	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1122	1438494	at	0.004919	84	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1123	1449261	at	0.00492	84	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
1124	1427005	at	0.004925	155	7	.27		1	1	4	7	.57		5	3	8	3	6	0
1125	1428652	at	0.004942	490	.93			5	6	2	0	2	0	2	0	2	0	2	0
1126	1457490	at	0.004948	33	7	.67		2	5	8	.17			0	5	8	8	2	0
1127	1435348	at	0.004954	233	1	.27		1	9	4	.4			1	9	4	.4		
1128	1416018	at	0.004959	188	6	.93		1	9	4	.4			1	9	4	.4		
1129	1435618	at	0.004959	431	.23			8	1	4	.2	.3		3	1	4	.2	.3	
1130	1452616	s	at	314	2	.17		1	3	5	1	0	2	0	2	0	2	0	2
1131	1451348	at	0.004963	195	9	.43		1	6	7	.2			5	6	2	0	2	0
1132	1452065	at	0.004971	92	.87	4	7		1	9	0	1	0	1	0	1	0	1	0
1133	1426382	at	0.004976	535	1	.37		4	6	0	1	0	1	0	1	0	1	0	1
1134	1439825	at	0.004977																
1135	1417027	at	0.00499																

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4530 03

1136	1429244	_at	0.004991	262800	_NMN	01F260B9426105534QLIPSHK	245.34689	46.5147075	423500.0	ta_x	4445541	4411					
1137	1435103	_x_at	0.005008	2084424	_MWX	8666.4168832MBFR2P200	132.44858	13.9411311	323500.0	ta_w	8944341	3211					
1138	1419546	_at	0.005011	7774.2	485800	_NMN	89800	2.578NM	024670701	ta	6988241	2411					
1139	1416465	_a_at	0.005014	553441	_NMN	93L362B83	1689144	3.3234441	962500.0	ta	1289341	1411					
1140	1419994	_s_at	0.005025	1331.0048	1102.4	434226B8J	113429364	34015.31	7904VM	0.2962500.0	ta_x	1838431	0711				
1141	1436317	_at	0.005034	776	264	LIQ	_NMN	933241R8B211	323	882500.0	ta_w	9285541	6911				
1142	1450758	_at	0.005042	109.241600	_NMN	79.5.1488100AV2	7194158	130.015004357	4.6811M	025642500.0	ta	1063241	8911				
1143	1459985	_at	0.005045	1721.67	1431.456800	_NMN	6.6601100B81	114044M2	126025375	5/3921M	00.29425005	9//ta	13588241	4911			
1144	1455618	_x_at	0.005075	091223	_at	0.005075	091220	_NMN	9850800V	3301123	38.36659353	43.6934353	872500.0	ta_w	18265141	5911	
1145	1417223	_at	0.005075	864810	-NMN	620141V	124169003	1248140	6.114M	00745.7236	472500.0	ta	6463341	4911			
1146	1418749	_at	0.005077	830661	_NMN	550661	590661	_NMN	550661	590661	_NMN	550661	590661	ta	1200541	3911	
1147	1418822	_a_at	0.005093	864810	-NMN	620141V	124169003	1248140	6.114M	00745.7236	472500.0	ta	6463341	4911			
1148	1450684	_at	0.005101	962.272820	_NMN	502345MVM	0013241	007463861	32.9152	142500.0	ta	1094541	2911				
1149	1460588	_at	0.00513	450.5	270.461350	_NMN	44.61350	_NMN	44.61350	_NMN	44.61350	_NMN	44.61350	ta	13684141	1911	
1150	1416790	_a_at	0.005163	1729.5	1511.83	402494	49430043	45.38.952NM	01522500	0NM	1941348847	10914	2552				
1151	1423095	_s_at	0.005164	2650.63	648810	FB	k1950M00100	124	130.144	4.1835	NM	361500.0	ta	1685541	8511		
1152	1433939	_at	0.005164	1261656821	MX1006	597545M	4.7p	45516	3.375236	3.6279	981500.0	ta_w	1166141	4511			
1153	1437622	_x_at	0.005171	664351	_NMN	411802	MB8	358455V	132.44331	144.955227	181500.0	ta	0113341	9511			
1154	1448537	_at	0.005172	1507.83	28291	11M	7	k1991H6100	34795	32.9852795	43.2213	841500.0	ta	4745541	5511		
1155	1455447	_at	0.005178	3122.37	564331	11M	7	564331	11M	7	564331	11M	7	ta	73584741	4511	
1156	1433710	_at	0.005181	422420	_NMN	130035B	18214	453	32.36114	49.2651799	141500.0	ta_x	122943741	3511			
1157	1419917	_s_at	0.005186	3672.3	93041	107	91199100	47	9001M	12149.8921	491500.0	ta_w	5603241	2511			
1158	1455589	_at	0.005214	742.23	629.07	OdF2	B8450471	NM	013615	5.6241	391500.0	ta_s	5603241	1511			
1159	1454735	_at	0.005228	1192.2	873.97	Sfxm3	NM	0190454	574BGM	0531.8	0.75	31500.0	ta	188509741	6711		
1161	1454760	_at	0.005241	2516.23	198.096	100	MNTal	096.100	1M	1.392	42	296	101500.0	ta	7890541	8711	
1162	1450021	_at	0.005242	9324184	700	MN7179	836821	100	18.5961	19	36.8222798	360500.0	ta_w	22884741	4711		
1163	1433779	_at	0.005247	2834	392035	MN	244.43920	0	MN	244.43920	0	16.0119054	11.462999033	670500.0	ta	040500.0	0
1164	1415928	_a_at	0.005248	353420	_NMN	353420	_NMN	124	324	3186	46.0651160	504500.0	ta	040500.0	0		
1165	1422684	_a_at	0.005288	1778.8	69551	11M	7	k191H6100	34795	32.9852795	43.2213	841500.0	ta	73584741	4511		
1166	1422684	_a_at	0.005298	1074.46	4520	_NMN	014.4	1613	00	99356	14.6679355	410500.0	ta	040500.0	0		
1167	1423390	_at	0.005298	1074.46	4520	_NMN	014.4	1613	00	99356	14.6679355	410500.0	ta	040500.0	0		
1168	1423390	_at	0.005298	1074.46	4520	_NMN	014.4	1613	00	99356	14.6679355	410500.0	ta	040500.0	0		
1169	1455826	_a_at	0.005323	1181	06	_NMN	856911	4V	19981	M	194.57802	800500.0	ta	040500.0	0		
1170	1437838	_x_at	0.005323	1181	06	_NMN	856911	4V	19981	M	194.57802	800500.0	ta	040500.0	0		
1171	1436821	_at	0.005323	1181	06	_NMN	856911	4V	19981	M	194.57802	800500.0	ta	040500.0	0		
1172	1422869	_at	0.005323	1181	06	_NMN	856911	4V	19981	M	194.57802	800500.0	ta	040500.0	0		
1173	1434468	_at	0.005323	1181	06	_NMN	856911	4V	19981	M	194.57802	800500.0	ta	040500.0	0		
1174	1455777	_x_at	0.005324	5701	815	57	684	424	M	1990H25019	233	47510	145.064292	166700.0	ta	040500.0	0

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1175	1425966_x_at	0.005326	6289671_TMN3	621070_BBT7	1_dread1D1L39f	1333.48	1333.48	0.098	95500	0	jp_s	1279271	6121		
1176	1417701_at	0.005327	970.97	813947_TMN	9264202B4C_6K6NM	1333.48	1333.48	0.098	95500	0	jp_s	1279271	6121		
1177	1432195_s_at	0.005328	1356.8	903010_TMN3	2454020B4L1E1uG8J.9	1666NM	011353.7821	NM_46590980	345500	0	jp_s	1458271	6121		
1178	1436816_at	0.005334	762.87	445.1	Nup133	BB553.82	909090NM_172215.873	6.684	245500	0	jp_s	1455471	6121		
1179	1450853_at	0.005339	152381_TMN7	4599302B	K1R1L10020018106	1.34	1099600	32.698	245500	0	jp_s	1451571	6121		
1180	1446244_at	0.005382	362.008821_TMX	3959920_TMN	05_6_VJL1163B4L1E1D3B0774.47	1894NM	143.66	1129	835500	0	jp_s	14519371	6021		
1181	1431050_at	0.005382	1160.37	1951.300947_TMN	769.0669909B1C_98u6NM	0261.44	791NM	0261.48	262	525500	0	jp_s	1454571	6021	
1182	1439904_at	0.005398	797.2	480.124220_TMN	673.903472M6D233.	K1R12420003EAKK0077C.69	866NM	1331.92	727	425500	0	jp_s	154571	6021	
1183	1460308_a_at	0.005403	1461.47	051984_TMX	1952020B3A1J3oqD07	31.0641	73821	325500	3021	0	jp_l	1527371	6021		
1184	1426762_s_at	0.005405	2731.165010_TMN	10210.165010_TMN	AbhAurB3B4581.42	298NM	1341.71621	815500	0	jp_s	1669871	6021			
1185	1438306_at	0.005407	1887.5	454.73	317.77	B130L244900NR	AV2567L3E.835X1.8	326625	564500	0	jp_s	17892	1021		
1186	1435227_x_at	0.005415	1631.820820_TMN	1359.381520CDB410011	twmszk	1.43	6494.5	758NM	01564500	0	jp_l	1681571	8611		
1187	1417981_at	0.005453	1631.820820_TMN	1359.381520CDB410011	twmszk	1.43	6494.5	758NM	01564500	0	jp_l	1681571	8611		
1189	1434856_at	0.005454	1341.398910_TMN	091.398910_TMN	S1M237	1.01	46409	16M	3911005419	3.8471	347500	0	jp_l	1667671	9611
1190	1437559_at	0.005457	1063.6	854.610_TMN	12426762_s_at	2920_03	621.486371_TMX	4681.637	1708594	8.504	NM	026639.267	NM	253500	
1191	1435923_at	0.005458	1284.07	890920_TMN	1359.381520CDB410011	twmszk	1.43	6494.5	758NM	01564500	0	jp_s	17892	1021	
1192	1417387_at	0.005472	1478.3	615400_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	011.416600_TMN	
1193	1448654_at	0.005473	203.668620_TMN	1845.168017B1	2911166631E1C	30.985656	33.968963	454500	0	jp_s	16557371	6111			
1194	1449429_at	0.005476	809.3	566.9	2811.453421_TMX	240932AVJ1	1.0811484	3.084	2.762	104500	0	jp_l	19038371	5811	
1195	1429053_at	0.005476	424.228831_TMN	2981.621920_TMN	961.29200V3421	302471	4.6	3792NM	21.403500	0	jp_s	1422571	9811		
1196	1451189_at	0.005524	292.621920_TMN	163.621920_TMN	961.29200V3421	302471	4.6	3792NM	21.403500	0	jp_s	1422571	9811		
1197	1427984_at	0.005525	3188.37	247.4	439841_TMN	S1DF2	1.44	6384	6.659143	43.0911	863500	0	jp_s	1489171	4021
1198	1416857_at	0.005524	2920.03	2420.03	489.9	378.382721_TMN	3906306G06.429655BB	1.53	065957	48.0327251	633500	0	jp_s	1483271	7811
1199	1436715_s_at	0.005538	621.489	93.378	382721_TMN	3906306G06.429655BB	1.53	065957	48.0327251	633500	0	jp_s	1483271	7811	
1200	1451381_at	0.005542	489.9	378.382721_TMN	3906306G06.429655BB	1.53	065957	48.0327251	633500	0	jp_s	1483271	7811		
1201	1445574_at	0.005543	869.23	009110_TMN	900540AVD.1E1K	1.53	065957	48.0327251	633500	0	jp_s	1483271	7811		
1202	1428665_at	0.005543	869.23	009110_TMN	900540AVD.1E1K	1.53	065957	48.0327251	633500	0	jp_s	1483271	7811		
1203	1424094_at	0.00556	860.584531_TMN	721.584531_TMN	NeK9	37uidd26	140.691138	66.066	723500	0	jp_s	1426721	923500		
1204	1426721_s_at	0.005564	639610_TMN	639610_TMN	NeK9	37uidd26	140.691138	66.066	723500	0	jp_s	1426721	923500		

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1295	1433864_at	0.006113	1509.63	1212	Lrp12	AV254798	NM_172814			
1296	1450760_a_at	0.006123	334.93	243.43	Ing3	BB020556	NM_023626			
1297	1426459_s_at	0.006127	2399.8	1937.5		AW549877	BC073457	NM_145930		
1298	1455468_at	0.006143	703.47	502.33		9330164H19R1k	BB768758	NM_178704		
1299	1448635_at	0.006144	333.03	242.77		Smc211	NM_008017	NM_008017		
1300	1460597_at	0.006149	341.57	232.03		Asx12	AV312178	NM_172421		
1301	1457046_s_at	0.006184	183.17	109.97		C77370	BS545241	XM_205178		
1302	1418071_s_at	0.00621	468.23	339.23		Cdyl	AF081260	NM_009881		
1303	1423229_at	0.006225	399.23	311.27		Imp5e	BM217803	NM_033134		
1304	1452341_at	0.006241	1455.37	1322.83		Ech51	BI111416	NM_053119		
1305	1439046_at	0.00625	417.63	347.37		AI851076	AV376983	NM_001012309		
1306	1452675_at	0.006257	706.47	584.43		Rbm22	BB758922	XM_619541		
1307	1420196_s_at	0.006261	2902.93	2120.6		Tbcl1d14	C77429	NM_133910		
1308	1435879_at	0.006263	2277.47	2040.8		Akt3	BB521695	NM_011785		
1309	1428935_at	0.006279	433	313.63		Canx	AI983026	NM_007597		
1310	1424004_x_at	0.006312	803.73	561.17			4930444A02R1k	BC027296	NM_029037	
1311	1429651_at	0.00632	3214.73	2737.7		Phactr3	AV339670	NM_001007154	//// NM_028806	
1312	1445676_at	0.006323	1206.33	628.73		Kcmn2	BB130001	NM_080465		
1313	1416983_s_at	0.006329	668.13	467.83		Foxo1	AI462296	NM_019739		
1314	1416659_at	0.006334	2326.27	2010.27		Eif3s10	AW701127	NM_010123		
1315	1448733_at	0.006334	1313.33	780.43		Pcgf4	M64279	NM_007552		
1316	1451507_at	0.006337	9737.8	8382.9		Meif2c	BB280300	NM_025282		
1317	1437874_s_at	0.006342	4515.8	3147.9		Hexb	AV225808	NM_010422		
1318	1435311_s_at	0.00635	677.07	429.23		Fbxo7	AV327590	NM_153195		
1319	1424280_at	0.006363	633.5	525.57		Mospd1	BC018329	NM_027409		
1320	1452095_a_at	0.006365	637.43	412.77		H47	AK005204	NM_024439		
1321	1452730_at	0.006368	636.73	531.2			1110033J19R1k	AK004068	NM_025405	
1322	1456253_s_at	0.006371	509.3	407.8		Plekhn1	KIh117	BB448454	NM_001008233	/// NM_198305
1323	1436735_at	0.006374	445.6	326.6		Nsun3	BB769111	NM_178925		
1324	1429514_at	0.00639	6845.63	5186.83		Epap2b	AM111876	NM_080555		
1325	1426531_at	0.006393	3240.77	2906.33		Zmynd11	BB832996	NM_144516		
1326	1415941_s_at	0.006402	1305.3	1035.37		Zfand2a	NM_133349	NM_133349		
1327	1451570_a_at	0.006407	3811.37	3080.57			6720467C03R1k	BC020162	NM_145558	
1328	1455538_at	0.006416	5016.87	4004.33			6330403M23R1k	BM200963	---	
1329	1420131_s_at	0.006427	1171.33	928.1		Ptclg1p	AU018448	NM_145925		
1330	1438580_at	0.006436	949.43	702.57			BB018109	---		
1331	1460429_at	0.006439	2356.97	2002		Cdc5l	AK004547	NM_152810		
1332	1448224_at	0.006459	1102.33	860.47		Tfam	NM_009360	NM_009360		
1333	1428279_a_at	0.006461	458.87	315.37		Acxh714	AK013145	NM_028139		
1334	1450973_s_at	0.006462	926.2	663.33		Mapkbp1	BQ174980	NM_011941		

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1335	1431076_at	0.006468	6087.93	4786.9	Add2	BG976853	NM_013458
1336	1424114_s_at	0.006476	259.7	144.07	Larvbl-1	BG970109	NM_008482
1337	1434108_at	0.006479	2173.3	1652.2	Fbrt01	BM250164	XM_110248
1338	1416631_at	0.00648	317.73	236.13	Ap4b1	NM_026193	NM_026193
1339	1435626_a_at	0.006508	1541.27	1065	Harpud1	AI835088	NM_022331
1340	1434173_s_at	0.006515	1674.37	1249.07	D18Bwg1357e	AW324123	NM_177474
1341	1439387_x_at	0.006519	893.13	621.43		2310061F22Rik	BB253397
1342	1415724_a_at	0.00652	3844.17	3161.87	Cdc42	AV000235	NM_009861
1343	1428543_at	0.006521	217.07	147.63	Ppat	AV305746	XM_620209
1344	1418225_at	0.006526	557.23	486.7	Orc21	BB830976	NM_001025378
1345	1444531_at	0.006545	684.9	410.7	Sod2	AI847438	NM_013671
1346	1447905_x_at	0.006548	2701.47	861.4	Naps	BM211104	NM_001003913
1347	1455951_at	0.006561	1105.37	4910578F03Rik		AK016299	XM_485055
1348	1428198_at	0.006569	374.4	300.53	Metap2	AW742814	NM_019648
1349	1434120_a_at	0.006583	3119	2508.1	Epc2	BB034610	NM_172663
1350	1455317_at	0.006615	2618.7	1992.63	Philp	BC024670	XM_129968
1351	1426994_at	0.006618	2402.53	2086.1	Hspalb	M12573	NM_010478
1352	1422541_at	0.006631	958.6	764			
1353	1427126_at	0.006636	207.13	130.83			
1354	1417846_at	0.006637	1469.47	1239.3	Ulk2	NM_013881	NM_013881
1355	1456535_at	0.006638	1216.53	910.27	Vps13c	AV372341	XM_620758
1356	1429389_at	0.006639	476.27	326.27	Setmar	AK017895	NM_178391
1357	1417140_a_at	0.006643	711.8	476.07	Ptgn2	NM_008977	NM_008977
1358	1441815_at	0.006651	1904.4	1469.73	AI851453	AI851453	---
1359	1428448_a_at	0.006657	660.53	471.7	Gtf3c2	AV297256	NM_027901
1360	1453583_at	0.006686	301.73	196.23	Zzef1	AI466222	XM_111053
1361	1423759_a_at	0.006704	2108.77	1683.23	Tmc01	BC020098	NM_026881
1362	1435078_at	0.006712	2868.17	2584.97		3526402J09Rik	BQ173895
1363	1448848_at	0.006714	851.93	663.1	Tor1b	BB004887	NM_133673
1364	1418109_at	0.00672	890.23	607.1	Gsp12	NM_008179	NM_008179
1365	1448958_at	0.00672	538.87	380.73	MG::1929890	NM_022329	NM_022329
1366	1449732_at	0.006739	314.9	242.97	Zip101	AI326372	NM_011757
1367	1460180_at	0.006744	2303.73	1968.77	Hexb	NM_010422	NM_010422
1368	1423046_s_at	0.006745	1472.03	1220.67	Ncbp2	BE285362	NM_026554
1369	1437837_x_at	0.006745	2853.37	1957.03	Poldip3	BB377698	NM_178627
1370	1426484_at	0.006748	400.87	317.87	Ubxk2	AV788596	NM_026390
1371	1424489_a_at	0.006759	424.13	340.07	Tf1l1	BC019812	NM_025873
1372	1423883_at	0.006768	1756.53	1411.83	Acs11	BC006692	NM_007981

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1373	1452147_at	0.006774	1757.8	3218009	3218009	1036269	1189621	1725970	221000	0	18130309	2171	
1374	1459253_at	0.006777	603.4	616120	71.5	3151888	2291755	555559	256	1071	1017000	1171	
1375	1435661_at	0.006786	1115	227120	89.7	6119170	1823214	4448018	66672	5334	3552470	0171	
1376	1423922_s_at	886600	///	6261520	100	78	426288	426288	426288	426288	426288	6071	
1377	1455516_at	0.006812	1876.03	1525	225620	330180	803200	3264	5629	1875	54109	8071	
1378	1456199_x_at	0.006823	2215	1517	891291	146	33	44	21012	36	667130	670700	
1379	1455788_x_at	0.006828	2807.93	141010	78	6615	108	4	78	269	927	5071	
1380	1423302_a_at	0.006841	23715	64.2	3110	78	10	41	10	715	9	5071	
1381	1417644_at	0.006842	340.1	279.3	31800	78	10	41	10	715	9	5071	
1382	1425554_a_at	0.006842	759	412	398600	78	10	41	10	715	9	5071	
1383	1455381_at	0.006842	759	412	398600	78	10	41	10	715	9	5071	
1384	1452285_a_at	313920	6719	54	1000	0	0	0	0	0	0	0	
1385	1416018_at	0.006854	1169.43	646	2423	1000	0	0	0	0	0	0	
1386	1434084_at	0.006862	1220	3388	17	1016	917	7306	11	22	7	667000	
1387	1428493_at	0.006871	410.67	261	100	78	10	41	10	715	9	5071	
1388	1448505_at	0.00689	6715	17	891	291	146	33	44	210	12	670700	
1389	1434456_at	0.006891	2497	3487	812	800	41	500	649	14	40	869000	
1390	1434972_x_at	0.006898	3487	812	800	41	500	649	14	40	869000		
1391	1428277_at	0.006915	1463	1885	101	471	47	40	869000	0	0	5631	
1392	1419460_at	0.006916	790.73	627	870	620	78	10	41	10	715	9	5071
1393	1428724_at	0.006922	450.5	353	86	650	78	10	41	10	715	9	5071
1394	1437526_x_at	0.006953	2182	51	302	110	47	40	869000	0	0	5631	
1395	1435486_at	0.006953	2957	43	31	94	53	61	10	8	2	1689000	
1396	1458268_s_at	0.006978	269	02	98	61	49	55	65	10	8	2	1689000
1397	1428910_at	0.00698	2511	855	020	78	10	41	10	715	9	5071	
1398	1415770_at	0.006987	3259.7	62	12	10	47	40	869000	0	0	5631	
1399	1449718_s_at	0.007009	931.83	719	901	920	78	10	41	10	715	9	5071
1400	1438420_at	0.007009	931.83	719	901	920	78	10	41	10	715	9	5071
1401	1424802_a_at	0.007036	4614.67	3517	959	010	57	9	3	300	001	47	949
1402	1426002_a_at	0.007031	345	250	07	12	7	5	2	0	0	0	0
1403	1418332_a_at	0.007031	345	250	07	12	7	5	2	0	0	0	0
1404	1448253_at	0.007036	4614.67	3517	959	010	57	9	3	300	001	47	949
1405	1416197_at	0.00704	1844	818	810	78	10	41	10	715	9	5071	
1406	1452380_at	0.007069	429	81	78	10	41	10	715	9	5071	0	
1407	1435014_at	0.007079	366	610	78	10	41	10	715	9	5071	0	
1408	1424895_at	0.007081	604	357	78	10	41	10	715	9	5071	0	
1409	1453282_at	0.9488	117	14	55	547	78	10	41	10	715	9	5071
1410	1434196_at	0.007098	600	102	55	78	10	41	10	715	9	5071	
1411	1433473_x_at	0.007101	1140.1	952	6	78	10	41	10	715	9	5071	
1412	1460303_at	0.007122	224	965	27	78	10	41	10	715	9	5071	

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1413	1439399_a	at	0.00669520	MMY42.64550008512.8	KIRLIDITD107032555	-35.538	38.6701	2257.00	0	9589174	2571			
1414	1434132_a	at	0.007131	1651201971	MMN408.3018909054303	38144006	8113E6480640.274	MM_1152570D11.0	0	10786371	1571			
1415	1424993_a	at	0.007132	2108.6	966800	MMN	504801MAYK:1qpaK	E1:3E029	39.3052509	5057.00	0	5057.00		
1416	1423717_a	at	0.007142	2493.1	666610	MMN	010661FY3C92QW4	4E:8E01999	34.9531	3057.00	0	3057.00		
1417	1428313_a	at	0.007148	308.942861	MMN	428432MM	10919494	N4T:52U75	40.261	7847.00	0	7847.00		
1418	1456120_a	at	0.007149	1093.17	727.63	MMN	55661E3EIM20R...	KIRL81E56006EY3P	.202M.6.100563	2847.00	0	2847.00		
1419	1433675_a	at	0.007155	819600	MMN	2529909B	KIRLH3Q177137	952T.1.5.0691	8747.00	0	8747.00			
1420	1423451_a	at	0.007162	11582.43	9626.13	MMN	Pyzmc1	94E42EAV0	---MM9.8227E2.222	8947.00	0	8947.00		
1421	1438096_a	at	0.007176	184520	MMN	10866LBE	127mmAV3062E	37.07MM_023147.748	3074.00	0	3074.00			
1422	1437213_a	at	0.007177	122E400100	MMN	35.6347110KAVudt2.	KIRL1E8000192U	4TEMM_026642.866	1667.00	0	1667.00			
1423	1422881_s	at	0.007209	427921	MMX	947498AV	zva4ypl	163:45E335	154.6281535	//474001.98710	3747			
1424	1417594_a	at	0.007219	159820	MMN	493842EB	KIR2222Jc04063332	3474.01332	47.1391	537.00	0	537.00		
1425	1419612_s	at	0.007221	5250.13	9911301	MMN	882E3E3I94949PPI77.2749	N47:541518	9432.00	0	9432.00			
1426	1455082_a	at	0.007242	750.035400	MMN	354700	MMN7	1622dca3257	//39.104138863	46.5351	6132.00	0	6132.00	
1427	1428080_a	at	0.007246	502241	MMN	4E4748LV	523E94E21	EDWAI7R11E8	7E59C02131E2	568MM_0181E400.0	6371			
1428	145505_a	at	0.007246	271.030600	MMN	87.7.7	444294E8D	4dqqa1840E29	8695MM_145E478172	4627.00	0	4627.00		
1429	1429434_a	at	0.007251	539.33	364.13	MMN	4401030MM	44E58E959	4PQMM.42.6631.191	6827.00	0	6827.00		
1430	1452240_a	at	0.007252	7188.73	8689109	MMN	868510MM	491PQV3276E	7.947MM_133147.4852	5827.00	0	5827.00		
1431	145600_a	at	0.00726	322500	MMN	1009	MMN	127E009X	133147.4852	827.00	0	827.00		
1432	1454926_a	at	0.007268	5089.03	499600	MMN	884924E8G2	8492E	N38:10430	9127.00	0	9127.00		
1433	1455365_a	at	0.007276	0	3421	MMN	67542EAV	KIR112D47450E6733	38:29367	30.6805	8927.00	0	8927.00	
1434	1452880_a	at	0.00728	121E5903E1	MMX	86.2.1284	40AVAN1449E	K41019D1	34.861E00522	5927.00	0	5927.00		
1435	1416440_a	at	0.007285	2581	561E31	MMN	764.3	55947EAVY164	41P un3S98	N4.646598	32.8812	2527.00	0	2527.00
1436	1441079_a	at	0.007289	164.6E800	MMN	64	6924E9E87	1	4041E00E47.781MM_009641.112	9427.00	0	9427.00		
1437	1434892_x	at	0.007293	721E96557	MMN	698	698	4041E00E47.781MM_009641.112	31.493	33.635	1527.00	0	1527.00	
1438	1439630_x	at	0.007319	1535.97	39885E1	MMX	668E4L	dtd	e66p3rd411198	46:184766	31.0525	1227.00	0	1227.00
1439	1417077_a	at	0.007319	0.00	32282	(MMN)	95	2.11E1200832.8	KIRL1V8250192616326	39:869134	35:42E205	2727.00	0	2727.00
1440	1438441_a	at	0.007346	819220	MMN	668E4L	dtd	e66p3rd411198	46:184766	31.0525	1227.00	0	1227.00	
1441	1428113_a	at	0.00735	1631.77	238610	MMN	238610	MMN	140:14474	N38:94951	6127.00	0	6127.00	
1442	1456615_a	at	0.007391	398.3E9920	MMN	17	01104093E11R11	124PMMX0113479.53E4MM_00144.1201	447.00	447.00	0	447.00		
1443	1429281_a	at	0.007403	847.9E1E30	MMN	70.4	056290EAV1	2MAYK	E3H:3E401	N3E:66681	9471.00	0	9471.00	
1444	1454894_a	at	0.007468	322.38420	MMN	..	081451V6	.1	10464	37.9296	37.28511	2917.00	0	2917.00
1445	1434982_a	at	0.007478	1690.5	1256	MMN	431110E4E42MM	E47:4E32	N42:245318	5517.00	0	5517.00		
1446	1437807_x	at	0.007482	390584	MMX	202.4	68474E9B	5118...	KIR021100011E35	.39.424	4713601	6471.00	0	6471.00
1447	1437542_a	at	0.007487	192.07	54E84	MMN	4064103V	E3MWS24	N45:78U248.803	8471.00	0	8471.00		
1448	1455187_a	at	0.007503	1356.43	609541	MMN	6247102E	KIR02X01040E485	16:7841996	9.8012	2317.00	0	2317.00	
1449	1449348_a	at	0.007504	1049.83	835.53	MMN	592E64E8	11E22MM	8.2193C00557E1	248MM_021E1100.0	0	0		
1450	1448210_a	at	0.007504	1049.83	835.53	MMN	592E64E8	11E22MM	8.2193C00557E1	248MM_021E1100.0	0	0		
1451	1436870_s	at	0.007522	1049.83	835.53	MMN	592E64E8	11E22MM	8.2193C00557E1	248MM_021E1100.0	0	0		
1452	1416856_a	at	0.007522	1049.83	835.53	MMN	592E64E8	11E22MM	8.2193C00557E1	248MM_021E1100.0	0	0		

1453	1460292_a_at	0.007524	946061_jx	1662965marcal_551r4dgm	053110_668nm	051_33_3001	416400	0	ta	533251T	261T				
1454	1424104_at	0.007526	1294_6884b7T	mnj002_59291009qy	X03344_2aeaeqm	0261_2_3661	49_4122	668400	0	ta	863624T	161T			
1455	1433519_at	0.007528	198420_jnx	948420gb	kir90K01001904v1	236_4_6_2661nm	171_58_6181	688400	0	ta	393634T	061T			
1456	1433507_a_at	0.007542	7809_8	200984_jnx	52990019y8538p8	carumf_38954_4_764	988400	0	ta	141554T	681T				
1457	1416861_at	0.007548	1594_93	136_081800	mnjtan_081800	mnj84_ssqm	011_4_7_522	1_103	ta	322847T	881T				
1458	1444039_at	0.007555	156_4_74_	548520_jmjB1	548520	mnj9q_wq93	4_7_1611	33_3051	ta	161181T	781T				
1459	1438134_at	0.007563	12530_jnx	144200jv	94w4p1	4_8_2461j7	39_4_60343	998400	0	ta_x	516931T	981T			
1460	1427208_at	0.007584	646_2_542_9	zfp6_1983T	mnjC024_14480mym	1_39317	7_0_248	3_594	ta	606331T	581T				
1461	1428468_at	0.007597	871_706_37	628010	mnj021R11_09608mkk	clm5W5	2_6_26531	1_847	ta	199124T	481T				
1462	1454937_at	0.007609	1408_43	1036_4	0053365m4R1k	139_4_52912	418400	0	ta	1110631T	381T				
1463	1456205_x_at	0.007612	1_832910100	mnj172_441566m4pca	BB559c	cl_3321nm	001_4_3_334T	418400	0	ta	1880531T	281T			
1464	1434310_at	0.007618	6414_457600	mnj700_038021mympr2	4_3229qj7	4_8_6939	308400	0	ta	702984T	181T				
1465	1433615_at	0.007628	189_43	04330_jmj930c	4847148	tdoc9B5211	4_2_6611nm	178_1_1_583T	ta	103324T	081T				
1466	1437525_a_at	0.007631	419010_jnx	063991fb	1_4_11j1k	146_30375	3_3_1_60924	284400	0	ta	944554T	641T			
1467	1431367_at	0.007633	508_03	300_6	1-Max	413561m32	nm_17514_7_252	32_923	ta	1331754T	841T				
1468	1448167_at	0.007645	407_33	258_3	1fngr1	382640m5j11	nm_010_4_3_19	228	ta	84400	0	ta	899534T	441T	
1469	1423998_at	0.007649	306_27	239_551350	mnjcl33_34764m5vc	nm121_7_8_913nm	8_7_69328	474400	0	ta	5_991624T	941T			
1470	1416308_at	0.007662	957_37	707_3	64_310xym	001_kir114790006	2466	015	ta	3_748	324400	0	ta	318234T	541T
1471	1455816_a_at	0.007671	4254_42682T	mnj270_00982288	cl_244q9B3	212_3_3_7_428nm	172_6_5_232T	304400	0	ta	1850954T	441T			
1472	1429454_at	0.007691	3124_4	268_4	4962T	mnjapvc_37682mym1	5_3_3_554	704400	0	ta	851254T	341T			
1473	1452158_at	0.007702	755_604520	mnj97_4_04332mym2389	c_1padqnm	12_4_0_0892	4_7_213	169400	0	ta	454624T	241T			
1474	1456058_at	0.007703	1262_05927	mnj27_33212388	cl_33228_4_7_0_233nm	12_4_3_9524	129400	0	ta	918554T	141T				
1475	1432813_at	0.007723	857_43	510	994600	mnjfl1_994600	mnjkk_48_107_1_1	42_7_55	ta	299400	0	ta	803914T	041T	
1476	1429166_s_at	0.007744	82684T	mnj316_447424200	49444_593110	nm_05311_4_5_632	42_7_903	679400	0	ta	866324T	691T			
1477	1435668_at	0.007748	822_1	613_115010	nm_115010	nm3_1_1_9_003	33_7_04	549400	0	ta	791844T	891T			
1478	1457133_at	0.007765	326_23	252_88154T	nm_1_1_9_003	1_3_6_003	30_805	339400	0	ta	293134T	491T			
1479	1455746_at	0.007782	424_87_jnx	541655gb	1_3_310d	136_4_4_9517	136_4_4_9517	139400	0	ta	525434T	991T			
1480	1423301_at	0.007801	138_68484T	mnj199_5711258	cl_0pb1_kir11242	90066nm_4_131370	37_681	829400	0	ta	519334T	591T			
1481	1448670_at	0.007803	6369_87	195403nm	4_1_9_4m	2_4_8_11208_8_7005nm	009_4_7_419	819400	0	ta	01334T	791T			
1482	1435088_at	0.007814	143_1123600	mnj233_2806558	nm_4511_8_2113nm	001_9_1_5583	215400	0	ta_x	502954T	391T				
1483	1439011_at	0.007817	21354T	nm_192633	kir1ns00039	4_7_901	37_804T	609400	0	ta	436454T	291T			
1484	1424166_at	0.007845	478_456382	jnx_541410k	v80361_kir11203	40011329	43_904	148	ta	894844T	191T				
1485	1433909_at	0.007861	765_3	542_07	41833T	mnj044_5347200	nm_1381	154_432	6_275	2_979	845400	0	ta	802474T	091T
1486	1436915_x_at	0.007866	340110_jnx	414142v	1_01upq	49_4_45171	4_1_402221	395400	0	ta	431834T	651T			
1487	1418119_at	0.00787	1503_33	1191_77	66041	nm_0_1_947	cl_3_41	7_4_951	555400	0	ta	630474T	851T		
1488	1448273_at	0.007873	301_1	225_484110	mnjss_484110	mnj8c_wa3nm	004_3_2_231	36_7651	845400	0	ta	198914T	451T		
1489	1455141_at	0.007886	794_4	56910	mnjhrcc_188355	nm_1_2_2_55	37_987902	8_6084	245400	0	ta	40534T	951T		
1490	1433463_at	0.007889	181_4	66510	mnj392_6683	cl_1v610011	1_3_3_901946	37_383461	825400	0	ta	61534T	551T		
1491	1424358_at	0.007899	2217_67	193_084920	mnjbe2c_3_3_4	cl_1v610011	1_3_3_901946	37_383461	825400	0	ta	61534T	551T		
1492	1452353_at	0.007914	100_3	321350	mnj39_321350	mnjpr151_1_3_88911	145_644346	425400	0	ta	262094T	351T			

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1533	1447936_at	0.008249	1313.23	814.93	2410006H16Rik	AA939619	---
1534	1434320_at	0.008256	974.67	812.4	AV221508	NM_172977	
1535	1460179_at	0.008258	8041.77	6880.6	Dnajal	BF141076	NM_008298
1536	1448835_at	0.008263	719.23	562.93	E2f6	NM_033270	NM_033270
1537	1434037_s_at	0.008278	778.77	598.93	Pcaf	AV034898	NM_020005
1538	1424427_at	0.008292	1107.93	913.97	Tudal1	BC027337	NM_030245
1539	1456135_s_at	0.008297	488.23	307.27	Pxn	BBS30368	NM_011223
1540	1440147_at	0.008315	1295.93	973.17	Tg12	BW118120	NM_144945
1541	1423577_at	0.00832	378.97	314.37	Amkrd32	BE653749	NM_134071
1542	1421923_at	0.008337	443.87	358.07	Sh3bp5	BQ179335	NM_011894
1543	1438157_s_at	0.008339	1268.9	779.57	Nfkbia	BB096843	NM_010907
1544	1423840_at	0.008343	1476.1	1332.4	D11ErtD9e	BC026206	NM_026618
1545	1436157_at	0.008355	1612.6	1130.1	Ccari	AMS38049	NM_026201
1546	1441989_at	0.008358	366.87	228.6	Bnlp2	AI481767	NM_001008238
1547	1424743_at	0.008367	382.33	309.63	2610003706Rik	BC010800	NM_028101
1548	1423350_at	0.008373	2705.43	1625.73	Socs5	AA510713	NM_019654
1549	1455875_x_at	0.008383	7961.03	5086.83	Tmsf2	BB131843	NM_080556
1550	1437071_at	0.008401	3028.03	2156.83	Eif1ay	BB471576	NM_025437
1551	1433571_at	0.008426	855.67	613.23	Serinc5	BQ175260	NM_172588
1552	1434590_at	0.008435	5593.67	4215.73	B230209C24Rik	EM898653	NM_177235
1553	1419100_at	0.008436	1051.57	697.13	Serpina3n	NM_009252	NM_009252
1554	1435116_at	0.008441	139.57	58.83	4933403G14Rik	BB219003	NM_028908
1555	1418128_at	0.00845	739.9	582.3	Adcy6	NM_007405	
1556	1424800_at	0.00845	2812	2231	Ehah	BQ044016	NM_010135
1557	1455827_at	0.008458	5489.9	4739.33	Mbnl2	B8003847	NM_175341
1558	1428512_at	0.00847	3148.17	2479.87	Bhhb9	AK012577	NM_198161
1559	1436534_at	0.008478	1707.27	1271.67	Trove2	BQ176653	NM_013835
1560	1454947_a_at	0.00849	2089.37	1469.43	Ublcp1	BE335796	NM_024475
1561	1433588_at	0.0085	1080.87	886.33	D6msu116e	BN238232	NM_026585
1562	1422511_a_at	0.008502	1210.83	984.5	Ogfr	AM476433	NM_031373
1563	1427965_at	0.008507	2422.1	1218.2	Ssbp1	BG073014	NM_028358
1564	1449059_a_at	0.008509	9278.77	8109.4	Uxct1	NM_024188	NM_024188
1565	1455486_at	0.008509	842.03	646.27	Pias1	BM246045	NM_019663
1566	1452265_at	0.008522	2874.2	2321.17	Claspi	AJ288061	---
1567	1428496_at	0.008533	549.27	340.2	Secisbp2	AA198634	NM_127336
1568	1455956_x_at	0.008535	891.63	649.5	Ccmd2	AV310588	NM_009829
1569	1452061_s_at	0.008538	1419	1192.2	Strbp	AK006314	NM_009261
1570	1454697_at	0.008546	4625.87	3650	Tlloc1	AI226757	NM_027016
1571	1431818_at	0.008547	1223.07	974.17	1700012B15Rik	AK005891	NM_028796
1572	1455686_at	0.008561	924.67	569	BB077342	---	

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1573	1435020	at	0.008572	3929.8	485110. MN	485110. MN	GM 0254.2	2.5224	NM	488800.0	ta	8569171	0191	
1574	1437904	at	0.00858	1310.6	1060.27	MGT:2387367	BB821609	NM 153405	/// NM	4342102	///	4118611	///	
1576	1439999	at	0.00859	1998.5	24050. MN	1998.5	096600	NM	966600	///	4590000	///	9999999	0191
1577	1427231	at	0.008592	421.5	24950. MN	421.5	002467	NM	002467	///	4590000	///	9999999	0191
1578	1459854	s at	0.008597	4975.5	816310. MN	4975.5	002467	NM	002467	///	4590000	///	9999999	0191
1579	1434131	at	0.00861	632.5	699810. MN	632.5	002467	NM	002467	///	4590000	///	9999999	0191
1580	1437476	at	0.008615	660.5	915471. MN	660.5	002467	NM	002467	///	4590000	///	9999999	0191
1581	1428884	at	0.00863	599320. MN	1110. MN	599320. MN	002467	NM	002467	///	4590000	///	9999999	0191
1582	1419914	s at	0.008635	3250.67	2530.2	505500. MN	4388	NM	4388	///	4590000	///	9999999	0191
1583	1434427	at	0.008638	702910. MN	814724. MN	1434427	002467	NM	002467	///	4590000	///	9999999	0191
1584	1415973	at	0.008653	4785.5	140820. MN	4785.5	002467	NM	002467	///	4590000	///	9999999	0191
1585	1434842	s at	0.008657	810600. MN	810600. MN	1434842	002467	NM	002467	///	4590000	///	9999999	0191
1586	1419286	s at	0.00866	415521. MN	156200. MN	1419286	002467	NM	002467	///	4590000	///	9999999	0191
1587	1438412	at	0.008669	117000. MN	56.5	1438412	002467	NM	002467	///	4590000	///	9999999	0191
1588	1427270	at	0.008696	1563110. MN	822.2	1427270	002467	NM	002467	///	4590000	///	9999999	0191
1589	1425092	at	0.008703	1612.5	283120. MN	1612.5	002467	NM	002467	///	4590000	///	9999999	0191
1590	1456653	at	0.008704	48.5	161600. MN	48.5	002467	NM	002467	///	4590000	///	9999999	0191
1591	1432042	at	0.008731	161010. MN	211820. MN	1432042	002467	NM	002467	///	4590000	///	9999999	0191
1592	1416368	at	0.008742	1377.63	1039.5	1416368	002467	NM	002467	///	4590000	///	9999999	0191
1593	1423508	at	0.008748	1140.33	735010. MN	1423508	002467	NM	002467	///	4590000	///	9999999	0191
1594	1438322	x at	0.008755	555120. MN	471100. MN	1438322	002467	NM	002467	///	4590000	///	9999999	0191
1595	1419186	at	0.008758	806241. MN	602560. MN	1419186	002467	NM	002467	///	4590000	///	9999999	0191
1596	1440803	x at	0.008762	239.5	992827. MN	1440803	002467	NM	002467	///	4590000	///	9999999	0191
1597	1428231	at	0.008763	2726.5	688321. MN	1428231	002467	NM	002467	///	4590000	///	9999999	0191
1598	1416610	at	0.008765	3370.07	303211. MN	1416610	002467	NM	002467	///	4590000	///	9999999	0191
1599	1430301	at	0.008777	1240.5	678600. MN	1430301	002467	NM	002467	///	4590000	///	9999999	0191
1600	1448149	at	0.008782	1716.9	625920. MN	1448149	002467	NM	002467	///	4590000	///	9999999	0191
1601	1438853	x at	0.008792	835800. MN	1141945. MN	1438853	002467	NM	002467	///	4590000	///	9999999	0191
1602	1456632	at	0.008794	947921. MN	781942. MN	1456632	002467	NM	002467	///	4590000	///	9999999	0191
1603	1459717	at	0.008815	059030. MN	110850. MN	1459717	002467	NM	002467	///	4590000	///	9999999	0191
1604	1417001	at	0.008825	285520. MN	825300. MN	1417001	002467	NM	002467	///	4590000	///	9999999	0191
1605	1436153	at	0.008829	5237.7	945611. MN	1436153	002467	NM	002467	///	4590000	///	9999999	0191
1606	1423462	at	0.008833	2003.87	455210. MN	1423462	002467	NM	002467	///	4590000	///	9999999	0191
1607	1448939	at	0.008836	546520. MN	315650. MN	1448939	002467	NM	002467	///	4590000	///	9999999	0191
1608	1460549	at	0.00885	543.87	30110. MN	1460549	002467	NM	002467	///	4590000	///	9999999	0191
1609	1420798	s at	0.008872	302210. MN	380110. MN	1420798	002467	NM	002467	///	4590000	///	9999999	0191
1610	1416958	at	0.008957	509811. MN	504511. MN	1416958	002467	NM	002467	///	4590000	///	9999999	0191
1611	1416958	at	0.008957	509811. MN	504511. MN	1416958	002467	NM	002467	///	4590000	///	9999999	0191

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1650	1423132_a_at	0.009381	1387.67	917.4	5730427N09Rik	LOC433230	BE308547	NM_021552	/// XM_484785
1651	1424873_at	0.009382	1539.93	960.3	Rnf2	BC020122	NM_011277		
1652	1424091_at	0.009393	573.5	422.87	ATI49175	BC010277	NM_172754		
1653	1455434_a_at	0.009421	2035.17	1454.9	Kch1	BF162017	NM_008477		
1654	1430474_a_at	0.009465	3060.6	2527.33	Mech2	AK007757	NM_019758		
1655	1417010_at	0.009467	11967.63	10356.67	Zfp238	NM_013915	NM_001012330	/// NM_013915	
1656	1444077_at	0.009472	1429.33	1247.93	---	BE993694	---		
1657	1425480_at	0.009489	1571.27	1456.37	Chot61	BC018506	NM_144910	/// NM_178854	
1658	1439454_x_at	0.009496	2484.13	2060.37	Tm2d2	AV337733	NM_027194		
1659	1448558_a_at	0.009496	111.33	63.47	Pla2g4a	NM_008869	NM_008869		
1660	1438633_x_at	0.009498	3138.23	2185.23	Iasp1	BB377636	NM_010688		
1661	1434416_a_at	0.0095	933.57	759.87	---	BB022975	---		
1662	1437785_at	0.009517	142.93	99.7	Adantcs9	AV364944	XM_620350		
1663	1428483_a_at	0.00952	202.67	146.37	2610039C10R1k	AK012762	NM_025642		
1664	1428588_a_at	0.009531	2611.87	2336.33	Mrp141	BF134369	---		
1665	1436293_x_at	0.009546	4043.03	3718.73	Dftrtd471e	AI852300	---		
1666	1451188_at	0.009548	2989.6	2453.7	Wdr26	BC020044	---		
1667	1451302_at	0.009561	505.47	383.63	1110012L19R1k	BC024574	NM_026787		
1668	1447992_s_at	0.009573	5591.27	4321.33	Pcsk2	AI839700	NM_008792		
1669	1455351_at	0.009577	842.37	642	AU023006	AV340615	---		
1670	1428582_at	0.009595	703.47	583.3	2010208K18R1k	AK008476	NM_028095		
1671	1448100_at	0.009603	4532	3865.27	4833439L19R1k	NM_133797	NM_133797		
1672	1434441_at	0.009617	187.63	142.6	1110018J18R1k	BB525584	NM_025370		
1673	1416207_at	0.009634	873.2	748.97	Taz	NM_133682	NM_181516		
1674	1457936_at	0.009634	2251.13	1901.93	Mapk8	BB184171	NM_016700		
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1682	1417768_at	0.009746	4247.47	3299.97	1200006019R1k	BC019364	NM_026164		
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1686	1454715_at	0.009765	3288.53	2723.87	0710005M24R1k	BB170143	NM_178631		
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1688	1418127_a_at	0.009769	873.8	655.5	Pdcd8	BC003292	NM_012019		
1689	1433664_at	0.009778	1376.33	1109.77	3010021M21R1k	BM202586	NM_180600		

We claim:

1. A method for modifying plasticity or aiding restoration of function in the nervous system of a subject comprising the step of:
administering a plasticity-modifying agent to a subject in need thereof, wherein the agent is administered either alone or in combination with one or more additional agents in an amount effective to modify nervous system plasticity, wherein the plasticity-modifying agent modulates a gene or pathway that is differentially regulated in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition.
2. The method of claim 1, wherein the condition is a neurodevelopmental disorder.
3. The method of claim 2, wherein the neurodevelopmental disorder is selected from the group consisting of autism, Rett Syndrome, Fragile X syndrome, tuberous sclerosis, or autism spectrum disorder.
4. The method of claim 1, wherein the condition is a neuropsychiatry disorder.
5. The method of claim 3, wherein the neuropsychiatry disorder is selected from the group consisting of schizophrenia and bipolar disorder.
6. The method of claim 1, wherein the condition is trauma to the nervous system caused by a condition such as stroke.
7. The method of claim 1, wherein the plasticity-modifying condition comprises dark rearing (DR) or monocular deprivation (MD).
8. The method of claim 1, wherein the plasticity-modifying agent is IGF1 or a modulator of the IGF1 pathway.
9. The method of claim 1, wherein the plasticity-modifying agent is a modulator of the JAK/STAT pathway.
10. The method of claim 1, wherein the plasticity-modifying agent is IFN γ .
11. The method of claim 1, wherein the plasticity-modifying agent is a statin.

12. The method of claim 1, which comprises administering a first agent that activates the IGF1 pathway and a second agent that activates the JAK/STAT pathway.
13. The method of claim 1, wherein the plasticity-modifying agent inhibits development, survival, or activity of parvalbumin expressing interneurons.
14. The method of claim 1, wherein the plasticity-modifying agent inhibits expression or activity of parvalbumin.
15. The method of claim 1, wherein the plasticity-modifying agent is delivered in an amount effective to enhance the capacity of the nervous system, or a portion thereof, to restore lost function in an activity-dependent manner or in response to a second agent.
16. The method of claim 1, wherein the plasticity-modifying agent is administered to a subject who has suffered damage to the nervous system or has been diagnosed with a disorder of the nervous system, and is administered in an amount and for a time effective to promote nervous system recovery, reorganization, or function.
17. The method of claim 1, wherein the step of administering comprises steps of:
 - (1) administering a first plasticity-modifying agent to a subject following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder for a first period of time;
 - (2) administering a second plasticity-modifying agent to the subject for a second period of time, wherein the second period of time is separate from the first period of time.
18. The method of claim 1, wherein the period of time begins within 24 hours following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
19. The method of claim 1, wherein the period of time begins within 1 week following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
20. The method of claim 1, wherein the period of time begins within 4 weeks following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.

21. The method of claim 1, wherein the period of time begins within 6 months following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
22. The method of claim 1, wherein the period of time begins within 1 year following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
23. The method of claim 1, wherein the period of time begins within 2 years following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
24. The method of claim 1, wherein the period of time begins within 5 years following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
25. The method of claim 1, wherein the period of time begins within 10 years following the event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
26. The method of claim 17, wherein the first period of time ends upon response of the subject to the administration of the first plasticity-modifying agent.
27. The method of claim 17, wherein the first period of time ends when the subject has reached at least one desired endpoint or treatment milestone.
28. The method of claim 17, wherein the time between the end of the first period of time and the beginning of the second period of time is at least 1 week.
29. The method of claim 17, wherein the time between the end of the first period of time and the beginning of the second period of time is at least 4 weeks.
30. The method of claim 17, wherein the time between the end of the first period of time and the beginning of the second period of time is at least 6 months.
31. The method of claim 17, wherein the time between the end of the first period of time and the beginning of the second period of time is at least 1 year.

32. The method of claim 17, wherein the time between the end of the first period of time and the beginning of the second period of time is at least 2 years.
33. The method of claim 17, wherein the time between the end of the first period of time and the beginning of the second period of time is at least 5 years.
34. The method of claim 17, wherein the time between the end of the first period of time and the beginning of the second period of time is at least 10 years.
35. The method of claim 17, wherein steps 1-2 are repeated until the subject has reached at least one desired endpoint or treatment milestone.
36. The method of claim 17, wherein the first plasticity-modifying agent is identical to the second plasticity-modifying agent.
37. The method of claim 17, wherein the first plasticity-modifying agent is not identical to the second plasticity-modifying agent.
38. The method of claim 1, wherein the plasticity-modifying agent is administered between 24 hours and 10 years following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
39. The method of claim 1, wherein the plasticity-modifying agent is administered between 1 week and 10 years following a following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
40. The method of claim 1, wherein the plasticity-modifying agent is administered between 4 weeks and 10 years following a following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
41. The method of claim 1, wherein the plasticity-modifying agent is administered between 5 years and 10 years following a following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.
42. The method of claim 1, wherein the plasticity-modifying agent is administered either continuously or intermittently for at least 1 week following an event that damages the brain or spinal cord or following diagnosis of a neuropsychiatric or neurodevelopmental disorder.

43. The method of claim 1, wherein the plasticity-modifying agent is administered systemically.
44. The method of claim 43, wherein the systemic administration is selected from the group consisting of oral, intravenous, intramuscular, subcutaneous, transdermal, nasal, and pulmonary administration.
45. The method of claim 1, wherein the plasticity-modifying agent is administered focally.
46. The method of claim 1, wherein the plasticity-modifying agent is administered by implanting into the subject a drug delivery device that releases the agent over a period of time at or in the vicinity of a desired location in the central or peripheral nervous system.
47. The method of claim 46, wherein the desired location is an area that shows evidence of ischemic, hemorrhagic, neoplastic, degenerative, traumatic, or neurodevelopmental damage in the central or peripheral nervous system, or is located in a brain hemisphere opposite to an area that shows evidence of such damage.
48. The method of claim 46, wherein the drug delivery device comprises a pump.
49. The method of claim 46, wherein the drug delivery device comprises a biocompatible polymer.
50. The method of claim 49, wherein the polymer is biodegradable.
51. The method of claim 1, wherein the composition comprises a plurality of polymeric microparticles or nanoparticles having the plasticity-modifying agent associated therewith.
52. The method of claim 1, wherein the plasticity-modifying agent is delivered in a solution that forms a gel following contact with physiological fluids.
53. The method of claim 1, wherein the plasticity-modifying agent is delivered in an amount effective to inhibit neural deterioration that would otherwise occur as a result of loss of inputs.

54. The method of claim 1, wherein the plasticity-modifying agent is delivered in an amount effective to promote growth or sprouting of axons, promote structural reorganization of synaptic connections, increase formation of new synaptic connections, increase dendritic spine motility, stabilize synaptic connections, or any combination of the foregoing.
55. The method of claim 1, wherein the composition is administered by injecting or infusing it at or in the vicinity of a desired location in the central or peripheral nervous system.
56. The method of claim 1, wherein the composition is administered intrathecally.
57. The method of claim 1, further comprising administering a proteolysis-enhancing agent to the subject.
58. The method of claim 57, wherein the proteolysis-enhancing agent is a protease.
59. The method of claim 57, wherein the proteolysis-enhancing agent is plasmin, a plasminogen activator, or an inhibitor of an endogenous plasminogen activator inhibitor.
60. The method of claim 57, wherein the proteolysis-enhancing agent is tissue plasminogen activator (tPA).
61. The method of claim 57, wherein the proteolysis-enhancing agent promotes degradation of a component of the extracellular matrix.
62. The method of claim 57, wherein the proteolysis-enhancing agent is administered focally.
63. The method of claim 62, wherein focal delivery is achieved by implanting a drug delivery device comprising a biocompatible polymer and the proteolysis-enhancing agent into the nervous system of the subject at or in the vicinity of an area of damage.
64. The method of claim 62, wherein the plasticity-modifying agent and the proteolysis-enhancing agent are administered as components of a single composition.

65. The method of claim 1, further comprising administering an agent selected from the group consisting of neural growth enhancing agents, which are optionally selected from among neurotransmitters or analogs thereof, neurally active growth factors, neural signaling molecules, neurally active small molecules, and neurally active metals.
66. The method of claim 1, further comprising the step of:
engaging the subject in a program of rehabilitation designed to promote functional recovery following damage to the nervous system, wherein the subject is so engaged during at least part of the time interval during which the agent is administered or remains present in the nervous system of the subject.
67. A method for promoting recovery or reorganization in the nervous system of a subject comprising the step of:
administering a plasticity-modifying agent to a subject in need thereof, wherein the agent is administered either alone or in combination with one or more additional agents in an amount effective to promote recovery or reorganization in the nervous system, wherein the plasticity-modifying agent modulates a gene or pathway that is differentially regulated in at least a portion of the nervous system of an individual subjected to a plasticity-modifying condition.
68. The method of claim 61, wherein the plasticity-modifying condition comprises dark rearing (DR) or monocular deprivation (MD).
69. The method of claim 67, wherein the plasticity-modifying agent is a modulator of the IGF1 pathway.
70. The method of claim 67, wherein the plasticity-modifying agent is a modulator of the JAK/STAT pathway.
71. The method of claim 67, wherein the plasticity-modifying agent is IFN γ .
72. The method of claim 67, wherein the plasticity-modifying agent is a statin.
73. The method of claim 67, which comprises administering a first agent that activates the IGF1 pathway and a second agent that modulates the JAK/STAT pathway.

74. The method of claim 67, wherein the plasticity-modifying agent inhibits development, survival, or activity of parvalbumin expressing interneurons.
75. The method of claim 67, wherein the plasticity-modifying agent inhibits expression or activity of parvalbumin.
76. The method of claim 67, wherein the plasticity-modifying agent is delivered in an amount effective to enhance the capacity of the nervous system, or a portion thereof, to restore lost function in an activity-dependent manner or in response to a second agent.
77. The method of claim 67, further comprising administering a proteolysis-enhancing agent to the subject.
78. A method for promoting recovery or reorganization in the nervous system of a subject in need thereof comprising the step of:
 - administering to the subject a proteolysis-enhancing agent and an agent selected from the group consisting of: agents that activate the IGF1 pathway, agents that activate the JAK/STAT pathway, agents that inhibit the development, survival, or activity of parvalbumin expressing interneurons, and agents that inhibit the expression of parvalbumin, wherein the proteolysis-enhancing agent is administered at least 3, 6, 12, 24, or more hours after a specific damaging event or diagnosis of a disorder and optionally also prior to 3 hours after the specific damaging event or diagnosis of a disorder.
79. A drug delivery device for implantation into the nervous system of a subject, the drug delivery device comprising:
 - a biocompatible polymer; and
 - a plasticity-modifying agent, wherein the plasticity-modifying agent is released from the polymer in an amount effective to modify plasticity in the nervous system of the subject.
80. The drug delivery device of claim 79, wherein the biocompatible polymer is biodegradable.
81. The drug delivery device of claim 79, wherein the plasticity-modifying agent is selected from the group consisting of: activators of the IGF1 pathway, modulators of the JAK/STAT pathway, substances that inhibit survival or activity of parvalbumin

expressing interneurons in the brain, and substances that inhibit expression or activity of parvalbumin.

82. The drug delivery device of claim 79, wherein the proteolysis-enhancing agent is selected from the group consisting of: plasmin, a plasminogen activator, or an inhibitor of an endogenous plasminogen activator inhibitor.
83. A composition comprising a plasticity-modifying agent and a proteolysis-enhancing agent.
84. The composition of claim 83, wherein the plasticity-modifying agent is selected from the group consisting of: activators of the IGF1 pathway, activators of the JAK/STAT pathway, substances that inhibit survival or activity of parvalbumin expressing interneurons in the brain, and substances that inhibit expression or activity of parvalbumin.
85. The composition of claim 83, wherein the proteolysis-enhancing agent is selected from the group consisting of: tissue plasminogen activator, plasmin, and inhibitors of tissue plasminogen activator.
86. A method of identifying a gene involved in plasticity comprising steps of:
 - evaluating an individual in or subjecting an individual to a condition that modifies nervous system plasticity;
 - measuring level or activity of each of a plurality of genes in at least a portion of the individual's nervous system; and
 - identifying one or more genes whose expression or activity is differentially regulated in the portion of the individual's nervous system relative to its expression or activity under alternative conditions.
87. The method of claim 86, wherein the condition comprises depriving at least a portion of the individual's nervous system of normal inputs.
88. The method of claim 86, wherein the nervous system is deprived of normal inputs during at least a portion of a critical period.
89. The method of claim 86, wherein the level of expression of each of a plurality of genes is measured by measuring levels of multiple different mRNAs with a microarray.

90. The method of claim 86, wherein the step of identifying is performed using a method that evaluates expression or activity in a highly parallel manner.
91. The method of claim 86, which comprises comparing the expression or activity of each of a plurality of genes in at least a portion of the individual's nervous system with the expression or activity of those genes in a subject maintained under normal conditions.
92. The method of claim 86, which comprises comparing the expression or activity of each of a plurality of genes in at least a portion of the individual's nervous system under a first deprived condition with the expression or activity of those genes in a subject maintained under a second deprived condition.
93. The method of claim 86, which comprises comparing the expression or activity of each of a plurality of genes in at least a portion of the nervous system of an individual who has been subjected to a deprived condition with the expression or activity of those genes in an individual maintained under an enriched condition.
94. The method of claim 86, which comprises comparing the expression or activity of each of a plurality of genes in at least a portion of the individual's nervous system that has been subjected to a plasticity-modifying condition with the expression or activity of those genes in an oppositely located portion of the individual's nervous system not subjected to a plasticity-modifying condition.
95. The method of claim 86, which comprises comparing the expression or activity of each of a plurality of genes in a portion of the individual's nervous system that has been subjected to a deprived condition with the expression or activity of those genes in an oppositely located portion of the individual's nervous system that has not been subjected to a deprived condition.
96. The method of claim 86, further comprising identifying a biological pathway or process enriched in genes that are differentially regulated in at least a portion of the nervous system of the individual.
97. The method of claim 86, further comprising storing information identifying at least one of the genes on a computer readable medium.

98. The method of claim 86, further comprising;
administering an agent that modulates the gene to an individual; and
determining whether the agent modifies plasticity.
99. The method of claim 86, further comprising:
administering an agent that modulates the gene to an individual who has
suffered nervous system damage; and
determining whether the agent improves structural or functional recovery of the
individual's nervous system.
100. A computer readable medium that stores information that identifies a set of genes
whose expression or activity is differentially regulated in an individual subjected to a
condition that modifies plasticity.
101. The computer readable medium of claim 78, wherein the computer readable medium
further stores information that includes the absolute or relative level of expression or
activity of the gene under the condition.

Fig. 1

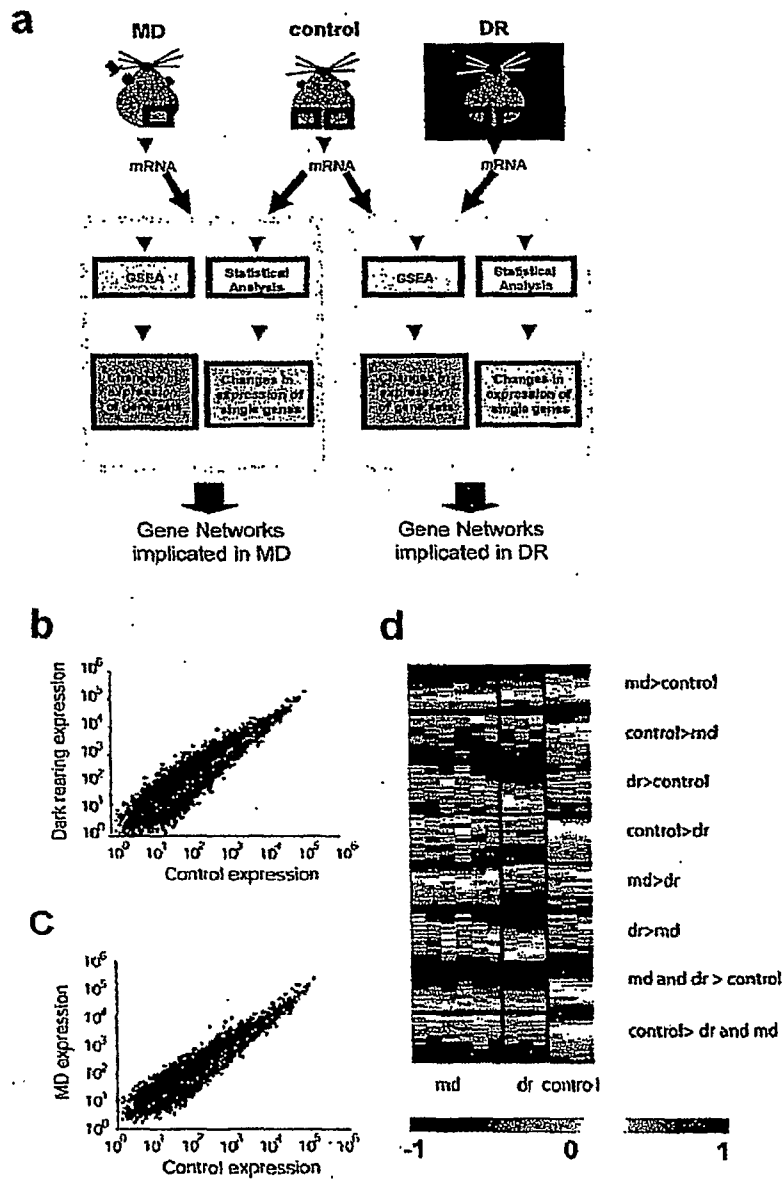


Fig. 2.

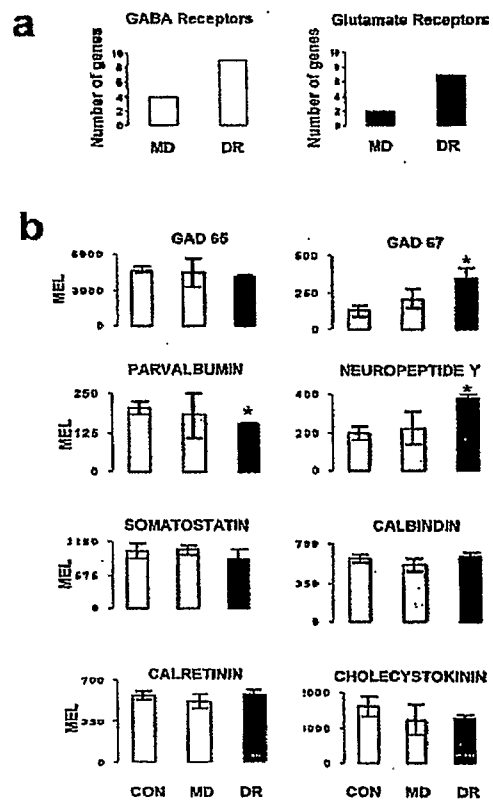


Fig. 3

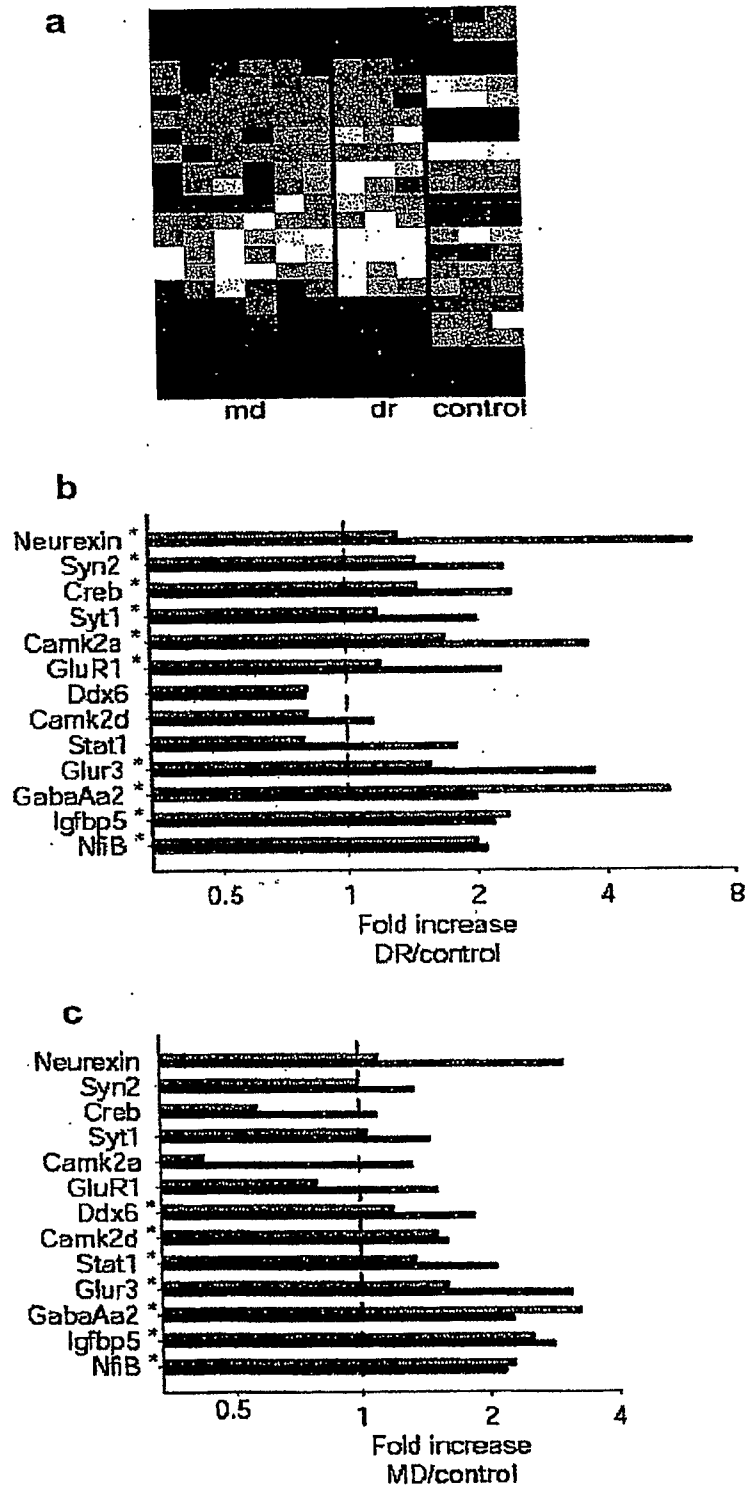


Fig. 4

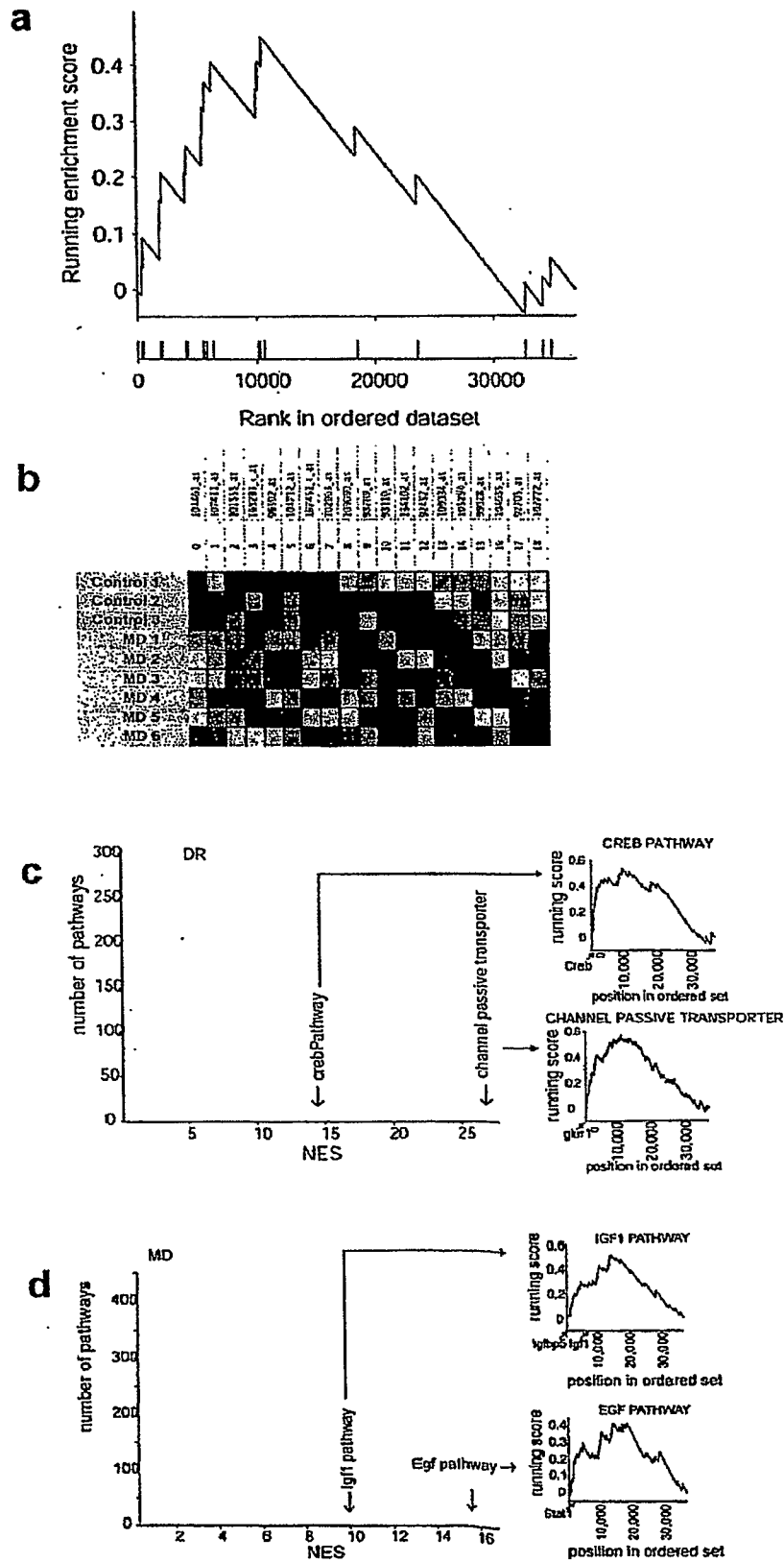


Fig. 5

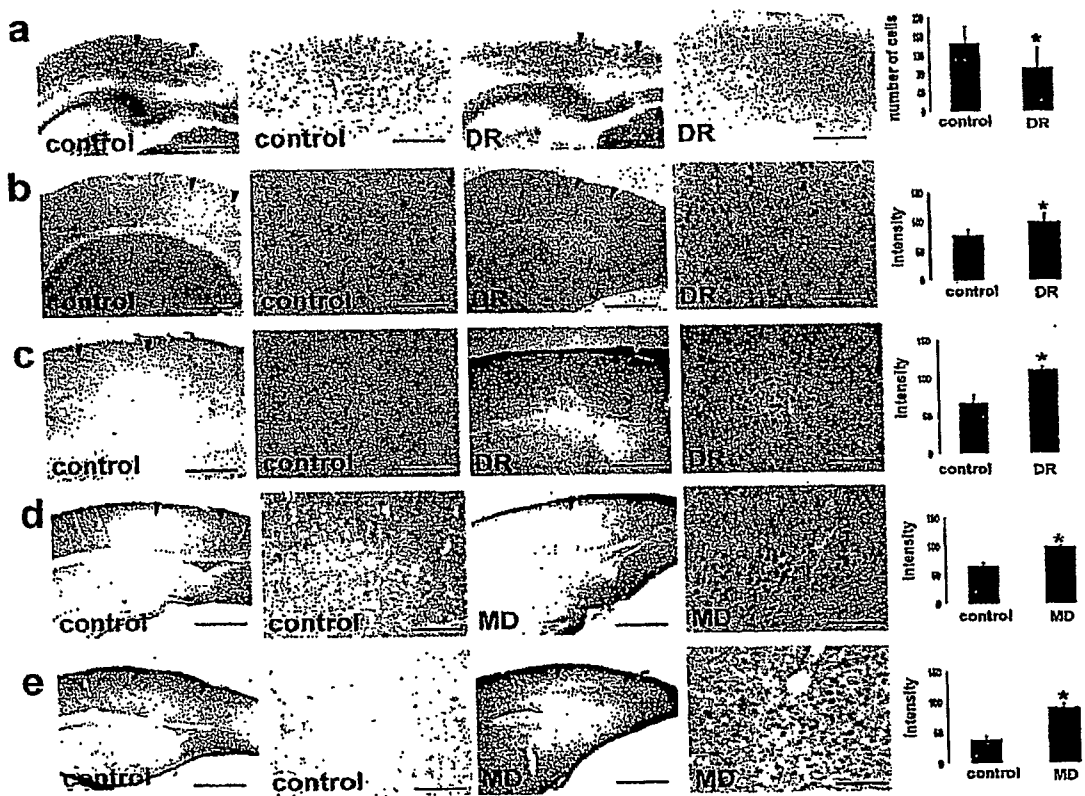


Fig. 6

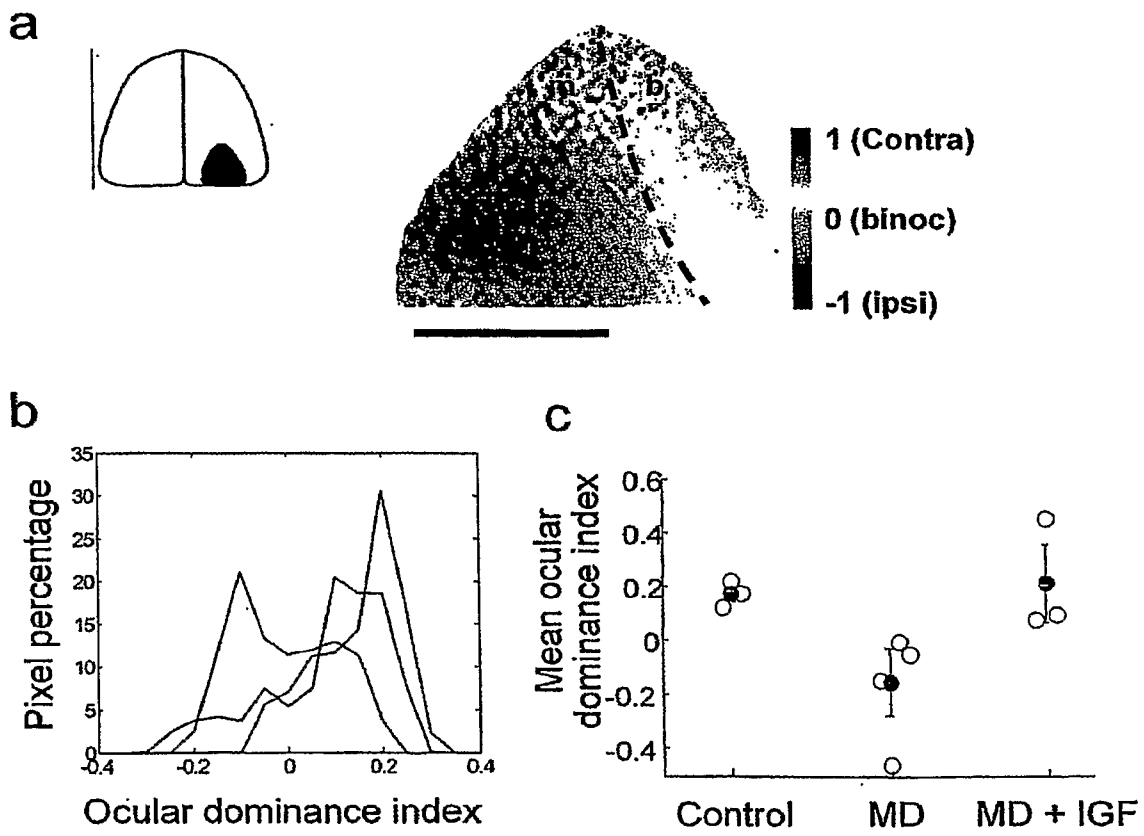


Fig. 7

