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(71) Applicant(s)
The Scripps Research Institute;Syngenta Participations AG

(72) Inventor(s)
Harper, Jeffrey F.;Wang, Xun;Zhu, Tong;Kreps, Joel

(74) Agent / Attorney
Freehills Patent & Trade Mark Attorneys, GPO Box 128, Melbourne, VIC, 3000

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(71) Applicants *(for all designated States except US)*: **THE SCRIPPS RESEARCH INSTITUTE** [US/US]; 10550 North Torrey Pines Road, La Jolla, CA 92037 (US). **SYNGENTA PARTICIPATIONS AG** [CH/CH]; Schwarzwaldallee 215, CH-4058 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **HARPER, Jeffrey, F.** [US/US]; 2825 Camino del Mar, Apt. 64, Del Mar, CA 92014 (US). **KREPS, Joel** [US/US]; 2582 Luciernaga Street, Carlsbad, CA 92009 (US). **WANG, Xun** [CN/US]; 12524 Caminito Vista Soledad, San Diego, CA 92130 (US). **ZHU, Tong** [CN/US]; 5260 Caminito Exquisito, San Diego, CA 92130 (US).

(74) Agent: **HAILE, Lisa, A.**; Gray Cary Ware & Friedenrich LLP, Suite 1100, 4365 Executive Drive, San Diego, CA 92121-2133 (US).

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(54) Title: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING SAME, AND METHODS OF USE

(57) Abstract: The present invention relates to clusters of plant genes that areregulated in response to one or more stress conditions. The present invention also relates to isolated plant stress-regulated genes, including portions thereof comprising a coding sequence or a regulatory element, and to consensus sequences comprising a plant stress-regulated regulatory element. In addition, the invention relates to a recombinant polynucleotide, which includes a plant stress-regulated gene, or functional portion thereof, operatively linked to a heterologous mucleotide sequence. The invention further relates to a transgenic plant, which contains a plant stress-regulated gene or functional portion thereof that was introduced into a progenitor cell of the plant. In addition, the invention relates to methods of using a plant stress-regulated gene to confer upon a plant a selective advantage to a stress condition. The invention also relates to a method of identifying an agent that modulates the activity of a plant stress-regulated regulatory element.

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STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING SAME, AND METHODS OF USE

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates generally to plant genes, the expression of which are regulated in response to stress, and more specifically to the gene regulatory elements involved in a stress-induced response in plants, to uses of the coding sequences and regulatory elements of such plant stress-regulated genes, and to transgenic plants genetically modified to express such a coding sequence or to express a heterologous polynucleotide from such a regulatory element.

BACKGROUND INFORMATION

Microarray technology is a powerful tool that can be used to identify the presence and level of expression of a large number of polynucleotides in a single assay. A microarray is formed by linking a large number of discrete polynucleotide sequences, for example, a population of polynucleotides representative of a genome of an organism, to a solid support such as a microchip, glass slide, or the like, in a defined pattern. By contacting the microarray with a nucleic acid sample obtained from a cell of interest, and detecting those polynucleotides expressed in the cell can hybridize specifically to complementary sequences on the chip, the pattern formed by the hybridizing polynucleotides allows the identification of clusters of genes that are expressed in the cell. Furthermore, where each polynucleotide linked to the solid support is known, the identity of the hybridizing sequences from the nucleic acid sample can be identified.

A strength of microarray technology is that it allows the identification of differential gene expression simply by comparing patterns of hybridization. For example, by comparing the hybridization pattern of nucleic acid molecules obtained from cells of an individual suffering from a disease with the nucleic acids obtained from the corresponding cells of a healthy individual, genes that are differentially expressed can be identified. The identification of such differentially expressed genes

provides a means to identify new genes, and can provide insight as to the etiology of a disease.

Microarray technology has been widely used to identify patterns of gene expression associated with particular stages of development or of disease conditions in animal model systems, and is being applied to the identification of specific patterns of gene expression in humans. The recent availability of information for the genomes of plants provides a means to adapt microarray technology to the study of plant gene expression.

Plants and plant products provide the primary sustenance, either directly or indirectly, for all animal life, including humans. For the majority of the world's human population and for many animals, plants and plant products provide the sole source of nutrition. As the world population increases, the best hope to prevent widespread famine is to increase the quantity and improve the quality of food crops, and to make the crops available to the regions of the world most in need of food.

Throughout history, a continual effort has been made to increase the yield and nutritious value of food crops. For centuries, plants having desirable characteristics such as greater resistance to drought conditions or increased size of fruit were crossbred and progeny plants exhibiting the desired characteristics were selected and used to produce seed or cuttings for propagation. Using such classical genetic methods, plants having, for example, greater disease resistance, increased yield, and better flavor have been obtained. The identification of plant genes involved in conferring a selective advantage on the plant to an environmental challenge would facilitate the generation and yield of plants, thereby increasing the available food supply to an increasing world population. The involvement of these genes in a single organism to responses to multiple stress conditions, however, remains unknown. Thus, a need exists to identify plant genes and polynucleotides that are involved in modulating the response of a plant to changing environmental conditions. The present invention satisfies this need and provides additional advantages.

SUMMARY OF THE INVENTION

The present invention relates to clusters of genes that are regulated in response to a stress condition in plants. Such clusters include, for example, plant polynucleotides

whose expression is altered in response to two or more different stress conditions; and plant polynucleotides the expression of which are altered in response to one stress condition, but not to others. The identification of such clusters, using microarray technology, has allowed the identification of plant stress-regulated genes in *Arabidopsis thaliana* (see Tables 1 and 2); and homologs and orthologs thereof in other plant species (see Table 32). Thus, the invention provides isolated polynucleotide portions of *Arabidopsis* plant stress-regulated genes, and homologs and orthologs thereof; variants of such sequences, and polynucleotides encoding substantially similar plant stress-regulated polypeptides expressed therefrom. Such sequences include, for example, sequences encoding transcription factors; enzymes, including kinases; and structural proteins, including channel proteins (see Tables 29-31). Accordingly, the present invention also relates to an isolated polynucleotide comprising all or a portion of a plant stress-regulated gene, and to polynucleotide portions thereof, including a coding region (open reading frame), which encodes all or a portion of a stress-regulated polypeptide, for example, as set forth in SEQ ID NOS:1-2703; and a regulatory element involved in regulating the response of the plant to a stress condition such exposure to an abnormal level of salt, osmotic pressure, temperature or any combination thereof, for example, as set forth in SEQ ID NOS:2704-5379.

The present invention also relates to a recombinant polynucleotide, which contains a nucleotide sequence of a plant stress-regulated gene or functional portion thereof operatively linked to a heterologous nucleotide sequence. In one embodiment, the recombinant polynucleotide comprises a plant stress-regulated gene regulatory element operatively linked to a heterologous nucleotide sequence, which is not regulated by the regulatory element in a naturally occurring plant. The heterologous nucleotide sequence, when expressed from the regulatory element, can confer a desirable phenotype to a plant cell containing the recombinant polynucleotide. In another embodiment, the recombinant polynucleotide comprises a coding region, or portion thereof, of a plant stress-regulated gene operatively linked to a heterologous promoter. The heterologous promoter provides a means to express an encoded stress-regulated polypeptide constitutively, or in a tissue-specific or phase-specific manner.

Accordingly, in one aspect, the present invention provides an isolated polynucleotide comprising a nucleotide sequence of a plant gene that hybridizes under

stringent conditions, preferably high stringency conditions, to any one of SEQ ID NOS:1-5379 (see Tables 1 and 2), including to a coding region (SEQ ID NOS:1-2703) or a regulatory region, which can alter transcription of an operatively linked nucleic acid sequence in response to an abiotic stress (SEQ ID NOS:2704-5379; see Table 2), or to a complement thereof. Additional aspects provide sequences that hybridize under stringent conditions, preferably high stringency conditions, to the complements of SEQ ID NO 1-1261 (cold responsive genes; Tables 3-6), SEQ ID NOS:2227-2427 (saline responsive genes; Tables 7-10), SEQ ID NOS:2428-2585 (osmotic responsive genes; Tables 11-14), SEQ ID NOS:1699-1969 (cold and osmotic responsive genes; Tables 15-17), SEQ ID NOS:1970-2226 (cold and saline responsive genes; Tables 18-20), SEQ ID NOS:2586-2703 (osmotic and saline responsive genes; Tables 21-23), and SEQ ID NOS:1262-1698(cold, osmotic and saline responsive genes; Tables 24-26), and which can comprise regulatory regions that can alter transcription in response to cold stress, osmotic stress, saline stress, or combinations thereof (SEQ ID NOS:2704-5379; see Table 2). Also provided are nucleotide sequences complementary thereto, and expression cassettes, plants and seeds comprising any of the above isolated sequences.

In another aspect, the present invention provides an isolated polynucleotide comprising a plant nucleotide sequence that hybridizes under stringent conditions, preferably high stringency conditions, to the complement of any one of SEQ ID NOS:1-2703 (Table 1), including to a coding region thereof (SEQ ID NOS:2704-5379), wherein expression of said coding region is altered in response to an abiotic stress. Additional aspects provide sequences that hybridize under high stringency conditions to the complements of SEQ ID NO 1-1261 (cold responsive genes; Tables 3-6), SEQ ID NOS:2227-2427 (saline responsive genes; Tables 7-10), SEQ ID NOS:2428-2585 (osmotic responsive genes; Tables 11-14), SEQ ID NOS:1699-1969 (cold and osmotic responsive genes; Tables 15-17), SEQ ID NOS:1970-2226 (cold and saline responsive genes; Tables 18-20), SEQ ID NOS:2586-2703 (osmotic and saline responsive genes; Tables 21-23), and SEQ ID NOS:1262-1698(cold, osmotic and saline responsive genes; Tables 24-26), and which can comprise a coding region whose transcription is altered in response to cold stress, osmotic stress, saline stress, or a combination thereof. Also provided are nucleotide

sequences complementary thereto, and expression cassettes, plants and seeds comprising any of the above sequences.

The invention further relates to a method of producing a transgenic plant, which comprises at least one plant cell that exhibits altered responsiveness to a stress condition. In one embodiment, the method can be performed by introducing a polynucleotide portion of plant stress-regulated gene into a plant cell genome, whereby the polynucleotide portion of the plant stress-regulated gene modulates a response of the plant cell to a stress condition.

The polynucleotide portion of the plant stress-regulated gene can encode a stress-regulated polypeptide or functional peptide portion thereof (see SEQ ID NOS:1-2703), wherein expression of the stress-regulated polypeptide or functional peptide portion thereof either increases the stress tolerance of the transgenic plant, or decreases the stress tolerance of the transgenic plant. The polynucleotide portion of the plant stress-regulated gene encoding the stress-regulated polypeptide or functional peptide portion thereof can be operatively linked to a heterologous promoter. The polynucleotide portion of the plant stress-regulated gene also can comprise a stress-regulated gene regulatory element (see SEQ ID NOS:2704-5379). The stress-regulated gene regulatory element can integrate into the plant cell genome in a site-specific manner, whereupon it can be operatively linked to a heterologous nucleotide sequence, which can be expressed in response to a stress condition specific for the regulatory element; or can be a mutant regulatory element, which is not responsive to the stress condition, whereby upon integrating into the plant cell genome, the mutant regulatory element disrupts an endogenous stress-regulated regulatory element of a plant stress-regulated gene, thereby altering the responsiveness of the plant stress-regulated gene to the stress condition.

In one aspect, the invention provides a method for producing a transgenic plant by introducing into at least one plant cell a recombinant nucleic acid construct comprising i) all or a portion of any one of SEQ ID NOS:1-5379; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to all or a portion of the complement of any one of SEQ ID NOS:1-2703; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to abiotic stress, and that hybridizes under conditions of

high stringency to the complement of any one of SEQ ID NOS:2704-5379; iv) a polynucleotide having at least 90% sequence identity with any one of SEQ ID NO:1-5379; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the sequences of iv), wherein the fragment comprises a nucleotide sequence that alters transcription of an operatively linked coding region in response to abiotic stress; and regenerating a plant from the at least one plant cell.

Another aspect provides a method for producing a transgenic plant comprising introducing into at least one plant cell a recombinant nucleic acid construct comprising i) any one of SEQ ID NOS:1-1261 or 2704-3955; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:1-1261; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to cold stress that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:2704-3955; iv) a polynucleotide that has at least 90% sequence identity with any one of SEQ ID NOS:1-1261 or 2704-3955; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the sequences of iv) wherein the fragment comprises a sequence or region that alters transcription of an operatively linked coding region in response to cold stress; and regenerating a plant from the at least one plant cell.

In another aspect, the invention provides a method for producing a transgenic plant by introducing into at least one plant cell a recombinant nucleic acid construct comprising i) any one of SEQ ID NOS:2428-2585 or 5108-5263; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:2428-2585; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to osmotic stress that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:5108-5263; iv) a polynucleotide that has at least 90% sequence identity with any one of SEQ ID NOS:2428-2585 or 5108-5263; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the

sequences of iv), wherein the fragment comprises a sequence or region that alters transcription of an operatively linked coding region in response to osmotic stress; and regenerating a plant from the at least one plant cell.

Still another aspect provides a method for producing a transgenic plant comprising introducing into at least one plant cell a recombinant nucleic acid construct comprising i) any one of SEQ ID NOS:2227-2427 or 4910-5107; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:2227-2427; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to saline stress that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:2227-2427; iv) a polynucleotide that has at least 90% sequence identity with any one of SEQ ID NOS:4910-5107; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the sequences of iv) wherein the fragment comprises a sequence or region that alters transcription of an operatively linked coding region in response to saline stress; and regenerating a plant from the at least one plant cell.

Yet another aspect provides a method for producing a transgenic plant comprising introducing into at least one plant cell a recombinant nucleic acid construct comprising i) any one of SEQ ID NOS:1699-1969 or 4389-4654; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:1699-1969; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to a combination of cold and osmotic stress that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:4389-4654; iv) a polynucleotide that has at least 90% sequence identity with any one of SEQ ID NOS:1699-1969 or 4389-4654; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the sequences of iv), wherein the fragment comprises a sequence or region that alters transcription of an operatively linked coding region in response to a combination of cold and osmotic stress; and regenerating a plant from the at least one plant cell.

Yet another aspect provides a method for producing a transgenic plant comprising introducing into at least one plant cell a recombinant nucleic acid construct comprising i) any one of SEQ ID NOS:1970-2226 or 4655-4909; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:1970-2226; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to a combination of cold and saline stress that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:4655-4909; iv) a polynucleotide that has at least 90% sequence identity with any one of SEQ ID NOS:1970-2226 or 4655-4909; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the sequences of iv), wherein the fragment comprises a sequence or region that alters transcription of an operatively linked coding region in response to a combination of cold and saline stress; and regenerating a plant from the at least one plant cell.

A further aspect provides a method for producing a transgenic plant comprising introducing into at least one plant cell a recombinant nucleic acid construct comprising i) any one of SEQ ID NOS:2586-2703 or 5264-5379; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:2586-2703; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to a combination of osmotic and saline stress that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS: 5264-5379; iv) a polynucleotide that has at least 90% sequence identity with any one of SEQ ID NOS:2586-2703 or 5264-5379; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the sequences of iv), wherein the fragment comprises a sequence or region that alters transcription of an operatively linked coding region in response to a combination of osmotic and saline stress; and regenerating a plant from the at least one plant cell.

Another aspect provides a method for producing a transgenic plant comprising introducing into at least one plant cell a recombinant nucleic acid construct

comprising i) any one of SEQ ID NOS:1262-1698 or 3956-4388; ii) a polynucleotide comprising a coding region that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:1262-1698; iii) a polynucleotide comprising a sequence that alters transcription of an operatively linked coding region in response to a combination of cold, osmotic and saline stress that hybridizes under conditions of high stringency to the complement of any one of SEQ ID NOS:3956-4388; iv) a polynucleotide that has at least 90% sequence identity with any one of SEQ ID NOS:1262-1698 or 3956-4388; v) a fragment of any one of the sequences of iv), wherein the fragment comprises a coding region; or vi) a fragment of any one of the sequences of iv) wherein the fragment comprises a sequence or region that alters transcription of an operatively linked coding region in response to a combination of cold, osmotic and saline stress; and regenerating a plant from the at least one plant cell. Further aspects include plants and uniform populations of plants made by the above methods as well as seeds and progeny from such plants.

In another embodiment, a transgene introduced into a plant cell according to a method of the invention can encode a polypeptide that regulates expression from an endogenous plant stress-regulated gene. Such a polypeptide can be, for example, a recombinantly produced polypeptide comprising a zinc finger domain, which is specific for the regulatory element, and an effector domain, which can be a repressor domain or an activator domain. The polynucleotide encoding the recombinant polypeptide can be operatively linked to and expressed from a constitutively active, inducible or tissue specific or phase specific regulatory element. Expression of the recombinant polypeptide from a plant stress-regulated promoter as disclosed herein can be particularly advantageous in that the polypeptide can be coordinately expressed with the endogenous plant stress-regulated genes upon exposure to a stress condition. The invention also provides transgenic plants produced by a method as disclosed, as well as to a plant cell obtained from such transgenic plant, wherein said plant cell exhibits altered responsiveness to the stress condition; a seed produced by the transgenic plant; and a cDNA or genomic DNA library prepared from the transgenic plant, or from a plant cell from said transgenic plant, wherein said plant cell exhibits altered responsiveness to the stress condition.

In one aspect, the invention provides an isolated nucleic acid molecule comprising a nucleotide sequence substantially similar to a sequence of any one of SEQ ID NOS:2704-5379, which can alter transcription of an operatively linked polynucleotide in a plant cell in response to an abiotic stress. Additional aspects of the invention provide isolated polynucleotides, including, for example, sequences substantially similar to any of SEQ ID NOS:2704-3955, which can alter transcription of an operatively linked polynucleotide in response to a cold stress; isolated polynucleotides substantially similar to a sequence of any of SEQ ID NOS:5108-5263, which can alter transcription of an operatively linked polynucleotide in response to an osmotic stress; isolated polynucleotides substantially similar to a sequence of any of SEQ ID NOS:4910-5107, which can alter transcription of an operatively linked polynucleotide in response to a saline stress; isolated polynucleotides substantially similar to a sequence of any of SEQ ID NOS:4389-4654, which can alter transcription of an operatively linked polynucleotide in response to a combination of cold and osmotic stresses; isolated polynucleotides substantially similar to a sequence of any of SEQ ID NOS:4655-4909, which can alter transcription of an operatively linked polynucleotide in response to a combination of cold and saline stresses; isolated polynucleotides substantially similar to a sequence of any of SEQ ID NOS:5264-5379, which can alter transcription of an operatively linked polynucleotide in response to a combination of osmotic and saline stresses; and isolated polynucleotides substantially similar to a sequence of any of SEQ ID NOS:3956-4388, which can alter transcription of an operatively linked polynucleotide in response to a combination of cold, osmotic and saline stresses.

Related aspects of the invention provide an isolated nucleotide sequences that can alter transcription of an operatively linked polynucleotide in response to an abiotic stress, and that hybridize under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:2704-5379. Additional aspects provide an isolated nucleotide sequence that can alter transcription of an operatively linked polynucleotide in response to cold stress, and that hybridizes under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:2704-3955; a nucleotide sequence that alters transcription of an operatively linked polynucleotide in response to osmotic stress, and that

hybridizes under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:5108-5263; a nucleotide sequence that alters transcription of an operatively linked polynucleotide in response to saline stress, and that hybridizes under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:4910-5107; a nucleotide sequence that alters transcription of an operatively linked polynucleotide in response to a combination of cold and osmotic stress, and that hybridizes under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:4389-4654; a nucleotide sequence that alters transcription of an operatively linked polynucleotide in response to a combination of cold and saline stress, and that hybridizes under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:4655-4909; a nucleotide sequence that alters transcription of an operatively linked polynucleotide in response to an combination of osmotic and saline stress, and that hybridizes under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:5264-5379; and a nucleotide sequence that alters transcription of an operatively linked polynucleotide in response to a combination of cold, osmotic and saline stress, and that hybridizes under stringent conditions, preferably highly stringent conditions, to the complement of any one of SEQ ID NOS:3956-4388.

Further aspects provide an expression cassette comprising as operatively linked components any of the above isolated nucleic acid sequences that alter transcription, a coding region, and a termination sequence. Also provided are host cells and seeds comprising such expression cassettes, plants containing such host cells and seeds and progeny of plants containing said host cells. In related aspects, the coding region of the expression cassettes comprise sequences encoding marker proteins and sequences involved in gene silencing such as antisense sequences, double stranded RNAi sequences, a triplexing agent, and sequences comprising dominant negative mutations. In additional related aspects, the coding regions comprise sequences encoding polypeptides that alter the response of a plant to an abiotic stress.

The present invention also relates to a method of modulating the responsiveness of a plant cell to a stress condition. Such a method can be performed, for example, by introducing a polynucleotide portion of a plant stress-regulated genes

described herein into the plant cell, thereby modulating the responsiveness of the plant cell to a stress condition. Such a method can result in the responsiveness of the plant cell being increased upon exposure to the stress condition, which, in turn, can result in increased or decreased tolerance of the plant cell to a stress condition; or can result in the responsiveness of the plant cell to the stress condition being decreased, which, in turn, can result in increased or decreased tolerance of the plant cell to a stress condition. In one embodiment, the polynucleotide portion of the plant stress-regulated gene can integrate into the genome of the plant cell, thereby modulating the responsiveness of the plant cell to the stress condition. In another embodiment, the polynucleotide portion of the plant stress-regulated gene encodes a stress-regulated polypeptide or functional peptide portion thereof, and can be operatively linked to a heterologous promoter. The polynucleotide portion of the plant stress-regulated gene also can contain a mutation, whereby upon integrating into the plant cell genome, the polynucleotide disrupts (knocks-out) an endogenous plant stress-regulated sequence, thereby modulating the responsiveness of the plant cell to the stress condition. Depending on whether the knocked-out gene encodes an adaptive or a maladaptive stress-regulated polypeptide, the responsiveness of the plant will be modulated accordingly. In still another embodiment, the polynucleotide portion of the plant stress-regulated gene can comprise a stress-regulated regulatory element, which can be operatively linked to a heterologous nucleotide sequence, the expression of which can modulate the responsiveness of the plant cell to a stress condition. Such a heterologous nucleotide sequence can encode, for example, a stress-inducible transcription factor such as DREB1A. The heterologous nucleotide sequence also can encode a polynucleotide that is specific for a plant stress-regulated gene, for example, an antisense molecule, an RNAi molecule, a ribozyme, and a triplexing agent, any of which, upon expression in the plant cell, reduces or inhibits expression of a stress-regulated polypeptide encoded by the gene, thereby modulating the responsiveness of the plant cell to a stress condition, for example, an abnormal level of cold, osmotic pressure, and salinity. Accordingly, the invention also relates to a plant cell obtained by such a method, and to a plant comprising such a plant cell.

The present invention also relates to a method of expressing a heterologous nucleotide sequence in a plant cell. Such a method can be performed, for example, by

introducing into the plant cell a plant stress-regulated regulatory element operatively linked to the heterologous nucleotide sequence, whereby, upon exposure of the plant cell to a stress condition, the heterologous nucleotide sequence is expressed in the plant cell. In a preferred embodiment, the stress regulated element is any of the sequences described herein that are capable of altering transcription of an operatively linked sequence in response to an abiotic stress, for example, SEQ ID NOS:2704-5379. The heterologous nucleotide sequence can encode a selectable marker, a diagnostic marker, or a polypeptide that confers a desirable trait upon the plant cell, for example, a polypeptide that improves the nutritional value, digestibility or ornamental value of the plant cell, or a plant comprising the plant cell.

The present invention further relates to a method of modulating the activity of a biological pathway in a plant cell, wherein the pathway involves a stress-regulated polypeptide or a non-protein regulatory molecule. Such a method can be performed by introducing a polynucleotide portion of a plant stress-regulated gene, or a polynucleotide derived therefrom, for example a ribozyme derived from a nucleotide sequence as set forth in any of SEQ ID NOS:1-2703, into the plant cell, thereby modulating the activity of the biological pathway. The method can be performed with respect to a pathway involving any of the stress-regulated polypeptides as disclosed herein or encoded by the polynucleotides disclosed herein, as well as using homologs or orthologs thereof.

The present invention also relates to a method of identifying a polynucleotide that modulates a stress response in a plant cell. In one embodiment the method comprises determining gene expression in a plant exposed to at least one stress to produce an expression profile and identifying sequences whose expression is altered at least two fold compared to plants not exposed to the stress. Such an expression profile can be obtained, for example, by contacting an array of probes representative of a plant cell genome with nucleic acid molecules expressed in a plant cell exposed to the stress; and detecting one or more nucleic acid molecules expressed at a level different from a level of expression in the absence of the stress. The method can further comprise introducing the differentially expressed nucleic acid molecule into a plant cell; and detecting a modulated response of the genetically modified plant cell to a stress, thereby identifying a polynucleotide that modulates a stress response in a

plant cell. The stress can be any stress, for example, an abiotic stress such as exposure to an abnormal level of cold, osmotic pressure, and salinity. The contacting is under conditions that allow for selective hybridization of a nucleic acid molecule with probe having sufficient complementarity, for example, under stringent hybridization conditions. Expression of the nucleic acid molecule can increase or decrease the tolerance of the plant cell to the stress, and the nucleic acid molecule can be expressed at a level that is less than or greater than the level of expression in the absence of the stress.

The present invention additionally relates to a method of identifying a stress condition to which a plant cell was exposed by comparing an expression profile from a test plant suspected of having been exposed to at least one stress condition to an expression profile obtained from a reference plant, preferably of the same species, which has been exposed to the suspected stress condition. Such a method can be performed, for example, by contacting nucleic acid molecules expressed in the test plant cell with an array of probes representative of the plant cell genome; detecting a profile of expressed nucleic acid molecules characteristic of a stress response, and comparing the expression pattern in the test plant to the expression pattern obtained from a reference plant thereby identifying the stress condition to which the plant cell was exposed. The contacting is under conditions that allow for selective hybridization of a nucleic acid molecule with probes having sufficient complementarity, for example, under stringent hybridization conditions. The profile can be characteristic of exposure to a single stress condition, for example, an abnormal level of cold, osmotic pressure, or salinity, or can be characteristic of exposure to more than one stress condition, for example, cold, increased osmotic pressure and increased salinity. In one embodiment, the nucleotide sequence of a gene whose expression is detected is selected from a polynucleotide comprising any of SEQ ID NOS:1-2703. In further embodiments, the nucleotide sequence of a gene that is expressed in response a particular stress or combination of stresses can comprise a polynucleotide expressed in response to cold stress (SEQ ID NOS:1-1261), osmotic stress (SEQ ID NOS:2428-2585), saline (salt) stress (SEQ ID NOS:2227-2427), a combination of cold and osmotic stress (SEQ ID NOS:1699-1969), a combination of saline and osmotic stress (SEQ ID NOS:1970-

2226), a combination of osmotic and saline stress (SEQ ID NOS:2586-2703), or a combination of cold, osmotic and saline stress (SEQ ID NOS:1262-1698).

The present invention further relates to a transgenic plant, which contains a nucleic acid construct comprising a polynucleotide portion of plant stress-regulated polynucleotide. In one embodiment, the transgenic plant exhibits altered responsiveness to a stress condition as compared to a corresponding reference plant not containing the construct. Such a transgenic plant can contain, for example, a construct that disrupts an endogenous stress-regulated gene in the plant, thereby reducing or inhibiting expression of the gene in response to a stress condition. Such a knock-out can increase or decrease tolerance of the plant to a stress condition. The transgene also can comprise a coding sequence of a plant stress-regulated gene, which can be operatively linked to a heterologous regulatory element such as a constitutively active regulatory element, an regulated regulatory element, a tissues specific or phase specific regulatory element, or the like. In another embodiment, the transgenic plant contains a nucleic acid construct comprising a plant stress-regulated regulatory element, which can be operatively linked to a heterologous nucleotide sequence that can encode a polypeptide. Expression of the heterologous polypeptide can confer a desirable characteristic on the plant, for example, can improve the nutritional or ornamental value of the transgenic plant. In still another embodiment, the transgenic plant contains multiple nucleic acid constructs, which can be multiple copies of the same construct, or can be two or more different constructs.

The present invention also relates to a plant stress-regulated regulatory element, which is obtained from a plant stress-regulated polynucleotide disclosed herein for example any of SEQ ID NOS:2704-5379; a homolog or ortholog thereof. The invention also provides a method of identifying an agent, for example a transcription factor, that specifically binds to or activates a plant stress-regulated regulatory element. Such a method can be performed, for example, by contacting the regulatory element with a plant cell extract, and identifying polypeptides that specifically bind to the regulatory element. Confirmation that the specifically binding polypeptide is a transcription factor can be demonstrated using, for example, the stress-regulated regulatory element operably linked to a reporter gene, and detecting expression of the reporter gene. Control constructs comprising a regulatory element, other than a plant stress-regulated regulatory element, operatively linked to a reporter molecule can be used to confirm

that the transcription factor is specific for the plant stress-regulated regulatory element. A polynucleotide encoding such a transcription factor also can be obtained.

The present invention also relates to a method of using a polynucleotide portion of a plant stress-regulated gene to confer a selective advantage on a plant cell. In one embodiment, such a method is performed by introducing a plant stress-regulated regulatory element into a plant cell such as those described herein, wherein, upon exposure of the plant cell to a stress condition to which the regulatory element is responsive, a nucleotide sequence operatively linked to the regulatory element is expressed, thereby conferring a selective advantage to plant cell. The operatively linked nucleotide sequence can be, for example, a transcription factor, the expression of which induces the further expression of polynucleotides involved in a stress response, thereby enhancing the response of a plant to the stress condition. In another embodiment, a coding sequence of a plant stress-regulated gene as disclosed herein is introduced into the cell, thereby providing the plant with a selective advantage in response to a stress condition. In still another embodiment, the method results in the knock-out of a plant stress-regulated gene as disclosed herein in a first population of plants, thereby providing a selective advantage to a stress condition in a second population of plants.

The invention further relates to a method of identifying an agent that modulates the activity of a stress-regulated regulatory element of a plant. In a particular embodiment, is provided a method for identifying an agent that alters the activity of an abiotic stress responsive regulatory element comprising contacting the agent or a composition containing an agent to be tested with at least one abiotic stress responsive regulatory element, preferably selected from the group consisting of SEQ ID NOS:2704-5379 (see Table 2), and determining the effect of the agent on the ability of the regulatory sequence to regulate transcription. In further embodiments, the regulatory elements are associated with particular stresses or combination of stresses such as cold stress (SEQ ID NOS:2704-3955), osmotic stress (SEQ ID NOS:5108-5263), saline stress (SEQ ID NOS:4910-5107), a combination of cold and osmotic stress (SEQ ID NOS:4389-4654), a combination of cold and saline stress (SEQ ID NOS:4655-4909), a combination of osmotic and saline stress (SEQ ID NOS:5264-5379), or a combination of cold, osmotic and saline stress (SEQ ID

NOS:3956-4388). In one embodiment, the regulatory element can be operatively linked to a heterologous polynucleotide encoding a reporter molecule, and an agent that modulates the activity of the stress-regulated regulatory element can be identified by detecting a change in expression of the reporter molecule due to contacting the regulatory element with the agent. Such a method can be performed *in vitro* in a plant cell-free system, or in a plant cell in culture or in a plant *in situ*. In another embodiment, the agent is contacted with a transgenic plant containing an introduced plant stress-regulated regulatory element, and an agent that modulates the activity of the regulatory element is identified by detecting a phenotypic change in the transgenic plant. The methods of the invention can be performed in the presence or absence of the stress condition to which the particularly regulatory element is responsive.

Another aspect provides a method for identifying an agent that alters abiotic stress responsive polynucleotide expression in a plant or plant cell comprising contacting a plant or plant cell with a test agent; subjecting the plant cell or plant cell to an abiotic stress or combination of stresses before, during or after contact with the agent to be tested; obtaining an expression profile of the plant or plant cell and comparing the expression profile of the plant or plant cell to an expression profile from a plant or plant cell not exposed to the abiotic stress or combination of stresses. In one embodiment, the expression profile comprises expression data for at least one nucleotide sequence comprising any of SEQ ID NOS:1-5379 (see Tables 1 and 2). In additional embodiments, the expression profile comprises expression data for at least one, and preferably two or more sequences associated with a particular abiotic stress or combination of stresses such as cold stress (SEQ ID NOS:1-1261 and 2704-3955), osmotic stress (SEQ ID NOS:2428-2585 and 5108-5263), saline stress (SEQ ID NOS:2227-2427 and 4910-5107), a combination of cold and osmotic stress (SEQ ID NOS:1699-1969 and 4389-4654), a combination of cold and saline stress (SEQ ID NOS:1970-2226 and 4655-4909), a combination of osmotic and saline stress (SEQ ID NOS:2586-2703 and 5264-5379), or a combination of cold, osmotic and saline stress (SEQ ID NOS:1262-1698 and 3956-4388).

Still another aspect provides nucleotide probes useful for detecting an abiotic stress response in plants, the probes comprising a nucleotide sequence of at least 15, 25, 50 or 100 nucleotides that hybridizes under stringent, preferably highly stringent,

conditions to at least one sequence comprising any of SEQ ID NOS:1-2703. Also provided are nucleotide probes comprising at least 15, 25, 50 or 100 nucleotides in length that hybridize under stringent, preferably highly stringent conditions, to at least one gene associated with a particular stress or combination of stresses, for example cold stress, (SEQ ID NOS:1-1261), osmotic stress (SEQ ID NOS:2428-2585), saline stress (SEQ ID NOS:2227-2427), a combination of cold and osmotic stress (SEQ ID NOS:1699-1969), a combination of cold and saline stress (SEQ ID NOS:1970-2226), a combination of osmotic and saline stress (SEQ ID NOS:2586-2703), or a combination of cold, osmotic, and saline stress (SEQ ID NOS:1262-1698).

An additional aspect provides a method for marker-assisted breeding to select plants having an altered resistance to abiotic stress comprising obtaining nucleic acid molecules from the plants to be selected; contacting the nucleic acid molecules with one or more probes that selectively hybridize under stringent, preferably highly stringent, conditions to a nucleic acid sequence selected from the group consisting of SEQ ID NOS:1-2703; detecting the hybridization of the one or more probes to the nucleic acid sequences wherein the presence of the hybridization indicates the presence of a gene associated with altered resistance to abiotic stress; and selecting plants on the basis of the presence or absence of such hybridization. Marker-assisted selection can also be accomplished using one or more probes which selectively hybridize under stringent, preferably highly stringent conditions, to a nucleotide sequence comprising a polynucleotide expressed in response associated with a particular stress, for example, a nucleotide sequence comprising any of SEQ ID NOS:1-1261 (cold stress), SEQ ID NOS:2428-2585 (osmotic stress), SEQ ID NOS:2227-2427 (saline stress), SEQ ID NOS:1699-1969 (cold and osmotic stress), SEQ ID NOS:1970-2226 (cold and saline stress), SEQ ID NOS:2586-2703 (osmotic and saline stress), or SEQ ID NOS:1262-1698 (cold, osmotic and saline stress). In each case marker-assisted selection can be accomplished using a probe or probes to a single sequence or multiple sequences. If multiple sequences are used they can be used simultaneously or sequentially.

A further aspect provides a method for monitoring a population of plants comprising providing at least one sentinel plant containing a recombinant polynucleotide comprising a stress responsive regulatory sequence selected from the

group consisting of SEQ ID NOS:2704-5379 which is operatively linked to a nucleotide sequence encoding a detectable marker, for example a fluorescent protein. Additional aspects provide the use of various regulatory sequences including those associated with cold stress (SEQ ID NOS:2704-3955), osmotic stress (SEQ ID NOS:5108-5263), saline stress (SEQ ID NOS:4910-5107), cold and osmotic stress (SEQ ID NOS:4389-4654), cold and saline stress (SEQ ID NOS:4655-4909), osmotic and saline stress (SEQ ID NOS:5264-5379), and cold, osmotic and saline stress (SEQ ID NOS:3956-4388), or fragments thereof wherein such fragments can alter transcription of an operatively linked nucleotide sequence in response to an abiotic stress.

A further aspect provides a computer readable medium having stored thereon computer executable instructions for performing a method comprising receiving data on gene expression in a test plant of at least one nucleic acid molecule having at least 70%, preferably at least 80%, more preferably at least 90%, and most preferably at least 95% nucleotide sequence identity to one or more polynucleotide sequences as set forth in any of SEQ ID NOS:1-2703; and comparing expression data from the test plant to expression data for the same polynucleotide sequence or sequences in a plant that has been exposed to at least one abiotic stress.

Yet a further aspect provides a computer readable medium having stored thereon a data structure comprising, sequence data for at least one, and preferably a plurality of nucleic acid molecules having at least 70%, preferably at least 80%, more preferably at least 90%, and most preferably at least 95% nucleotide sequence identity to a polynucleotide comprising any of SEQ ID NOS:1-2703, or the complement thereof; and a module receiving the nucleic acid molecule sequence data which compares the nucleic acid molecule sequence data to at least one other nucleic acid sequence.

DETAILED DESCRIPTION OF THE INVENTION

The present invention relates to clusters of genes that are induced in response to one or a combination of abiotic stress conditions. Abiotic stress conditions, such as a shortage or excess of solar energy, water and nutrients, and salinity, high and low temperature, or pollution (e.g., heavy metals), can have a major impact on plant growth and can significantly reduce the yield, for example, of cultivars. Under

conditions of abiotic stress, the growth of plant cells is inhibited by arresting the cell cycle in late G1, before DNA synthesis, or at the G2/M boundary (see Dudits, Plant Cell Division, Portland Press Research, Monograph; Francis, Dudits, and Inze, eds., 1997; chap. 2, page 21; Bergounioux, Protoplasma 142:127-136, 1988). The identification of stress-regulated gene clusters, using microarray technology, provides a means to identify plant stress-regulated genes.

As used herein, the term "cluster," when used in reference to stress-regulated genes, refers to nucleotide sequences of genes that have been selected by drawing Venn diagrams, and selecting those genes that are regulated only by a selected stress condition. In general, a cluster of stress-regulated genes includes at least 5, 10, 15, or 20 genes, including polynucleotide portions thereof, each of which is responsive to the same selected stress condition or conditions. The selected stress condition can be a single stress condition, for example, cold, osmotic stress or salinity stress (see Tables 3-14), or can be a selected combination of stress conditions, for example, cold, osmotic stress and salinity stress (see Tables 15-26). In addition, a cluster can be selected based on specifying that all of the genes are coordinately regulated, for example, they all start at a low level and are induced to a higher level. However, a cluster of saline stress-regulated genes, for example, that was selected for coordinate regulation from low to high, also can be decreased in response to cold or mannitol. By varying the parameters used for selecting a cluster of gene nucleotide sequences, those genes that are expressed in a specific manner following a stress can be identified.

As used herein in reference to a polynucleotide or polynucleotide portion of a gene or nucleic acid molecule, the term "isolated" means a polynucleotide, polynucleotide portion of a gene, or nucleic acid molecule that is free of one or both of the nucleotide sequences that normally flank the polynucleotide in a genome of a naturally-occurring organism from which the polynucleotide is derived. The term includes, for example, a polynucleotide or fragment thereof that is incorporated into a vector or expression cassette; into an autonomously replicating plasmid or virus; into the genomic DNA of a prokaryote or eukaryote; or that exists as a separate molecule independent of other polynucleotides. It also includes a recombinant polynucleotide that is part of a hybrid polynucleotide, for example, one encoding a polypeptide sequence.

The terms "polynucleotide," "oligonucleotide," and "nucleic acid sequence" are used interchangeably herein to refer to a polymeric (2 or more monomers) form of nucleotides of any length, either ribonucleotides or deoxyribonucleotides. Although nucleotides are usually joined by phosphodiester linkages, the term also includes polymers containing neutral amide backbone linkages composed of aminoethyl glycine units. The terms are used only to refer to the primary structure of the molecule. Thus, the term includes double stranded and single stranded DNA molecules, including a sense strand or an antisense strand, and RNA molecules as well as genomic DNA, cDNA, mRNA and the like. It will be recognized that such polynucleotides can be modified, for example, by including a label such as a radioactive, fluorescent or other tag, by methylation, by the inclusion of a cap structure, by containing a substitution of one or more of the naturally occurring nucleotides with a nucleotide analog, by containing an internucleotide modification such as having uncharged linkages (e.g., methyl phosphonates, phosphotriesters, phosphoramidates, carbamates, or the like), by containing a pendant moiety such as a protein (e.g., a nuclease, toxin, antibody, signal peptide, poly-L-lysine, or the like), by containing an intercalator such as acridine or psoralen, by containing a chelator, which can be a metal such as boron, an oxidative metal, or a radioactive metal, by containing an alkylator, or by having a modified linkage (e.g., an alpha anomeric nucleic acid).

The term "recombinant nucleic acid molecule" refers to a polynucleotide produced by human intervention. A recombinant nucleic acid molecule can contain two or more nucleotide sequences that are linked in a manner such that the product is not found in a cell in nature. In particular, the two or more nucleotide sequences can be operatively linked and, for example, can encode a fusion polypeptide, or can comprise a nucleotide sequence and a regulatory element. A recombinant nucleic acid molecule also can be based on, but different, from a naturally occurring polynucleotide, for example, a polynucleotide having one or more nucleotide changes such that a first codon, which normally is found in the polynucleotide, is replaced with a degenerate codon that encodes the same or a conservative amino acid, or such that a sequence of interest is introduced into the polynucleotide, for example, a

restriction endonuclease recognition site or a splice site, a promoter, a DNA replication initiation site, or the like.

As used herein, the term "abiotic stress" or "abiotic stress condition" refers to the exposure of a plant, plant cell, or the like, to a non-living ("abiotic") physical or chemical agent or condition that has an adverse effect on metabolism, growth, development, propagation and/or survival of the plant (collectively "growth"). An abiotic stress can be imposed on a plant due, for example, to an environmental factor such as water (e.g., flooding, drought, dehydration), anaerobic conditions (e.g., a low level of oxygen), abnormal osmotic conditions, salinity or temperature (e.g., hot/heat, cold, freezing, frost), a deficiency of nutrients or exposure to pollutants, or by a hormone, second messenger or other molecule. Anaerobic stress, for example, is due to a reduction in oxygen levels (hypoxia or anoxia) sufficient to produce a stress response. A flooding stress can be due to prolonged or transient immersion of a plant, plant part, tissue or isolated cell in a liquid medium such as occurs during monsoon, wet season, flash flooding or excessive irrigation of plants, or the like. A cold stress or heat stress can occur due to a decrease or increase, respectively, in the temperature from the optimum range of growth temperatures for a particular plant species. Such optimum growth temperature ranges are readily determined or known to those skilled in the art. Dehydration stress can be induced by the loss of water, reduced turgor, or reduced water content of a cell, tissue, organ or whole plant. Drought stress can be induced by or associated with the deprivation of water or reduced supply of water to a cell, tissue, organ or organism. Saline stress (salt stress) can be associated with or induced by a perturbation in the osmotic potential of the intracellular or extracellular environment of a cell. Osmotic stress also can be associated with or induced by a change, for example, in the concentration of molecules in the intracellular or extracellular environment of a plant cell, particularly where the molecules cannot be partitioned across the plant cell membrane.

As disclosed herein, clusters of plant stress-regulated genes (Example 1; see, also, Tables 1-31) and homologs and orthologs thereof (Table 32) have been identified. Remarkably, several of the stress-regulated genes previously were known to encode polypeptides having defined cellular functions, including roles as transcription factors, enzymes such as kinases, and structural proteins such as channel proteins (see

Tables 29-31). The identification of *Arabidopsis* stress-regulated genes provides a means to identify homologous and orthologous genes and gene sequences in other plant species using well known procedures and algorithms based on identity (or homology) to the disclosed sequences. Thus, the invention provides polynucleotide sequences comprising plant stress-regulated genes that are homologs or orthologs, variants, or otherwise substantially similar to the polynucleotides disclosed herein, and having an E value $\leq 1 \times 10^{-8}$, which can be identified, for example, by a BLASTN search using the *Arabidopsis* polynucleotides of Tables 1 and 2 (SEQ ID NOS:1-5379) as query sequences (see Table 32).

A polynucleotide sequence of a stress-regulated gene as disclosed herein can be particularly useful for performing the methods of the invention on a variety of plants, including but not limited to, corn (*Zea mays*), *Brassica* sp. (e.g., *B. napus*, *B. rapa*, *B. juncea*), particularly those *Brassica* species useful as sources of seed oil, alfalfa (*Medicago sativa*), rice (*Oryza sativa*), rye (*Secale cereale*), sorghum (*Sorghum bicolor*, *Sorghum vulgare*), millet (e.g., pearl millet (*Pennisetum glaucum*), proso millet (*Panicum miliaceum*), foxtail millet (*Setaria italica*), finger millet (*Eleusine coracana*)), sunflower (*Helianthus annuus*), safflower (*Carthamus tinctorius*), wheat (*Triticum aestivum*), soybean (*Glycine max*), tobacco (*Nicotiana tabacum*), potato (*Solanum tuberosum*), peanuts (*Arachis hypogaea*), cotton (*Gossypium barbadense*, *Gossypium hirsutum*), sweet potato (*Ipomoea batatus*), cassava (*Manihot esculenta*), coffee (*Cofea* spp.), coconut (*Cocos nucifera*), pineapple (*Ananas comosus*), citrus trees (*Citrus* spp.), cocoa (*Theobroma cacao*), tea (*Camellia sinensis*), banana (*Musa* spp.), avocado (*Persea ultilane*), fig (*Ficus casica*), guava (*Psidium guajava*), mango (*Mangifera indica*), olive (*Olea europaea*), papaya (*Carica papaya*), cashew (*Anacardium occidentale*), macadamia (*Macadamia integrifolia*), almond (*Prunus amygdalus*), sugar beets (*Beta vulgaris*), sugarcane (*Saccharum* spp.), oats, duckweed (*Lemna*), barley, tomatoes (*Lycopersicon esculentum*), lettuce (e.g., *Lactuca sativa*), green beans (*Phaseolus vulgaris*), lima beans (*Phaseolus limensis*), peas (*Lathyrus* spp.), and members of the genus *Cucumis* such as cucumber (*C. sativus*), cantaloupe (*C. cantalupensis*), and musk melon (*C. melo*).Ornamentals such as azalea (*Rhododendron* spp.), hydrangea (*Macrophylla hydrangea*), hibiscus (*Hibiscus rosasanensis*), roses (*Rosa* spp.), tulips (*Tulipa* spp.),

daffodils (*Narcissus* spp.), petunias (*Petunia hybrida*), carnation (*Dianthus caryophyllus*), poinsettia (*Euphorbia pulcherrima*), and chrysanthemum are also included. Additional ornamentals within the scope of the invention include impatiens, Begonia, Pelargonium, Viola, Cyclamen, Verbena, Vinca, Tagetes, Primula, Saint Paulia, Agertum, Amaranthus, Antihirrhinum, Aquilegia, Cineraria, Clover, Cosmo, Cowpea, Dahlia, Datura, Delphinium, Gerbera, Gladiolus, Gloxinia, Hippeastrum, Mesembryanthemum, Salpiglossos, and Zinnia. Conifers that may be employed in practicing the present invention include, for example, pines such as loblolly pine (*Pinus taeda*), slash pine (*Pinus elliotii*), ponderosa pine (*Pinus ponderosa*), lodgepole pine (*Pinus contorta*), and Monterey pine (*Pinus radiata*), Douglas-fir (*Pseudotsuga menziesii*); Western hemlock (*Tsuga ultilane*); Sitka spruce (*Picea glauca*); redwood (*Sequoia sempervirens*); true firs such as silver fir (*Abies amabilis*) and balsam fir (*Abies balsamea*); and cedars such as Western red cedar (*Thuja plicata*) and Alaska yellow-cedar (*Chamaecyparis nootkatensis*).

Leguminous plants which may be used in the practice of the present invention include beans and peas. Beans include guar, locust bean, fenugreek, soybean, garden beans, cowpea, mung bean, lima bean, fava bean, lentils, chickpea, etc. Legumes include, but are not limited to, *Arachis*, e.g., peanuts, *Vicia*, e.g., crown vetch, hairy vetch, adzuki bean, mung bean, and chickpea, *Lupinus*, e.g., lupine, trifolium, *Phaseolus*, e.g., common bean and lima bean, *Pisum*, e.g., field bean, *Melilotus*, e.g., clover, *Medicago*, e.g., alfalfa, Lotus, e.g., trefoil, lens, e.g., lentil, and false indigo. Preferred forage and turf grass for use in the methods of the invention include alfalfa, orchard grass, tall fescue, perennial ryegrass, creeping bent grass, and redtop.

Other plants within the scope of the invention include *Acacia*, aneth, artichoke, arugula, blackberry, canola, cilantro, clementines, escarole, eucalyptus, fennel, grapefruit, honey dew, jicama, kiwifruit, lemon, lime, mushroom, nut, okra, orange, parsley, persimmon, plantain, pomegranate, poplar, radiata pine, radicchio, Southern pine, sweetgum, tangerine, triticale, vine, yams, apple, pear, quince, cherry, apricot, melon, hemp, buckwheat, grape, raspberry, chenopodium, blueberry, nectarine, peach, plum, strawberry, watermelon, eggplant, pepper, cauliflower, Brassica, e.g., broccoli, cabbage, ultilan sprouts, onion, carrot, leek, beet, broad bean,

celery, radish, pumpkin, endive, gourd, garlic, snapbean, spinach, squash, turnip, ultilane, chicory, groundnut and zucchini.

As used herein, the term "substantially similar", when used herein with respect to a nucleotide sequence, means a nucleotide sequence corresponding to a reference nucleotide sequence, wherein the corresponding sequence encodes a polypeptide or comprises a regulatory element having substantially the same structure and function as the polypeptide encoded by the reference nucleotide sequence, for example, where only changes in amino acids not affecting the polypeptide function occur. For purposes of the present invention, a reference (or query) sequence is a polynucleotide sequence as set forth in any of SEQ ID NOS:1-2703 or a polypeptide encoded thereby. Desirably, a substantially similar nucleotide sequence encodes the polypeptide encoded by the reference nucleotide sequence. The percentage of identity between the substantially similar nucleotide sequence and the reference nucleotide sequence desirably is at least 60%, more desirably at least 75%, preferably at least 90%, more preferably at least 95%, still more preferably at least 99% and including 100%. A nucleotide sequence is "substantially similar" to reference nucleotide sequence hybridizes to the reference nucleotide sequence in 7% sodium dodecyl sulfate (SDS), 0.5 M $NaPO_4$, 1 mM EDTA at 50°C with washing in 2X SSC, 0.1% SDS at 50°C, more desirably in 7% sodium dodecyl sulfate (SDS), 0.5 M $NaPO_4$, 1 mM EDTA at 50°C with washing in 1X SSC, 0.1% SDS at 50°C (stringent conditions), more desirably still in 7% sodium dodecyl sulfate (SDS), 0.5 M $NaPO_4$, 1 mM EDTA at 50°C with washing in 0.5X SSC, 0.1% SDS at 50°C (high stringency), preferably in 7% sodium dodecyl sulfate (SDS), 0.5 M $NaPO_4$, 1 mM EDTA at 50°C with washing in 0.1X SSC, 0.1% SDS at 50°C (very high stringency), more preferably in 7% sodium dodecyl sulfate (SDS), 0.5 M $NaPO_4$, 1 mM EDTA at 50°C with washing in 0.1X SSC, 0.1% SDS at 65°C (extremely high stringency).

In addition, the term "substantially similar," when used in reference to a polypeptide sequence, means that an amino acid sequence relative to a reference (query) sequence shares at least about 65% amino acid sequence identity, particularly at least about 75% amino acid sequence identity, and preferably at least about 85%, more

preferably at least about 90% , and most preferably at least about 95% or greater amino acid sequence identity. Generally, sequences having an $E \leq 10^{-8}$ are considered to be substantially similar to a query sequence. Such sequence identity can take into account conservative amino acid changes that do not substantially affect the function of a polypeptide. As such, homologs or orthologs of the *Arabidopsis* stress-regulated nucleotide sequences disclosed herein, variants thereof, and polypeptides substantially similar to the polynucleotide sequence of *Arabidopsis* stress-regulated genes set forth in SEQ ID NOS:1-5379 are encompassed within the present invention and, therefore, useful for practicing the methods of the invention (see, for example, Table 32).

Homology or identity is often measured using sequence analysis software such as the Sequence Analysis Software Package of the Genetics Computer Group (University of Wisconsin Biotechnology Center, 1710 University Avenue, Madison, WI 53705). Such software matches similar sequences by assigning degrees of homology to various deletions, substitutions and other modifications. The terms "homology" and "identity," when used herein in the context of two or more nucleic acids or polypeptide sequences, refer to two or more sequences or subsequences that are the same or have a specified percentage of amino acid residues or of nucleotides that are the same when compared and aligned for maximum correspondence over a comparison window or designated region as measured using any number of sequence comparison algorithms or by manual alignment and visual inspection.

For sequence comparison, typically one sequence acts as a reference sequence, to which test sequences are compared. When using a sequence comparison algorithm, test and reference sequences are entered into a computer, subsequence coordinates are designated, if necessary, and sequence algorithm program parameters are designated. Default program parameters can be used, or alternative parameters can be designated. The sequence comparison algorithm then calculates the percent sequence identities for the test sequences relative to the reference sequence, based on the program parameters.

The term "comparison window" is used broadly herein to include reference to a segment of any one of the number of contiguous positions, for example, about 20 to 600 positions, for example, amino acid or nucleotide position, usually about 50 to about 200 positions, more usually about 100 to about 150 positions, in which a sequence may be compared to a reference sequence of the same number of contiguous positions

after the two sequences are optimally aligned. Methods of alignment of sequence for comparison are well-known in the art. Optimal alignment of sequences for comparison can be conducted, for example, by the local homology algorithm of Smith and Waterman (Adv. Appl. Math. 2:482, 1981), by the homology alignment algorithm of Needleman and Wunsch (J. Mol. Biol. 48:443, 1970), by the search for similarity method of Person and Lipman (Proc. Natl. Acad. Sci., *USA* 85:2444, 1988), each of which is incorporated herein by reference; by computerized implementations of these algorithms (GAP, BESTFIT, FASTA, and TFASTA in the Wisconsin Genetics Software Package, Genetics Computer Group, 575 Science Dr., Madison, WI); or by manual alignment and visual inspection. Other algorithms for determining homology or identity include, for example, in addition to a BLAST program (Basic Local Alignment Search Tool at the National Center for Biological Information), ALIGN, AMAS (Analysis of Multiply Aligned Sequences), AMPS (Protein Multiple Sequence Alignment), ASSET (Aligned Segment Statistical Evaluation Tool), BANDS, BESTSCOR, BIOSCAN (Biological Sequence Comparative Analysis Node), BLIMPS (BLocks IMProved Searcher), FASTA, Intervals & Points, BMB, CLUSTAL V, CLUSTAL W, CONSENSUS, LCONSENSUS, WCONSENSUS, Smith-Waterman algorithm, DARWIN, Las Vegas algorithm, FNAT (Forced Nucleotide Alignment Tool), Framealign, Framesearch, DYNAMIC, FILTER, FSAP (Fristensky Sequence Analysis Package), GAP (Global Alignment Program), GENAL, GIBBS, GenQuest, ISSC (Sensitive Sequence Comparison), LALIGN (Local Sequence Alignment), LCP (Local Content Program), MACAW (Multiple Alignment Construction & Analysis Workbench), MAP (Multiple Alignment Program), MBLKP, MBLKN, PIMA (Pattern-Induced Multi-sequence Alignment), SAGA (Sequence Alignment by Genetic Algorithm) and WHAT-IF. Such alignment programs can also be used to screen genome databases to identify polynucleotide sequences having substantially identical sequences.

A number of genome databases are available for comparison. Several databases containing genomic information annotated with some functional information are maintained by different organizations, and are accessible via the internet, for example, at world wide web addresses (url's) "wwwtigr.org/tdb"; "genetics.wisc.edu";

"genome-www.stanford.edu/~ball"; "hiv-web.lanl.gov"; "ncbi.nlm.nih.gov"; "ebi.ac.uk"; "Pasteur.fr/other/biology"; and "genome.wi.mit.edu".

In particular, the BLAST and BLAST 2.0 algorithms using default parameters are particularly useful for identifying polynucleotide and polypeptides encompassed within the present invention (Altschul et al. (Nucleic Acids Res. 25:3389-3402, 1977; J. Mol. Biol. 215:403-410, 1990, each of which is incorporated herein by reference). Software for performing BLAST analyses is publicly available through the National Center for Biotechnology Information (http://www.ncbi.nlm.nih.gov). This algorithm involves first identifying high scoring sequence pairs (HSPs) by identifying short words of length W in the query sequence, which either match or satisfy some positive-valued threshold score T when aligned with a word of the same length in a database sequence. T is referred to as the neighborhood word score threshold (Altschul et al., *supra*, 1977, 1990). These initial neighborhood word hits act as seeds for initiating searches to find longer HSPs containing them. The word hits are extended in both directions along each sequence for as far as the cumulative alignment score can be increased. Cumulative scores are calculated using, for nucleotide sequences, the parameters M (reward score for a pair of matching residues; always >0). For amino acid sequences, a scoring matrix is used to calculate the cumulative score. Extension of the word hits in each direction are halted when: the cumulative alignment score falls off by the quantity X from its maximum achieved value; the cumulative score goes to zero or below, due to the accumulation of one or more negative-scoring residue alignments; or the end of either sequence is reached. The BLAST algorithm parameters W, T, and X determine the sensitivity and speed of the alignment. The BLASTN program (for nucleotide sequences) uses as defaults a wordlength (W) of 11, an expectation (E) of 10, M=5, N=4 and a comparison of both strands. For amino acid sequences, the BLASTP program uses as defaults a wordlength of 3, and expectations (E) of 10, and the BLOSUM62 scoring matrix (see Henikoff and Henikoff, Proc. Natl. Acad. Sci., *USA* 89:10915, 1989) alignments (B) of 50, expectation (E) of 10, M=5, N=4, and a comparison of both strands.

The BLAST algorithm also performs a statistical analysis of the similarity between two sequences (see, for example, Karlin and Altschul, Proc. Natl. Acad. Sci., *USA* 90:5873, 1993, which is incorporated herein by reference). One measure of

similarity provided by BLAST algorithm is the smallest sum probability (P(N)), which provides an indication of the probability by which a match between two nucleotide or amino acid sequences would occur by chance. For example, a nucleic acid is considered similar to a references sequence if the smallest sum probability in a comparison of the test nucleic acid to the reference nucleic acid is less than about 0.2, more preferably less than about 0.01, and most preferably less than about 0.001. Significantly, upon identifying polynucleotides that are substantially similar to those of SEQ ID NOS:1-5379, the identified polynucleotides can be used as query sequences in a BLAST search to identify polynucleotides and polypeptides substantially similar thereto.

It should be noted that the nucleotide sequences set forth as SEQ ID NOS:1-2703 comprise coding sequences, whereas the nucleotide sequences set forth as SEQ ID NOS:2704-5379 comprise regulatory sequences. In addition, the coding sequences and regulatory sequences are related in that, for example, SEQ ID NO:1 is the coding sequence of a plant cold regulated gene having a 5' upstream (regulatory) sequence set forth as SEQ ID NO:2704 (see Table 2). Similarly, SEQ ID NO:2705 comprises a regulatory region of SEQ ID NO:2, SEQ ID NO:2706 comprises a regulatory region of SEQ ID NO:3, and so forth as shown in Table 2. As such, reference herein, for example, to a "polynucleotide comprising SEQ ID NO:1" can, unless indicated otherwise, include at least SEQ ID NO:2704. In some cases, the entire coding region of a plant stress regulated gene or the 5' upstream sequence has not yet been determined (see, for example, SEQ ID NO:43 in Table 3, where "none" indicates that 5' upstream regulatory sequences have not yet been determined). However, the determination of a complete coding sequence where only a portion is known or of regulatory sequences where a portion of the coding sequence is known can be made using methods as disclosed herein or otherwise known in the art.

In one embodiment, protein and nucleic acid sequence homologies are evaluated using the Basic Local Alignment Search Tool ("BLAST"). In particular, five specific BLAST programs are used to perform the following task:

(1) BLASTP and BLAST3 compare an amino acid query sequence against a protein sequence database;

(2) BLASTN compares a nucleotide query sequence against a nucleotide sequence database;

(3) BLASTX compares the six-frame conceptual translation products of a query nucleotide sequence (both strands) against a protein sequence database;

(4) TBLASTN compares a query protein sequence against a nucleotide sequence database translated in all six reading frames (both strands); and

(5) TBLASTX compares the six-frame translations of a nucleotide query sequence against the six-frame translations of a nucleotide sequence database.

The BLAST programs identify homologous sequences by identifying similar segments, which are referred to herein as "high-scoring segment pairs," between a query amino or nucleic acid sequence and a test sequence which is preferably obtained from a protein or nucleic acid sequence database. High-scoring segment pairs are preferably identified (*i.e.*, aligned) by means of a scoring matrix, many of which are known in the art. Preferably, the scoring matrix used is the BLOSUM62 matrix (Gonnet et al., Science 256:1443-1445, 1992; Henikoff and Henikoff, Proteins 17:49-61, 1993, each of which is incorporated herein by reference). Less preferably, the PAM or PAM250 matrices may also be used (Schwartz and Dayhoff, eds., "Matrices for Detecting Distance Relationships: Atlas of Protein Sequence and Structure" (Washington, National Biomedical Research Foundation 1978)). BLAST programs are accessible through the U.S. National Library of Medicine, for example, on the world wide web at address (url) "ncbi.nlm.nih.gov".

The parameters used with the above algorithms may be adapted depending on the sequence length and degree of homology studied. In some embodiments, the parameters may be the default parameters used by the algorithms in the absence of instructions from the user.

The term "substantially similar" also is used in reference to a comparison of expression profiles of nucleotide sequences, wherein a determination that an expression profile characteristic of a stress response is substantially similar to the profile of nucleic acid molecules expressed in a plant cell being examined ("test plant") is indicative of exposure of the test plant cell to one or a combination of abiotic stress conditions. When used in reference to such a comparison of expression profiles, the term "substantially similar" means that that the individual nucleotide sequences in the test plant cell profile are altered in the same manner as the corresponding nucleotide sequences in the expression profile characteristic of the stress response.

By way of example, where exposure to saline results in an increased expression of nucleotide sequences A, B and C, and a decreased expression of nucleotide sequences D and E, as indicated by the expression profile characteristic of a saline stress response, a determination that corresponding nucleotide sequences A, B and C in the test plant cell are increased and that nucleotides sequences D and E are decreased is indicative of exposure of the test plant cell to a saline stress condition. It should be recognized that, where, for example, only nucleotide sequences A, B, D and E are examined in the test plant cell, an increase in A and B and a decrease in D and E expression of the test plant cells is considered to be substantially similar to the expression profile characteristic of a saline stress condition and, therefore, is indicative of exposure of the plant cell to a saline stress condition. Similarly, where the levels of expression of the nucleotide sequences examined in a test plant are altered in the same manner, i.e., are increased or are decreased, as that observed in an expression profile characteristic of a particular stress response, the absolute levels of expression may vary, for example, two-fold, five-fold, ten-fold, or the like. Nevertheless, the expression profile of the test plant cell is considered to be substantially similar to the expression profile characteristic of the particular stress response and, therefore, indicative of exposure of the plant cell to the stress condition.

As disclosed herein, clusters of stress-regulated genes (and their products), some of which also have been described as having cellular functions such as enzymatic activity or roles as transcription factors, are involved in the response of plant cells to various abiotic stresses (see Tables 29-31; see, also, Tables 1 and 32). As such, the polynucleotide sequences comprising the genes in a cluster likely share common stress-regulated regulatory elements, including, for example, cold-regulated regulatory elements (SEQ ID NOS:2704-3955), salinity-regulated regulatory elements (SEQ ID NOS:4910-5107, and osmotic pressure-regulated regulatory elements (SEQ ID NO:5108-5263), as well as regulatory elements that are responsive to a combination of stress conditions, but not to any of the individual stress conditions, alone (SEQ ID NOS:3956-4909 and 5263-5379). The identification of such clusters of genes thus provides a means to identify the stress-regulated regulatory elements that control the level of expression of these genes.

As used herein, the term "plant stress-regulated gene" means a polynucleotide sequence of a plant, the transcription of which is altered in response to exposure to a stress condition, and the regulatory elements linked to such a polynucleotide sequence and involved in the stress response, which can be induction or repression. In general, plant stress gene regulatory elements are contained within a sequence including approximately two kilobases upstream (5') of the transcription or translation start site and two kilobases downstream (3') of the transcription or translation termination site. In the absence of an abiotic stress condition, the stress-regulated gene can normally be unexpressed in the cells, can be expressed at a basal level, which is induced to a higher level in response to the stress condition, or can be expressed at a level that is reduced (decreased) in response to the stress condition. The coding region of a plant stress-regulated gene encodes a stress-regulated polypeptide, and also can be the basis for expression of a functional RNA molecule such as an antisense molecule or ribozyme. A stress-regulated polypeptide can have an adaptive effect on a plant, thereby allowing the plant to better tolerate stress conditions; or can have a maladaptive effect, thereby decreasing the ability of the plant to tolerate the stress conditions.

The present invention provides an isolated plant stress-regulated regulatory element, which regulates expression of an operatively linked nucleotide sequence in a plant in response a stress condition. As disclosed herein, a plant stress-regulated regulatory element can be isolated from a polynucleotide sequence of a plant stress-regulated gene comprising a nucleotide sequence as set forth in SEQ ID NOS:1-2703, for example any of SEQ ID NOS:2704-5379 (see Table 2). It is recognized that certain of the polynucleotides set forth as SEQ ID NOS:1-5379 previously have been described as being involved in a stress-regulated response in plants, including SEQ ID NOS:156, 229, 233, 558, 573, 606, 625, 635, 787, 813, 1263, 1386, 1391, 1405, 1445, 1484, 1589, 1609, 1634, 1726, 1866, 1918, and 1928 and, therefore, are not encompassed, in whole or in part, within the compositions of the invention, and are encompassed within only certain particular methods of the invention, for example, methods of making a transgenic plant that is resistant to two or more stress conditions, since, even where such a gene was known to be expressed in response to a single stress condition such as cold or saline (e.g., SEQ ID NO:1263), it was not known

prior to the present disclosure that any of these genes was responsive to a combination of stress conditions (for example, a combination of cold and osmotic stress for SEQ ID NOS:1726, 1866, 1918, and 1928; or a combination of cold, osmotic and saline stress for SEQ ID NOS:1263,1386, 1391, 1405, 1445, 1484, 1589, 1609, and 1634).

Methods for identifying and isolating the stress-regulated regulatory element from the disclosed polynucleotides, or genomic DNA clones corresponding thereto, are well known in the art. For example, methods of making deletion constructs or linker-scanner constructs can be used to identify nucleotide sequences that are responsive to a stress condition. Generally, such constructs include a reporter gene operatively linked to the sequence to be examined for regulatory activity. By performing such assays, a plant stress-regulated regulatory element can be defined within a sequence of about 500 nucleotides or fewer, generally at least about 200 nucleotides or fewer, particularly about 50 to 100 nucleotides, and more particularly at least about 20 nucleotides or fewer. Preferably the minimal (core) sequence required for regulating a stress response of a plant is identified.

The nucleotide sequences of the genes of a cluster also can be examined using a homology search engine such as described herein to identify sequences of conserved identity, particularly in the nucleotide sequence upstream of the transcription start site. Since all of the genes in a cluster as disclosed are induced in response to a particular stress condition or a particular combination of stress conditions, some or all of the nucleotide sequences can share conserved stress-regulated regulatory elements. By performing such a homology search, putative stress-regulated regulatory elements can be identified. The ability of such identified sequences to function as a plant stress-regulated regulatory element can be confirmed, for example, by operatively linking the sequence to a reporter gene and assaying the construct for responsiveness to a stress condition.

As used herein, the term "regulatory element" means a nucleotide sequence that, when operatively linked to a coding region of a gene, effects transcription of the coding region such that a ribonucleic acid (RNA) molecule is transcribed from the coding region. A regulatory element generally can increase or decrease the amount of transcription of a nucleotide sequence, for example, a coding sequence, operatively linked to the element with respect to the level at which the nucleotide sequence would

be transcribed absent the regulatory element. Regulatory elements are well known in the art and include promoters, enhancers, silencers, inactivated silencer intron sequences, 3'-untranslated or 5'-untranslated sequences of transcribed sequence, for example, a poly-A signal sequence, or other protein or RNA stabilizing elements, or other gene expression control elements known to regulate gene expression or the amount of expression of a gene product. A regulatory element can be isolated from a naturally occurring genomic DNA sequence or can be synthetic, for example, a synthetic promoter.

Regulatory elements can be constitutively expressed regulatory element, which maintain gene expression at a relative level of activity (basal level), or can be regulated regulatory elements. Constitutively expressed regulatory elements can be expressed in any cell type, or can be tissue specific, which are expressed only in particular cell types, phase specific, which are expressed only during particular developmental or growth stages of a plant cell, or the like. A regulatory element such as a tissue specific or phase specific regulatory element or an inducible regulatory element useful in constructing a recombinant polynucleotide or in a practicing a method of the invention can be a regulatory element that generally, in nature, is found in a plant genome. However, the regulatory element also can be from an organism other than a plant, including, for example, from a plant virus, an animal virus, or a cell from an animal or other multicellular organism.

A regulatory element useful for practicing method of the present is a promoter element. Useful promoters include, but are not limited to, constitutive, inducible, temporally regulated, developmentally regulated, spatially-regulated, chemically regulated, stress-responsive, tissue-specific, viral and synthetic promoters. Promoter sequences are known to be strong or weak. A strong promoter provides for a high level of gene expression, whereas a weak promoter provides for a very low level of gene expression. An inducible promoter is a promoter that provides for the turning on and off of gene expression in response to an exogenously added agent, or to an environmental or developmental stimulus. A bacterial promoter such as the P_{tac} promoter can be induced to varying levels of gene expression depending on the level of isothiopropylgalactoside added to the transformed bacterial cells. An isolated promoter sequence that is a strong promoter for heterologous nucleic acid is

advantageous because it provides for a sufficient level of gene expression to allow for easy detection and selection of transformed cells and provides for a high level of gene expression when desired.

Within a plant promoter region there are several domains that are necessary for full function of the promoter. The first of these domains lies immediately upstream of the structural gene and forms the "core promoter region" containing consensus sequences, normally 70 base pairs immediately upstream of the gene. The core promoter region contains the characteristic CAAT and TATA boxes plus surrounding sequences, and represents a transcription initiation sequence that defines the transcription start point for the structural gene.

The presence of the core promoter region defines a sequence as being a promoter: if the region is absent, the promoter is non-functional. The core promoter region, however, is insufficient to provide full promoter activity. A series of regulatory sequences upstream of the core constitute the remainder of the promoter. These regulatory sequences determine expression level, the spatial and temporal pattern of expression and, for an important subset of promoters, expression under inductive conditions (regulation by external factors such as light, temperature, chemicals, hormones).

To define a minimal promoter region, a DNA segment representing the promoter region is removed from the 5' region of the gene of interest and operably linked to the coding sequence of a marker (reporter) gene by recombinant DNA techniques well known to the art. The reporter gene is operably linked downstream of the promoter, so that transcripts initiating at the promoter proceed through the reporter gene. Reporter genes generally encode proteins which are easily measured, including, but not limited to, chloramphenicol acetyl transferase (CAT), beta-glucuronidase (GUS), green fluorescent protein (GFP), 8-galactosidase (8-GAL), and luciferase.

The construct containing the reporter gene under the control of the promoter is then introduced into an appropriate cell type by transfection techniques well known to the art. To assay for the reporter protein, cell lysates are prepared and appropriate assays, which are well known in the art, for the reporter protein are performed. For example, if CAT were the reporter gene of choice, the lysates from cells transfected with constructs containing CAT under the control of a promoter under study are

mixed with isotopically labeled chloramphenicol and acetyl-coenzyme A (acetyl-CoA). The CAT enzyme transfers the acetyl group from acetyl-CoA to the 2-position or 3-position of chloramphenicol. The reaction is monitored by thin layer chromatography, which separates acetylated chloramphenicol from unreacted material. The reaction products are then visualized by autoradiography.

The level of enzyme activity corresponds to the amount of enzyme that was made, which in turn reveals the level of expression from the promoter of interest. This level of expression can be compared to other promoters to determine the relative strength of the promoter under study. In order to be sure that the level of expression is determined by the promoter, rather than by the stability of the mRNA, the level of the reporter mRNA can be measured directly, for example, by northern blot analysis. Once activity is detected, mutational and/or deletional analyses may be employed to determine the minimal region and/or sequences required to initiate transcription. Thus, sequences can be deleted at the 5' end of the promoter region and/or at the 3' end of the promoter region, and nucleotide substitutions introduced. These constructs are then introduced to cells and their activity determined.

The choice of promoter will vary depending on the temporal and spatial requirements for expression, and also depending on the target species. In some cases, expression in multiple tissues is desirable. While in others, tissue-specific, e.g., leaf-specific, seed-specific, petal-specific, anther-specific, or pith-specific, expression is desirable. Although many promoters from dicotyledons have been shown to be operational in monocotyledons and *vice versa*, ideally dicotyledonous promoters are selected for expression in dicotyledons, and monocotyledonous promoters for expression in monocotyledons. There is, however, no restriction to the origin or source of a selected promoter. It is sufficient that the promoters are operational in driving the expression of a desired nucleotide sequence in the particular cell.

A range of naturally-occurring promoters are known to be operative in plants and have been used to drive the expression of heterologous (both foreign and endogenous) genes and nucleotide sequences in plants: for example, the constitutive 35S cauliflower mosaic virus (CaMV) promoter, the ripening-enhanced tomato polygalacturonase promoter (Bird et al., 1988), the E8 promoter (Diekman and Fischer, 1988) and the fruit specific 2A1 promoter (Pear et al., 1989). Many other

promoters, e.g., U2 and U5 snRNA promoters from maize, the promoter from alcohol dehydrogenase, the Z4 promoter from a gene encoding the Z4 22 kD zein protein, the Z10 promoter from a gene encoding a 10 kD zein protein, a Z27 promoter from a gene encoding a 27 kD zein protein, the A20 promoter from the gene encoding a 19 kD zein protein, inducible promoters, such as the light inducible promoter derived from the pea rbcS gene and the actin promoter from rice, e.g., the actin 2 promoter (WO 00/70067); seed specific promoters, such as the phaseolin promoter from beans, may also be used. The nucleotide sequences of the stress-regulated genes of this invention can also be expressed under the regulation of promoters that are chemically regulated. This enables the nucleic acid sequence or encoded polypeptide to be synthesized only when the crop plants are treated with the inducing chemicals. Chemical induction of gene expression is detailed in EP 0 332 104 and U.S. Pat. 5,614,395.

In some instances it may be desirable to link a constitutive promoter to a polynucleotide comprising a stress regulated gene of the invention. Examples of some constitutive promoters include the rice actin 1 (Wang et al., 1992; U.S. Pat. No. 5,641,876), CaMV 35S (Odell et al., 1985), CaMV 19S (Lawton et al., 1987), *nos*, Adh, sucrose synthase; and the ubiquitin promoters.

In other situations it may be desirable to limit expression of stress-related sequences to specific tissues or stages of development. As used herein, the term "tissue specific or phase specific regulatory element" means a nucleotide sequence that effects transcription in only one or a few cell types, or only during one or a few stages of the life cycle of a plant, for example, only for a period of time during a particular stage of growth, development or differentiation. The terms "tissue specific" and "phase specific" are used together herein in referring to a regulatory element because a single regulatory element can have characteristics of both types of regulatory elements. For example, a regulatory element active only during a particular stage of plant development also can be expressed only in one or a few types of cells in the plant during the particular stage of development. As such, any attempt to classify such regulatory elements as tissue specific or as phase specific can be difficult. Accordingly, unless indicated otherwise, all regulatory elements having the

characteristic of a tissue specific regulatory element, or a phase specific regulatory element, or both are considered together for purposes of the present invention.

Examples of tissue specific promoters which have been described include the lectin (Vodkin, 1983; Lindstrom et al., 1990) corn alcohol dehydrogenase 1 (Vogel et al., 1989; Dennis et al., 1984), corn light harvesting complex (Simpson, 1986; Bansal et al., 1992), corn heat shock protein (Odell et al., 1985), pea small subunit RuBP carboxylase (Poulsen et al., 1986), Ti plasmid mannopine synthase and Ti plasmid nopaline synthase (Langridge et al., 1989), petunia chalcone isomerase (vanTunen et al., 1988), bean glycine rich protein 1 (Keller et al., 1989), truncated CaMV 35s (Odell et al., 1985), potato patatin (Wenzler et al., 1989), root cell (Yamamoto et al., 1990), maize zein (Reina et al., 1990; Kriz et al., 1987; Wandelt et al., 1989; Langridge et al., 1983; Reina et al., 1990), globulin-1 (Belanger et al., 1991), α-tubulin, cab (Sullivan et al., 1989), PEPCase (Hudspeth & Grula, 1989), R gene complex-associated promoters (Chandler et al., 1989), histone, and chalcone synthase promoters (Franken et al., 1991). Tissue specific enhancers are described by Fromm et al. (1989).

Several other tissue-specific regulated genes and/or promoters have been reported in plants, including genes encoding seed storage proteins such as napin, cruciferin, beta-conglycinin, and phaseolin, zein or oil body proteins such as oleosin, genes involved in fatty acid biosynthesis, including acyl carrier protein, stearoyl-ACP desaturase, fatty acid desaturases (fad 2-1), and other genes expressed during embryonic development such as Bce4 (see, for example, EP 255378 and Kridl et al., 1991). Particularly useful for seed-specific expression is the pea vicilin promoter (Czako et al., 1992). (See also U.S. Pat. No. 5,625,136, which is incorporated herein by reference.) Other useful promoters for expression in mature leaves are those that are switched on at the onset of senescence, such as the SAG promoter from Arabidopsis (Gan et al., 1995).

A class of fruit-specific promoters expressed at or during antithesis through fruit development, at least until the beginning of ripening, is discussed in U.S. Pat. No. 4,943,674. cDNA clones that are preferentially expressed in cotton fiber have been isolated (John et al., 1992). cDNA clones from tomato displaying differential expression during fruit development have been isolated and characterized (Mansson et

al., 1985, Slater et al., 1985). The promoter for polygalacturonase gene is active in fruit ripening. The polygalacturonase gene is described in U.S. Pat. Nos. 4,535,060, 4,769,061, 4,801,590, and 5,107,065, each of which is incorporated herein by reference.

Other examples of tissue-specific promoters include those that direct expression in leaf cells following damage to the leaf (for example, from chewing insects), in tubers (for example, patatin gene promoter), and in fiber cells (an example of a developmentally-regulated fiber cell protein is E6 (John et al., 1992). The E6 gene is most active in fiber, although low levels of transcripts are found in leaf, ovule and flower.

Additional tissue specific or phase specific regulatory elements include, for example, the *AGL8/FRUITFULL* regulatory element, which is activated upon floral induction (Hempel et al., Development 124:3845-3853, 1997, which is incorporated herein by reference); root specific regulatory elements such as the regulatory elements from the RCP1 gene and the LRP1 gene (Tsugeki and Fedoroff, Proc. Natl. Acad., *USA* 96:12941-12946, 1999; Smith and Fedoroff, Plant Cell 7:735-745, 1995, each of which is incorporated herein by reference); flower specific regulatory elements such as the regulatory elements from the *LEAFY* gene and the *APETELA1* gene (Blazquez et al., Development 124:3835-3844, 1997, which is incorporated herein by reference; Hempel et al., *supra*, 1997); seed specific regulatory elements such as the regulatory element from the oleosin gene (Plant et al., Plant Mol. Biol. 25:193-205, 1994, which is incorporated herein by reference), and dehiscence zone specific regulatory element. Additional tissue specific or phase specific regulatory elements include the Zn13 promoter, which is a pollen specific promoter (Hamilton et al., Plant Mol. Biol. 18:211-218, 1992, which is incorporated herein by reference); the *UNUSUAL FLORAL ORGANS* (*UFO*) promoter, which is active in apical shoot meristem; the promoter active in shoot meristems (Atanassova et al., Plant J. 2:291, 1992, which is incorporated herein by reference), the cdc2a promoter and cyc07 promoter (see, for example, Ito et al., Plant Mol. Biol. 24:863, 1994; Martinez et al., Proc. Natl. Acad. Sci., *USA* 89:7360, 1992; Medford et al., Plant Cell 3:359, 1991; Terada et al., Plant J. 3:241, 1993; Wissenbach et al., Plant J. 4:411, 1993, each of which is incorporated herein by reference); the promoter of the *APETELA3* gene, which is active in floral

meristems (Jack et al., Cell 76:703, 1994, which is incorporated herein by reference; Hempel et al., *supra*, 1997); a promoter of an agamous-like (AGL) family member, for example, AGL8, which is active in shoot meristem upon the transition to flowering (Hempel et al., *supra*, 1997); floral abscission zone promoters; L1-specific promoters; and the like.

The tissue-specificity of some "tissue-specific" promoters may not be absolute and may be tested by one skilled in the art using the diphtheria toxin sequence. One can also achieve tissue-specific expression with "leaky" expression by a combination of different tissue-specific promoters (Beals et al., 1997). Other tissue-specific promoters can be isolated by one skilled in the art (see U.S. 5,589,379). Several inducible promoters ("gene switches") have been reported, many of which are described in the review by Gatz (1996) and Gatz (1997). These include tetracycline repressor system, *Lac* repressor system, copper inducible systems, salicylate inducible systems (such as the PR1a system), glucocorticoid (Aoyama et al., 1997) and ecdysone inducible systems. Also included are the benzene sulphonamide (U.S. Pat. No. 5,364,780) and alcohol (WO 97/06269 and WO 97/06268) inducible systems and glutathione S-transferase promoters.

In some instances it might be desirable to inhibit expression of a native DNA sequence within a plant's tissues to achieve a desired phenotype. In this case, such inhibition might be accomplished with transformation of the plant to comprise a constitutive, tissue-independent promoter operably linked to an antisense nucleotide sequence, such that constitutive expression of the antisense sequence produces an RNA transcript that interferes with translation of the mRNA of the native DNA sequence.

Inducible regulatory elements also are useful for purposes of the present invention. As used herein, the term "inducible regulatory element" means a regulatory element that, when exposed to an inducing agent, effects an increased level of transcription of a nucleotide sequence to which it is operatively linked as compared to the level of transcription, if any, in the absence of an inducing agent. Inducible regulatory elements can be those that have no basal or constitutive activity and only effect transcription upon exposure to an inducing agent, or those that effect a basal or constitutive level of transcription, which is increased upon exposure to an inducing

agent. Inducible regulatory elements that effect a basal or constitutive level of expression generally are useful in a method or composition of the invention where the induced level of transcription is substantially greater than the basal or constitutive level of expression, for example, at least about two-fold greater, or at least about five-fold greater. Particularly useful inducible regulatory elements do not have a basal or constitutive activity, or increase the level of transcription at least about ten-fold greater than a basal or constitutive level of transcription associated with the regulatory element.

Inducible promoters that have been described include the ABA- and turgor-inducible promoters, the promoter of the auxin-binding protein gene (Schwob et al., 1993), the UDP glucose flavonoid glycosyl-transferase gene promoter (Ralston et al., 1988), the MPI proteinase inhibitor promoter (Cordero et al., 1994), and the glyceraldehyde-3-phosphate dehydrogenase gene promoter (Kohler et al., 1995; Quigley et al., 1989; Martinez et al., 1989).

The term "inducing agent" is used to refer to a chemical, biological or physical agent or environmental condition that effects transcription from an inducible regulatory element. In response to exposure to an inducing agent, transcription from the inducible regulatory element generally is initiated *de novo* or is increased above a basal or constitutive level of expression. Such induction can be identified using the methods disclosed herein, including detecting an increased level of RNA transcribed from a nucleotide sequence operatively linked to the regulatory element, increased expression of a polypeptide encoded by the nucleotide sequence, or a phenotype conferred by expression of the encoded polypeptide.

An inducing agent useful in a method of the invention is selected based on the particular inducible regulatory element. For example, the inducible regulatory element can be a metallothionein regulatory element, a copper inducible regulatory element or a tetracycline inducible regulatory element, the transcription from which can be effected in response to metal ions, copper or tetracycline, respectively (Furst et al., Cell 55:705-717, 1988; Mett et al., Proc. Natl. Acad. Sci., *USA* 90:4567-4571, 1993; Gatz et al., Plant J. 2:397-404, 1992; Roder et al., Mol. Gen. Genet. 243:32-38, 1994, each of which is incorporated herein by reference). The inducible regulatory element also can be an ecdysone regulatory element or a glucocorticoid regulatory

element, the transcription from which can be effected in response to ecdysone or other steroid (Christopherson et al., Proc. Natl. Acad. Sci., *USA* 89:6314-6318, 1992; Schena et al., Proc. Natl. Acad. Sci., *USA* 88:10421-10425, 1991, each of which is incorporated herein by reference). In addition, the regulatory element can be a cold responsive regulatory element or a heat shock regulatory element, the transcription of which can be effected in response to exposure to cold or heat, respectively (Takahashi et al., Plant Physiol. 99:383-390, 1992, which is incorporated herein by reference). Additional regulatory elements useful in the methods or compositions of the invention include, for example, the spinach nitrite reductase gene regulatory element (Back et al., Plant Mol. Biol. 17:9, 1991, which is incorporated herein by reference); a light inducible regulatory element (Feinbaum et al., Mol. Gen. Genet. 226:449, 1991; Lam and Chua, Science 248:471, 1990, each of which is incorporated herein by reference), a plant hormone inducible regulatory element (Yamaguchi-Shinozaki et al., Plant Mol. Biol. 15:905, 1990; Kares et al., Plant Mol. Biol. 15:225, 1990, each of which is incorporated herein by reference), and the like.

An inducible regulatory element also can be a plant stress-regulated regulatory element of the invention. In addition to the known stress conditions that specifically induce or repress expression from such elements, the present invention provides methods of identifying agents that mimic a stress condition. Accordingly, such stress mimics are considered inducing or repressing agents with respect to a plant stress-regulated regulatory element. In addition, a recombinant polypeptide comprising a zinc finger domain, which is specific for the regulatory element, and an effector domain, particularly an activator, can be useful as an inducing agent for a plant stress-regulated regulatory element. Furthermore, such a recombinant polypeptide provides the advantage that the effector domain can be a repressor domain, thereby providing a repressing agent, which decreases expression from the regulatory element. In addition, use of such a method of modulating expression of an endogenous plant stress-regulated gene provides the advantage that the polynucleotide encoding the recombinant polypeptide can be introduced into cells of the plant, thus providing a transgenic plant that can be regulated coordinately with the endogenous plant stress-regulated gene upon exposure to a stress condition. A polynucleotide encoding such a

recombinant polypeptide can be operatively linked to and expressed from a constitutively active, inducible or tissue specific or phase specific regulatory element.

In one embodiment, the promoter may be a gamma zein promoter, an oleosin ole16 promoter, a globulin I promoter, an actin I promoter, an actin cl promoter, a sucrose synthetase promoter, an INOPS promoter, an EXM5 promoter, a globulin2 promoter, a b-32, ADPG-pyrophosphorylase promoter, an LtpI promoter, an Ltp2 promoter, an oleosin ole17 promoter, an oleosin ole18 promoter, an actin 2 promoter, a pollen-specific protein promoter, a pollen-specific pectate lyase promoter, an anther-specific protein promoter (Huffman), an anther-specific gene RTS2 promoter, a pollen- specific gene promoter, a tapeturn-specific gene promoter, tapeturn- specific gene RAB24 promoter, a anthranilate synthase alpha subunit promoter, an alpha zein promoter, an anthranilate synthase beta subunit promoter, a dihydrodipicolinate synthase promoter, a Thi 1 promoter, an alcohol dehydrogenase promoter, a cab binding protein promoter, an H3C4 promoter, a RUBISCO SS starch branching enzyme promoter, an ACCase promoter, an actin3 promoter, an actin7 promoter, a regulatory protein GF14-12 promoter, a ribosomal protein L9 promoter, a cellulose biosynthetic enzyme promoter, an S-adenosyl-L-homocysteine hydrolase promoter, a superoxide dismutase promoter, a C-kinase receptor promoter, a phosphoglycerate mutase promoter, a root-specific RCc3 mRNA promoter, a glucose-6 phosphate isomerase promoter, a pyrophosphate-fructose 6-phosphatelphosphotransferase promoter, an ubiquitin promoter, a beta-ketoacyl-ACP synthase promoter, a 33 kDa photosystem 11 promoter, an oxygen evolving protein promoter, a 69 kDa vacuolar ATPase subunit promoter, a metallothionein-like protein promoter, a glyceraldehyde-3-phosphate dehydrogenase promoter, an ABA- and ripening- inducible-like protein promoter, a phenylalanine ammonia lyase promoter, an adenosine triphosphatase S-adenosyl-L-homocysteine hydrolase promoter, an a- tubulin promoter, a cab promoter, a PEPCase promoter, an R gene promoter, a lectin promoter, a light harvesting complex promoter, a heat shock protein promoter, a chalcone synthase promoter, a zein promoter, a globulin-1 promoter, an ABA promoter, an auxin-binding protein promoter, a UDP glucose flavonoid glycosyl-transferase gene promoter, an NTI promoter, an actin promoter, an opaque 2 promoter, a b70 promoter, an oleosin promoter, a CaMV 35S promoter, a CaMV 19S promoter, a histone

promoter, a turgor-inducible promoter, a pea small subunit RuBP carboxylase promoter, a Ti plasmid mannopine synthase promoter, Ti plasmid nopaline synthase promoter, a petunia chalcone isomerase promoter, a bean glycine rich protein I promoter, a CaMV 35S transcript promoter, a potato patatin promoter, or a S-E9 small subunit RuBP carboxylase promoter.

In addition to promoters, a variety of 5N and 3N transcriptional regulatory sequences are also available for use in the present invention. Transcriptional terminators are responsible for the termination of transcription and correct mRNA polyadenylation. The 3'-untranslated regulatory DNA sequence preferably includes from about 50 to about 1,000, more preferably about 100 to about 1,000, nucleotide base pairs and contains plant transcriptional and translational termination sequences. Appropriate transcriptional terminators and those which are known to function in plants include the CaMV 35S terminator, the *tml* terminator, the nopaline synthase terminator, the pea rbcS E9 terminator, the terminator for the T7 transcript from the octopine synthase gene of *Agrobacterium tumefaciens*, and the 3N end of the protease inhibitor I or II genes from potato or tomato, although other 3N elements known to those of skill in the art can also be employed. Alternatively, one also could use a gamma coixin, oleosin 3 or other terminator from the genus *Coix*. Preferred 3' elements include those from the nopaline synthase gene of *Agrobacterium tumefaciens* (Bevan et al., 1983), the terminator for the T7 transcript from the octopine synthase gene of *Agrobacterium tumefaciens*, and the 3' end of the protease inhibitor I or II genes from potato or tomato.

As the DNA sequence between the transcription initiation site and the start of the coding sequence, i.e., the untranslated leader sequence, can influence gene expression, one may also wish to employ a particular leader sequence. Preferred leader sequences are contemplated to include those that include sequences predicted to direct optimum expression of the attached sequence, i.e., to include a preferred consensus leader sequence that may increase or maintain mRNA stability and prevent inappropriate initiation of translation. The choice of such sequences will be known to those of skill in the art in light of the present disclosure. Sequences that are derived from genes that are highly expressed in plants will be most preferred.

Other sequences that have been found to enhance gene expression in transgenic plants include intron sequences (e.g., from *Adh1, bronze1, actin1, actin 2* (WO 00/760067), or the sucrose synthase intron) and viral leader sequences (e.g., from TMV, MCMV and AMV). For example, a number of non-translated leader sequences derived from viruses are known to enhance expression. Specifically, leader sequences from tobacco mosaic virus (TMV), maize chlorotic mottle virus (MCMV), and alfalfa mosaic virus (AMV) have been shown to be effective in enhancing expression (e.g., Gallie et al., 1987; Skuzeski et al., 1990). Other leaders known in the art include but are not limited to picornavirus leaders, for example, EMCV leader (encephalomyocarditis virus 5' non-coding region; Elroy-Stein et al., 1989); potyvirus leaders, for example, TEV leader (tobacco etch virus); MDMV leader (maize dwarf mosaic virus); human immunoglobulin heavy chain binding protein (BiP) leader, (Macejak et al., 1991); untranslated leader from the coat protein mRNA of AMV (AMV RNA 4; Jobling et al., 1987), TMV (Gallie et al., 1989), and MCMV (Lommel et al., 1991; see also, della Cioppa et al., 1987).

Regulatory elements such as Adh intron 1 (Callis et al., 1987), sucrose synthase intron (Vasil et al., 1989) or TMV omega element (Gallie, et al., 1989), may further be included where desired. Examples of enhancers include elements from the CaMV 35S promoter, octopine synthase genes (Ellis et al., 1987), the rice actin I gene, the maize alcohol dehydrogenase gene (Callis et al., 1987), the maize shrunken I gene (Vasil et al., 1989), TMV Omega element (Gallie et al., 1989) and promoters from non-plant eukaryotes (e.g. yeast; Ma et al., 1988).

Vectors for use in accordance with the present invention may be constructed to include the ocs enhancer element, which was first identified as a 16 bp palindromic enhancer from the octopine synthase (ocs) gene of ultilane (Ellis et al., 1987), and is present in at least 10 other promoters (Bouchez et al., 1989). The use of an enhancer element, such as the ocs element and particularly multiple copies of the element, will act to increase the level of transcription from adjacent promoters when applied in the context of monocot transformation.

The methods of the invention provide genetically modified plant cells, which can contain, for example, a coding region, or peptide portion thereof, of a plant stress-regulated gene operatively linked to a heterologous inducible regulatory element; or a

plant stress-regulated regulatory element operatively linked to a heterologous nucleotide sequence encoding a polypeptide of interest. In such a plant, the expression from the inducible regulatory element can be effected by exposing the plant cells to an inducing agent in any of numerous ways depending, for example, on the inducible regulatory element and the inducing agent. For example, where the inducible regulatory element is a cold responsive regulatory element present in the cells of a transgenic plant, the plant can be exposed to cold conditions, which can be produced artificially, for example, by placing the plant in a thermostatically controlled room, or naturally, for example, by planting the plant in an environment characterized, at least in part, by attaining temperatures sufficient to induce transcription from the promoter but not so cold as to kill the plants. By examining the phenotype of such transgenic plants, those plants that ectopically express a gene product that confers increased resistance of the plant to cold can be identified. Similarly, a transgenic plant containing a metallothionein promoter can be exposed to metal ions such as cadmium or copper by watering the plants with a solution containing the inducing metal ions, or can be planted in soil that is contaminated with a level of such metal ions that is toxic to most plants. The phenotype of surviving plants can be observed, those expressing desirable traits can be selected.

As used herein, the term "phenotype" refers to a physically detectable characteristic. A phenotype can be identified visually by inspecting the physical appearance of a plant following exposure, for example, to increased osmotic conditions; can be identified using an assay to detecting a product produced due to expression of reporter gene, for example, an RNA molecule, a polypeptide such as an enzyme, or other detectable signal such as disclosed herein; or by using any appropriate tool useful for identifying a phenotype of a plant, for example, a microscope, a fluorescence activated cell sorter, or the like.

A transgenic plant containing an inducible regulatory element such as a steroid inducible regulatory element can be exposed to a steroid by watering the plants with a solution containing the steroid. The use of an inducible regulatory element that is induced upon exposure to a chemical or biological inducing agent that can be placed in solution or suspension in an aqueous medium can be particularly useful because the inducing agent can be applied conveniently to a relatively large crop of transgenic

plants containing the inducible regulatory element, for example, through a watering system or by spraying the inducing agent over the field. As such, inducible regulatory elements that are responsive to an environmental inducing agent, for example, cold; heat; metal ions or other potentially toxic agents such as a pesticides, which can contaminate a soil; or the like; or inducible regulatory elements that are regulated by inducing agents that conveniently can be applied to plants, can be particularly useful in a method or composition of the invention, and allow the identification and selection of plants that express desirable traits and survive and grow in environments that otherwise would not support growth of the plants.

As disclosed herein, the present invention provides plant stress-regulated regulatory elements, which are identified based on the expression of clusters of plant genes in response to stress. As used herein, the term "stress-regulated regulatory element of a plant" or "plant stress-regulated regulatory element" means a nucleotide sequence of a plant genome that can respond to a stress such that expression of a gene product encoded by a gene comprising the regulatory element (a stress-inducible gene) is increased above or decreased below the level of expression of the gene product in the absence of the stress condition. The regulatory element can be any gene regulatory element, including, for example, a promoter, an enhancer, a silencer, or the like. In one embodiment, the plant stress-regulated regulatory element is a plant stress-regulated promoter.

For purposes of modulating the responsiveness of a plant to a stress condition, it can be useful to introduce a modified plant stress-regulated regulatory element into a plant. Such a modified regulatory element can have any desirable characteristic, for example, it can be inducible to a greater level than the corresponding wild-type promoter, or it can be inactivated such that, upon exposure to a stress, there is little or no induction of expression of a nucleotide sequence operatively linked to the mutant element. A plant stress-regulated regulatory element can be modified by incorporating random mutations using, for example, *in vitro* recombination or DNA shuffling (Stemmer et al., Nature 370: 389-391, 1994; U.S. Pat. No. 5,605,793, each of which is incorporated herein by reference). Using such a method, millions of mutant copies of the polynucleotide, for example, stress-regulated regulatory element,

can be produced based on the original nucleotide sequence, and variants with improved properties, such as increased inducibility can be recovered.

A mutation method such as DNA shuffling encompasses forming a mutagenized double-stranded polynucleotide from a template double-stranded polynucleotide, wherein the template double-stranded polynucleotide has been cleaved into double stranded random fragments of a desired size, and comprises the steps of adding to the resultant population of double-stranded random fragments one or more single or double stranded oligonucleotides, wherein the oligonucleotides comprise an area of identity and an area of heterology to the double stranded template polynucleotide; denaturing the resultant mixture of double stranded random fragments and oligonucleotides into single stranded fragments; incubating the resultant population of single stranded fragments with a polymerase under conditions that result in the annealing of the single stranded fragments at the areas of identity to form pairs of annealed fragments, the areas of identity being sufficient for one member of a pair to prime replication of the other, thereby forming a mutagenized double-stranded polynucleotide; and repeating the second and third steps for at least two further cycles, wherein the resultant mixture in the second step of a further cycle includes the mutagenized double-stranded polynucleotide from the third step of the previous cycle, and the further cycle forms a further mutagenized double-stranded polynucleotide. Preferably, the concentration of a single species of double stranded random fragment in the population of double stranded random fragments is less than 1% by weight of the total DNA. In addition, the template double stranded polynucleotide can comprise at least about 100 species of polynucleotides. The size of the double stranded random fragments can be from about 5 base pairs to 5 kilobase pairs. In a further embodiment, the fourth step of the method comprises repeating the second and the third steps for at least 10 cycles.

A plant stress-regulated regulatory element of the invention is useful for expressing a nucleotide sequence operatively linked to the element in a cell, particularly a plant cell. As used herein, the term "expression" refers to the transcription and/or translation of an endogenous gene or a transgene in plants. In the case of an antisense molecule, for example, the term "expression" refers to the transcription of the polynucleotide encoding the antisense molecule.

As used herein, the term "operatively linked," when used in reference to a plant stress-regulated regulatory element, means that the regulatory element is positioned with respect to a second nucleotide sequence such that the regulatory element effects transcription or transcription and translation of the nucleotide sequence in substantially the same manner, but not necessarily to the same extent, as it does when the regulatory element is present in its natural position in a genome. Transcriptional promoters, for example, generally act in a position and orientation dependent manner and usually are positioned at or within about five nucleotides to about fifty nucleotides 5' (upstream) of the start site of transcription of a gene in nature. In comparison, enhancers and silencers can act in a relatively position or orientation independent manner and, therefore, can be positioned several hundred or thousand nucleotides upstream or downstream from a transcription start site, or in an intron within the coding region of a gene, yet still be operatively linked to a coding region so as to effect transcription.

The second nucleotide sequence, i.e., the sequence operatively linked to the plant stress-regulated regulatory element, can be any nucleotide sequence, including, for example, a coding region of a gene or cDNA; a sequence encoding an antisense molecule, an RNAi molecule, ribozyme, triplexing agent (see, for example, Frank-Kamenetskii and Mirkin, Ann. Rev. Biochem. 64:65-95, 1995), or the like; or a sequence that, when transcribed, can be detected in the cell using, for example, by hybridization or amplification, or when translated produces a detectable signal. The term "coding region" is used broadly herein to include a nucleotide sequence of a genomic DNA or a cDNA molecule comprising all or part of a coding region of the coding strand. A coding region can be transcribed from an operatively linked regulatory element, and can be translated into a full length polypeptide or a peptide portion of a polypeptide. It should be recognized that, in a nucleotide sequence comprising a coding region, not all of the nucleotides in the sequence need necessarily encode the polypeptide and, particularly, that a gene transcript can contain one or more introns, which do not encode an amino acid sequence of a polypeptide but, nevertheless, are part of the coding region, particularly the coding strand, of the gene.

The present invention also relates to a recombinant polynucleotide, which contains a polynucleotide portion of a plant stress-regulated gene operatively linked to

a heterologous nucleotide sequence. As used herein, the term "polynucleotide portion of plant stress-regulated sequence" means a contiguous nucleotide sequence of the plant stress-regulated gene that provides a function. The portion can be any portion of the sequence, particularly a coding sequence, or a sequence encoding a peptide portion of the stress-regulated polypeptide; the stress-regulated regulatory element; a sequence useful as an antisense molecule or triplexing agent; or a sequence useful for disrupting (knocking-out) an endogenous plant stress-regulated gene.

A heterologous nucleotide sequence is a nucleotide sequence that is not normally part of the plant stress-regulated gene from which the polynucleotide portion of the plant stress-regulated gene-component of the recombinant polynucleotide is obtained; or, if it is a part of the plant stress-regulated gene from which the polynucleotide portion is obtained, it is an orientation other than it would normally be in, for example, is an antisense sequence, or comprises at least partially discontinuous as compared to the genomic structure, for example, a single exon operatively linked to the regulatory element. In general, where the polynucleotide portion of the plant stress-regulated gene comprises the coding sequence in a recombinant polynucleotide of the invention, the heterologous nucleotide sequence will function as a regulatory element. The regulatory element can be any heterologous regulatory element, including, for example, a constitutively active regulatory element, an inducible regulatory element, or a tissue specific or phase specific regulatory element, as disclosed above. Conversely, where the polynucleotide portion of the plant stress-regulated polynucleotide comprises the stress-regulated regulatory element of a recombinant polynucleotide of the invention, the heterologous nucleotide sequence generally will be a nucleotide sequence that can be transcribed and, if desired, translated. Where the heterologous nucleotide sequence is expressed from a plant stress-regulated regulatory element, it generally confers a desirable phenotype to a plant cell containing the recombinant polynucleotide, or provides a means to identify a plant cell containing the recombinant polynucleotide. It should be recognized that a "desirable" phenotype can be one that decreases the ability of a plant cell to compete where the plant cell, or a plant containing the cell, is an undesired plant cell. Thus, a heterologous nucleotide sequence can allow a plant to grow, for example, under conditions in which it would not normally be able to grow.

A heterologous nucleotide sequence can be, or encode, a selectable marker. As used herein, the term "selectable marker" is used herein to refer to a molecule that, when present or expressed in a plant cell, provides a means to identify a plant cell containing the marker. As such, a selectable marker can provide a means for screening a population of plants, or plant cells, to identify those having the marker. A selectable marker also can confer a selective advantage to the plant cell, or a plant containing the cell. The selective advantage can be, for example, the ability to grow in the presence of a negative selective agent such as an antibiotic or herbicide, compared to the growth of plant cells that do not contain the selectable marker. The selective advantage also can be due, for example, to an enhanced or novel capacity to utilize an added compound as a nutrient, growth factor or energy source. A selectable advantage can be conferred, for example, by a single polynucleotide, or its expression product, or to a combination of polynucleotides whose expression in a plant cell gives the cell with a positive selective advantage, a negative selective advantage, or both.

Examples of selectable markers include those that confer antimetabolite resistance, for example, dihydrofolate reductase, which confers resistance to methotrexate (Reiss, Plant Physiol. (Life Sci. Adv.) 13:143-149, 1994); neomycin phosphotransferase, which confers resistance to the aminoglycosides neomycin, kanamycin and paromycin (Herrera-Estrella, EMBO J. 2:987-995, 1983) and hygro, which confers resistance to hygromycin (Marsh, Gene 32:481-485, 1984), trpB, which allows cells to utilize indole in place of tryptophan; hisD, which allows cells to utilize histinol in place of histidine (Hartman, Proc. Natl. Acad. Sci., *USA* 85:8047, 1988); mannose-6-phosphate isomerase which allows cells to utilize mannose (WO 94/20627); ornithine decarboxylase, which confers resistance to the ornithine decarboxylase inhibitor, 2-(difluoromethyl)-DL-ornithine (DFMO; McConlogue, 1987, In: Current Communications in Molecular Biology, Cold Spring Harbor Laboratory ed.); and deaminase from *Aspergillus terreus*, which confers resistance to Blasticidin S (Tamura, Biosci. Biotechnol. Biochem. 59:2336-2338, 1995). Additional selectable markers include those that confer herbicide resistance, for example, phosphinothricin acetyltransferase gene, which confers resistance to phosphinothricin (White et al., Nucl. Acids Res. 18:1062, 1990; Spencer et al., Theor. Appl. Genet. 79:625-631, 1990), a mutant EPSPV-synthase, which confers glyphosate

resistance (Hinchee et al., Bio/Technology 91:915-922, 1998), a mutant acetolactate synthase, which confers imidazolione or sulfonylurea resistance (Lee et al., EMBO J. 7:1241-1248, 1988), a mutant psbA, which confers resistance to atrazine (Smeda et al., Plant Physiol. 103:911-917, 1993), or a mutant protoporphyrinogen oxidase (see U.S. Pat. No. 5,767,373), or other markers conferring resistance to an herbicide such as glufosinate. In addition, markers that facilitate identification of a plant cell containing the polynucleotide encoding the marker include, for example, luciferase (Giacomin, Plant Sci. 116:59-72, 1996; Scikantha, J. Bacteriol. 178:121, 1996), green fluorescent protein (Gerdes, FEBS Lett. 389:44-47, 1996) or fl-glucuronidase (Jefferson, EMBO J. 6:3901-3907, 1997), and numerous others as disclosed herein or otherwise known in the art. Such markers also can be used as reporter molecules.

A heterologous nucleotide sequence can encode an antisense molecule, particularly an antisense molecule specific for a nucleotide sequence of a plant stress-regulated gene, for example, the gene from which the regulatory component of the recombinant polynucleotide is derived. Such a recombinant polynucleotide can be useful for reducing the expression of a plant stress-regulated polypeptide in response to a stress condition because the antisense molecule, like the polypeptide, only will be induced upon exposure to the stress. A heterologous nucleotide sequence also can be, or can encode, a ribozyme or a triplexing agent. In addition to being useful as heterologous nucleotide sequences, such molecules also can be used directly in a method of the invention, for example, to modulate the responsiveness of a plant cell to a stress condition. Thus, an antisense molecule, ribozyme, or triplexing agent can be contacted directly with a target cell and, upon uptake by the cell, can effect their antisense, ribozyme or triplexing activity; or can be encoded by a heterologous nucleotide sequence that is expressed in a plant cell from a plant stress-regulated regulatory element, whereupon it can effect its activity.

An antisense polynucleotide, ribozyme or triplexing agent is complementary to a target sequence, which can be a DNA or RNA sequence, for example, messenger RNA, and can be a coding sequence, a nucleotide sequence comprising an intron-exon junction, a regulatory sequence such as a Shine-Delgarno-like sequence, or the like. The degree of complementarity is such that the polynucleotide, for example, an antisense polynucleotide, can interact specifically with the target sequence in a cell.

Depending on the total length of the antisense or other polynucleotide, one or a few mismatches with respect to the target sequence can be tolerated without losing the specificity of the polynucleotide for its target sequence. Thus, few if any mismatches would be tolerated in an antisense molecule consisting, for example, of twenty nucleotides, whereas several mismatches will not affect the hybridization efficiency of an antisense molecule that is complementary, for example, to the full length of a target mRNA encoding a cellular polypeptide. The number of mismatches that can be tolerated can be estimated, for example, using well known formulas for determining hybridization kinetics (see Sambrook et al., "Molecular Cloning; A Laboratory Manual" 2nd Edition (Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY; 1989)) or can be determined empirically using methods as disclosed herein or otherwise known in the art, particularly by determining that the presence of the antisense polynucleotide, ribozyme, or triplexing agent in a cell decreases the level of the target sequence or the expression of a polypeptide encoded by the target sequence in the cell.

A nucleotide sequence useful as an antisense molecule, a ribozyme or a triplexing agent can inhibit translation or cleave a polynucleotide encoded by plant stress-regulated gene, thereby modulating the responsiveness of a plant cell to a stress condition. An antisense molecule, for example, can bind to an mRNA to form a double stranded molecule that cannot be translated in a cell. Antisense oligonucleotides of at least about 15 to 25 nucleotides are preferred since they are easily synthesized and can hybridize specifically with a target sequence, although longer antisense molecules can be expressed from a recombinant polynucleotide introduced into the target cell. Specific nucleotide sequences useful as antisense molecules can be identified using well known methods, for example, gene walking methods (see, for example, Seimiya et al., J. Biol. Chem. 272:4631-4636 (1997), which is incorporated herein by reference). Where the antisense molecule is contacted directly with a target cell, it can be operatively associated with a chemically reactive group such as iron-linked EDTA, which cleaves a target RNA at the site of hybridization. A triplexing agent, in comparison, can stall transcription (Maher et al., Antisense Res. Devel. 1:227 (1991); Helene, Anticancer Drug Design 6:569 (1991)).

A plant stress-regulated regulatory element can be included in an expression cassette. As used herein, the term "expression cassette" refers to a nucleotide sequence that can direct expression of an operatively linked polynucleotide. Thus, a plant stress-regulated regulatory element can constitute an expression cassette, or component thereof. An expression cassette is particularly useful for directing expression of a nucleotide sequence, which can be an endogenous nucleotide sequence or a heterologous nucleotide sequence, in a cell, particularly a plant cell. If desired, an expression cassette also can contain additional regulatory elements, for example, nucleotide sequences required for proper translation of a polynucleotide sequence into a polypeptide. In general, an expression cassette can be introduced into a plant cell such that the plant cell, a plant resulting from the plant cell, seeds obtained from such a plant, or plants produced from such seeds are resistant to a stress condition.

Additional regulatory sequences as disclosed above or other desirable sequences such as selectable markers or the like can be incorporated into an expression cassette containing a plant stress-regulated regulatory element (see, for example, WO 99/47552). Examples of suitable markers include dihydrofolate reductase (DHFR) or neomycin resistance for eukaryotic cells and tetracycline or ampicillin resistance for E. coli. Selection markers in plants include bleomycin, gentamycin, glyphosate, hygromycin, kanamycin, methotrexate, phleomycin, phosphinotricin, spectinomycin, streptomycin, sulfonamide and sulfonylureas resistance (see, for example, Maliga et al., *Methods in Plant Molecular Biology*, Cold Spring Harbor Laboratory Press, 1995, page 39). The selection marker can have its own promoter or its expression can be driven by the promoter operably linked to the sequence of interest. Additional sequences such as intron sequences (e.g. from Adh1 or bronze1) or viral leader sequences (e.g. from TMV, MCMV and AlVlV), all of which can enhance expression, can be included in the cassette. In addition, where it is desirable to target expression of a nucleotide sequence operatively linked to the stress-regulated regulatory element, a sequence encoding a cellular localization motif can be included in the cassette, for example, such that an encoded transcript or translation product is translocated to and localizes in the cytosol, nucleus, a chloroplast, or another subcellular organelle. Examples of useful transit peptides and transit peptide

sequences can be found in Von Heijne et al., Plant Mol. Biol. Rep. 9: 104, 1991; Clark et al., J. Biol. Chem. 264:17544, 1989; della Cioppa et al., Plant Physiol. 84:965, 1987; Romer et al., Biochem. Biophys. Res. Comm. 196:1414, 1993; Shah et al., Science 233:478, 1986; Archer et al., J. Bioenerg Biomemb. 22:789, 1990; Scandalios, Prog. Clin. Biol. Res. 344:515, 1990; Weisbeek et al., J. Cell Sci. Suppl. 11:199, 1989; Bruce, Trends Cell Biol. 10:440, 2000. The present invention can utilize native or heterologous transit peptides. The encoding sequence for a transit peptide can include all or a portion of the encoding sequence for a particular transit peptide, and may also contain portions of the mature protein encoding sequence associated with a particular transit peptide.

A polynucleotide portion of a plant stress-regulated plant gene, or an expression cassette, can be introduced into a cell as a naked DNA molecule, can be incorporated in a matrix such as a liposome or a particle such as a viral particle, or can be incorporated into a vector. Such vectors can be cloning or expression vectors, but other uses are within the scope of the present invention. A cloning vector is a self-replicating DNA molecule that serves to transfer a DNA segment into a host cell. The three most common types of cloning vectors are bacterial plasmids, phages, and other viruses. An expression vector is a cloning vector designed so that a coding sequence inserted at a particular site will be transcribed and translated into a protein. Incorporation of the polynucleotide into a vector can facilitate manipulation of the polynucleotide, or introduction of the polynucleotide into a plant cell. A vector can be derived from a plasmid or a viral vector such as a T-DNA vector (Horsch et al., Science 227:1229-1231, 1985, which is incorporated herein by reference). If desired, the vector can comprise components of a plant transposable element, for example, a Ds transposon (Bancroft and Dean, Genetics 134:1221-1229, 1993, which is incorporated herein by reference) or an Spm transposon (Aarts et al., Mol. Gen. Genet. 247:555-564, 1995, which is incorporated herein by reference).

In addition to containing the polynucleotide portion of a plant stress-regulated gene, a vector can contain various nucleotide sequences that facilitate, for example, rescue of the vector from a transformed plant cell; passage of the vector in a host cell, which can be a plant, animal, bacterial, or insect host cell; or expression of an encoding nucleotide sequence in the vector, including all or a portion of a rescued

coding region. As such, the vector can contain any of a number of additional transcription and translation elements, including constitutive and inducible promoters, enhancers, and the like (see, for example, Bitter et al., Meth. Enzymol. 153:516-544, 1987). For example, a vector can contain elements useful for passage, growth or expression in a bacterial system, including a bacterial origin of replication; a promoter, which can be an inducible promoter; and the like. In comparison, a vector that can be passaged in a mammalian host cell system can have a promoter such as a metallothionein promoter, which has characteristics of both a constitutive promoter and an inducible promoter, or a viral promoter such as a retrovirus long terminal repeat, an adenovirus late promoter, or the like. A vector also can contain one or more restriction endonuclease recognition and cleavage sites, including, for example, a polylinker sequence, to facilitate rescue of a nucleotide sequence operably linked to the polynucleotide portion.

The present invention also relates to a method of using a polynucleotide portion of a plant stress-regulated gene to confer a selective advantage on a plant cell. Such a method can be performed by introducing, for example, a plant stress-regulated regulatory element into a plant cell, wherein, upon exposure of the plant cell to a stress condition to which the regulatory element is responsive, a nucleotide sequence operatively linked to the regulatory element is expressed, thereby conferring a selective advantage to plant cell. The operatively linked nucleotide sequence can be a heterologous nucleotide sequence, which can be operatively linked to the regulatory element prior to introduction of the regulatory sequence into the plant cell; or can be an endogenous nucleotide sequence into which the regulatory element was targeted by a method such as homologous recombination. The selective advantage conferred by the operatively linked nucleotide sequence can be such that the plant is better able to tolerate the stress condition; or can be any other selective advantage.

As used herein, the term "selective advantage" refers to the ability of a particular organism to better propagate, develop, grow, survive, or otherwise tolerate a condition as compared to a corresponding reference organism that does not contain a plant-stress regulated polynucleotide portion of the present invention. In one embodiment, a selective advantage is exemplified by the ability of a desired plant, plant cell, or the like, that contains an introduced plant stress-regulated regulatory

element, to grow better than an undesired plant, plant cell, or the like, that does not contain the introduced regulatory element. For example, a recombinant polynucleotide comprising a plant stress-regulated regulatory element operatively linked to a heterologous nucleotide sequence encoding an enzyme that inactivates an herbicide can be introduced in a desired plant. Upon exposure of a mixed population of plants comprising the desired plants, which contain the recombinant polynucleotide, and one or more other populations of undesired plants, which lack the recombinant polynucleotide, to a stress condition that induces expression of the regulatory element and to the herbicide, the desired plants will have a greater likelihood of surviving exposure to the toxin and, therefore, a selective advantage over the undesired plants.

In another embodiment, a selective advantage is exemplified by the ability of a desired plant, plant cell, or the like, to better propagate, develop, grow, survive, or otherwise tolerate a condition as compared to an undesired plant, plant cell, or the like, that contains an introduced plant stress-regulated regulatory element. For example, a recombinant polynucleotide comprising a plant stress-regulated regulatory element operatively linked to a plant cell toxin can be introduced into cells of an undesirable plant present in a mixed population of desired and undesired plants, for example, food crops and weeds, respectively, then the plants can be exposed to stress conditions that induce expression from the plant stress-regulated regulatory element, whereby expression of the plant cell toxin results in inhibition of growth or death of the undesired plants, thereby providing a selective advantage to the desired plants, which no longer have to compete with the undesired plants for nutrients, light, or the like. In another example, a plant stress-regulated regulatory element operatively linked to a plant cell toxin can be introduced into cells of plants used as a nurse crop. Nurse crops, also called cover or companion crops, are planted in combination with plants of interest to provide, among other things, shade and soil stability during establishment of the desired plants. Once the desired plants have become established, the presence of the nurse crop may no longer be desirable. Exposure to conditions inducing expression of the gene linked to the plant stress-regulated regulatory element allows elimination of the nurse crop. Alternatively nurse crops can be made less tolerate to abiotic stress by the inhibition of any of the stress-regulated sequences

disclosed herein. Inhibition can be accomplished by any of the method described herein. Upon exposure of the nurse crop to the stress, the decreased ability of the nurse crop to respond to the stress will result in elimination of the nurse crop, leaving only the desired plants.

The invention also provides a means of producing a transgenic plant, which comprises plant cells that exhibit altered responsiveness to a stress condition. As such, the present invention further provides a transgenic plant, or plant cells or tissues derived therefrom, which are genetically modified to respond to stress differently than a corresponding wild-type plant or plant not containing constructs of the present invention would respond. As used herein, the term "responsiveness to a stress condition" refers to the ability of a plant to express a plant stress-regulated gene upon exposure to the stress condition. A transgenic plant cell contains a polypeptide portion of a plant stress-regulated gene, or a mutant form thereof, for example, a knock-out mutant. A knock-out mutant form of a plant stress-regulated gene can contain, for example, a mutation such that a STOP codon is introduced into the reading frame of the translated portion of the gene such that expression of a functional stress-regulated polypeptide is prevented; or a mutation in the stress-regulated regulatory element such that inducibility of the element in response to a stress condition is inhibited. Such transgenic plants of the invention can display any of various idiotypic modifications is response to an abiotic stress, including altered tolerance to the stress condition, as well as increased or decreased plant growth, root growth, yield, or the like, as compared to the corresponding wild-type plant.

The term "plant" is used broadly herein to include any plant at any stage of development, or to part of a plant, including a plant cutting, a plant cell, a plant cell culture, a plant organ, a plant seed, and a plantlet. A plant cell is the structural and physiological unit of the plant, comprising a protoplast and a cell wall. A plant cell can be in the form of an isolated single cell or a cultured cell, or can be part of higher organized unit, for example, a plant tissue, plant organ, or plant. Thus, a plant cell can be a protoplast, a gamete producing cell, or a cell or collection of cells that can regenerate into a whole plant. As such, a seed, which comprises multiple plant cells and is capable of regenerating into a whole plant, is considered plant cell for purposes of this disclosure. A plant tissue or plant organ can be a seed, protoplast, callus, or

any other groups of plant cells that is organized into a structural or functional unit. Particularly useful parts of a plant include harvestable parts and parts useful for propagation of progeny plants. A harvestable part of a plant can be any useful part of a plant, for example, flowers, pollen, seedlings, tubers, leaves, stems, fruit, seeds, roots, and the like. A part of a plant useful for propagation includes, for example, seeds, fruits, cuttings, seedlings, tubers, rootstocks, and the like.

A transgenic plant can be regenerated from a transformed plant cell. As used herein, the term "regenerate" means growing a whole plant from a plant cell; a group of plant cells; a protoplast; a seed; or a piece of a plant such as a callus or tissue. Regeneration from protoplasts varies from species to species of plants. For example, a suspension of protoplasts can be made and, in certain species, embryo formation can be induced from the protoplast suspension, to the stage of ripening and germination. The culture media generally contains various components necessary for growth and regeneration, including, for example, hormones such as auxins and cytokinins; and amino acids such as glutamic acid and proline, depending on the particular plant species. Efficient regeneration will depend, in part, on the medium, the genotype, and the history of the culture. If these variables are controlled, however, regeneration is reproducible.

Regeneration can occur from plant callus, explants, organs or plant parts. Transformation can be performed in the context of organ or plant part regeneration. (see Meth. Enzymol. Vol. 118; Klee et al. Ann. Rev. Plant Physiol. 38:467, 1987, which is incorporated herein by reference). Utilizing the leaf disk-transformation-regeneration method, for example, disks are cultured on selective media, followed by shoot formation in about two to four weeks (see Horsch et al., *supra*, 1985). Shoots that develop are excised from calli and transplanted to appropriate root-inducing selective medium. Rooted plantlets are transplanted to soil as soon as possible after roots appear. The plantlets can be repotted as required, until reaching maturity.

In vegetatively propagated crops, the mature transgenic plants are propagated utilizing cuttings or tissue culture techniques to produce multiple identical plants. Selection of desirable transgenotes is made and new varieties are obtained and propagated vegetatively for commercial use. In seed propagated crops, the mature transgenic plants can be self crossed to produce a homozygous inbred plant. The

resulting inbred plant produces seeds that contain the introduced plant stress-induced regulatory element, and can be grown to produce plants that express a polynucleotide or polypeptide in response to a stress condition that induces expression from the regulatory element. As such, the invention further provides seeds produced by a transgenic plant obtained by a method of the invention.

In addition, transgenic plants comprising different recombinant sequences can be crossbred, thereby providing a means to obtain transgenic plants containing two or more different transgenes, each of which contributes a desirable characteristic to the plant. Methods for breeding plants and selecting for crossbred plants having desirable characteristics or other characteristics of interest are well known in the art.

A method of the invention can be performed by introducing a polynucleotide portion of a plant stress-regulated gene into the plant. As used herein, the term "introducing" means transferring a polynucleotide into a plant cell. A polynucleotide can be introduced into a cell by a variety of methods well known to those of ordinary skill in the art. For example, the polynucleotide can be introduced into a plant cell using a direct gene transfer method such as electroporation or microprojectile mediated transformation, or using *Agrobacterium* mediated transformation. Non-limiting examples of methods for the introduction of polynucleotides into plants are provided in greater detail herein. As used herein, the term "transformed" refers to a plant cell containing an exogenously introduced polynucleotide portion of a plant stress-regulated gene that is or can be rendered active in a plant cell, or to a plant comprising a plant cell containing such a polynucleotide.

It should be recognized that one or more polynucleotides, which are the same or different can be introduced into a plant, thereby providing a means to obtain a genetically modified plant containing multiple copies of a single transgenic sequence, or containing two or more different transgenic sequences, either or both of which can be present in multiple copies. Such transgenic plants can be produced, for example, by simply selecting plants having multiple copies of a single type of transgenic sequence; by cotransfecting plant cells with two or more populations of different transgenic sequences and identifying those containing the two or more different transgenic sequences; or by crossbreeding transgenic plants, each of which contains

one or more desired transgenic sequences, and identifying those progeny having the desired sequences.

Methods for introducing a polynucleotide into a plant cell to obtain a transformed plant also include direct gene transfer (see European Patent A 164 575), injection, electroporation, biolistic methods such as particle bombardment, pollen-mediated transformation, plant RNA virus-mediated transformation, liposome-mediated transformation, transformation using wounded or enzyme-degraded immature embryos, or wounded or enzyme-degraded embryogenic callus, and the like. Transformation methods using *Agrobacterium tumefaciens* tumor inducing (Ti) plasmids or root-inducing (Ri) plasmids, or plant virus vectors are well known in the art (see, for example, WO 99/47552; Weissbach & Weissbach, "Methods for Plant Molecular Biology" (Academic Press, NY 1988), section VIII, pages 421-463; Grierson and Corey, "Plant Molecular Biology" 2d Ed. (Blackie, London 1988), Chapters 7-9, each of which is incorporated herein by reference; Horsch et al., *supra*, 1985). The wild-type form of *Agrobacterium*, for example, contains a Ti plasmid, which directs production of tumorigenic crown gall growth on host plants. Transfer of the tumor inducing T-DNA region of the Ti plasmid to a plant genome requires the Ti plasmid-encoded virulence genes as well as T-DNA borders, which are a set of direct DNA repeats that delineate the region to be transferred. An *Agrobacterium* based vector is a modified form of a Ti plasmid, in which the tumor inducing functions are replaced by a nucleotide sequence of interest that is to be introduced into the plant host.

Methods of using *Agrobacterium* mediated transformation include cocultivation of *Agrobacterium* with cultured isolated protoplasts; transformation of plant cells or tissues with *Agrobacterium*; and transformation of seeds, apices or meristems with *Agrobacterium*. In addition, *in planta* transformation by *Agrobacterium* can be performed using vacuum infiltration of a suspension of *Agrobacterium* cells (Bechtold et al., C.R. Acad. Sci. Paris 316:1194, 1993, which is incorporated herein by reference).

Agrobacterium mediated transformation can employ cointegrate vectors or binary vector systems, in which the components of the Ti plasmid are divided between a helper vector, which resides permanently in the *Agrobacterium* host and carries the

virulence genes, and a shuttle vector, which contains the gene of interest bounded by T-DNA sequences. Binary vectors are well known in the art (see, for example, De Framond, BioTechnology 1:262, 1983; Hoekema et al., Nature 303:179, 1983, each of which is incorporated herein by reference) and are commercially available (Clontech; Palo Alto CA). For transformation, *Agrobacterium* can be cocultured, for example, with plant cells or wounded tissue such as leaf tissue, root explants, hypocotyledons, stem pieces or tubers (see, for example, Glick and Thompson, "Methods in Plant Molecular Biology and Biotechnology" (Boca Raton FL, CRC Press 1993), which is incorporated herein by reference). Wounded cells within the plant tissue that have been infected by *Agrobacterium* can develop organs *de novo* when cultured under the appropriate conditions; the resulting transgenic shoots eventually give rise to transgenic plants, which contain an exogenous polynucleotide portion of a plant stress-regulated gene.

Agrobacterium mediated transformation has been used to produce a variety of transgenic plants, including, for example, transgenic cruciferous plants such as *Arabidopsis*, mustard, rapeseed and flax; transgenic leguminous plants such as alfalfa, pea, soybean, trefoil and white clover; and transgenic solanaceous plants such as eggplant, petunia, potato, tobacco and tomato (see, for example, Wang et al., "Transformation of Plants and Soil Microorganisms" (Cambridge, University Press 1995), which is incorporated herein by reference). In addition, *Agrobacterium* mediated transformation can be used to introduce an exogenous polynucleotide sequence, for example, a plant stress-regulated regulatory element into apple, aspen, belladonna, black currant, carrot, celery, cotton, cucumber, grape, horseradish, lettuce, morning glory, muskmelon, neem, poplar, strawberry, sugar beet, sunflower, walnut, asparagus, rice and other plants (see, for example, Glick and Thompson, *supra,* 1993; Hiei et al., Plant J. 6:271-282, 1994; Shimamoto, Science 270:1772-1773, 1995).

Suitable strains of *Agrobacterium tumefaciens* and vectors as well as transformation of Agrobacteria and appropriate growth and selection media are well known in the art (GV3101, pMK90RK), Koncz, Mol. Gen. Genet. 204:383-396, 1986; (C58C1, pGV3850kan), Deblaere, Nucl. Acid Res. 13:4777, 1985; Bevan, Nucl. Acid Res. 12:8711, 1984; Koncz, Proc. Natl. Acad. Sci. *USA* 86:8467-8471, 1986; Koncz, Plant Mol. Biol. 20:963-976, 1992; Koncz, Specialized vectors for gene tagging and

expression studies. In: Plant Molecular Biology Manual Vol. 2, Gelvin and Schilperoort (Eds.), Dordrecht, The Netherlands: Kluwer Academic Publ. (1994), 1-22; European Patent A-1 20 516; Hoekema: The Binary Plant Vector System, Offsetdrukkerij Kanters B. V., Alblasserdam (1985), Chapter V; Fraley, Crit. Rev. Plant. Sci., 4:1-46; An, EMBO J. 4:277-287, 1985).

Where a polynucleotide portion of a plant stress-regulated gene is contained in vector, the vector can contain functional elements, for example "left border" and "right border" sequences of the T-DNA of *Agrobacterium*, which allow for stable integration into a plant genome. Furthermore, methods and vectors that permit the generation of marker-free transgenic plants, for example, where a selectable marker gene is lost at a certain stage of plant development or plant breeding, are known, and include, for example, methods of co-transformation (Lyznik, Plant Mol. Biol. 13:151-161, 1989; Peng, Plant Mol. Biol. 27:91-104, 1995), or methods that utilize enzymes capable of promoting homologous recombination in plants (see, e.g., W097/08331; Bayley, Plant Mol. Biol. 18:353-361, 1992; Lloyd, Mol. Gen. Genet. 242:653-657, 1994; Maeser, Mol. Gen. Genet. 230:170-176, 1991; Onouchi, Nucl. Acids Res. 19:6373-6378, 1991; see, also, Sambrook et al., *supra*, 1989).

A direct gene transfer method such as electroporation also can be used to introduce a polynucleotide portion of a plant stress-regulated gene into a cell such as a plant cell. For example, plant protoplasts can be electroporated in the presence of the regulatory element, which can be in a vector (Fromm et al., Proc. Natl. Acad. Sci., *USA* 82:5824, 1985, which is incorporated herein by reference). Electrical impulses of high field strength reversibly permeabilize membranes allowing the introduction of the nucleic acid. Electroporated plant protoplasts reform the cell wall, divide and form a plant callus. Microinjection can be performed as described in Potrykus and Spangenberg (eds.), Gene Transfer To Plants (Springer Verlag, Berlin, NY 1995). A transformed plant cell containing the introduced polynucleotide can be identified by detecting a phenotype due to the introduced polynucleotide, for example, increased or decreased tolerance to a stress condition.

Microprojectile mediated transformation also can be used to introduce a polynucleotide into a plant cell (Klein et al., Nature 327:70-73, 1987, which is incorporated herein by reference). This method utilizes microprojectiles such as gold

or tungsten, which are coated with the desired nucleic acid molecule by precipitation with calcium chloride, spermidine or polyethylene glycol. The microprojectile particles are accelerated at high speed into a plant tissue using a device such as the BIOLISTIC PD-1000 (BioRad; Hercules CA).

Microprojectile mediated delivery ("particle bombardment") is especially useful to transform plant cells that are difficult to transform or regenerate using other methods. Methods for the transformation using biolistic methods are well known (Wan, Plant Physiol. 104:37-48, 1984; Vasil, Bio/Technology 11:1553-1558, 1993; Christou, Trends in Plant Science 1:423-431, 1996). Microprojectile mediated transformation has been used, for example, to generate a variety of transgenic plant species, including cotton, tobacco, corn, hybrid poplar and papaya (see Glick and Thompson, *supra,* 1993). Important cereal crops such as wheat, oat, barley, sorghum and rice also have been transformed using microprojectile mediated delivery (Duan et al., Nature Biotech. 14:494-498, 1996; Shimamoto, Curr. Opin. Biotech. 5:158-162, 1994). A rapid transformation regeneration system for the production of transgenic plants such as a system that produces transgenic wheat in two to three months (see European Patent No. EP 0709462A2, which is incorporated herein by reference) also can be useful for producing a transgenic plant using a method of the invention, thus allowing more rapid identification of gene functions. The transformation of most dicotyledonous plants is possible with the methods described above. Transformation of monocotyledonous plants also can be transformed using, for example, biolistic methods as described above, protoplast transformation, electroporation of partially permeabilized cells, introduction of DNA using glass fibers, *Agrobacterium* mediated transformation, and the like.

Plastid transformation also can be used to introduce a polynucleotide portion of a plant stress-regulated gene into a plant cell (U.S. Patent Nos. 5,451,513, 5,545,817, and 5,545,818; WO 95/16783; McBride et al., Proc. Natl. Acad. Sci., *USA* 91:7301-7305, 1994). Chloroplast transformation involves introducing regions of cloned plastid DNA flanking a desired nucleotide sequence, for example, a selectable marker together with polynucleotide of interest into a suitable target tissue, using, for example, a biolistic or protoplast transformation method (e.g., calcium chloride or PEG mediated transformation). One to 1.5 kb flanking regions ("targeting

sequences") facilitate homologous recombination with the plastid genome, and allow the replacement or modification of specific regions of the plastome. Using this method, point mutations in the chloroplast 16S rRNA and rps12 genes, which confer resistance to spectinomycin and streptomycin, can be utilized as selectable markers for transformation (Svab et al., Proc. Natl. Acad. Sci., *USA* 87:8526-8530, 1990; Staub and Maliga, Plant Cell 4:39-45, 1992), resulted in stable homopiasmic transformants; at a frequency of approximately one per 100 bombardments of target leaves. The presence of cloning sites between these markers allowed creation of a plastid targeting vector for introduction of foreign genes (Staub and Maliga, EMBO J. 12:601-606, 1993). Substantial increases in transformation frequency are obtained by replacement of the recessive rRNA or r-protein antibiotic resistance genes with a dominant selectable marker, the bacterial aadA gene encoding the spectinomycin-detoxifying enzyme aminoglycoside-3'-adenyltransf erase (Svab and Maliga, Proc. Natl. Acad. Sci., *USA* 90:913-917, 1993). Approximately 15 to 20 cell division cycles following transformation are generally required to reach a homoplastidic state. Plastid expression, in which genes are inserted by homologous recombination into all of the several thousand copies of the circular plastid genome present in each plant cell, takes advantage of the enormous copy number advantage over nuclear-expressed genes to permit expression levels that can readily exceed 10% of the total soluble plant protein.

Plants suitable to treatment according to a method of the invention can be monocots or dicots and include, but are not limited to, corn (*Zea mays*), *Brassica* sp. (e.g., *B. napus*, *B. rapa*, *B. juncea*), particularly those *Brassica* species useful as sources of seed oil, alfalfa (*Medicago sativa*), rice (*Oryza sativa*), rye (*Secale cereale*), sorghum (*Sorghum bicolor*, *Sorghum vulgare*), millet (e.g., pearl millet (*Pennisetum glaucum*), proso millet (*Panicum miliaceum*), foxtail millet (*Setaria italica*), finger millet (*Eleusine coracana*)), sunflower (*Helianthus annuus*), safflower (*Carthamus tinctorius*), wheat (*Triticum aestivum*), soybean (*Glycine max*), tobacco (*Nicotiana tabacum*), potato (*Solanum tuberosum*), peanuts (*Arachis hypogaea*), cotton (*Gossypium barbadense*, *Gossypium hirsutum*), sweet potato (*Ipomoea batatus*), cassava (*Manihot esculenta*), coffee (*Cofea* spp.), coconut (*Cocos nucifera*), pineapple (*Ananas comosus*), citrus trees (*Citrus* spp.), cocoa (*Theobroma cacao*), tea

(*Camellia sinensis*), banana (*Musa* spp.), avocado (*Persea ultilane*), fig (*Ficus casica*), guava (*Psidium guajava*), mango (*Mangifera indica*), olive (*Olea europaea*), papaya (*Carica papaya*), cashew (*Anacardium occidentale*), macadamia (*Macadamia integrifolia*), almond (*Prunus amygdalus*), sugar beets (*Beta vulgaris*), sugarcane (*Saccharum* spp.), oats, duckweed (*Lemna*), barley, tomatoes (*Lycopersicon esculentum*), lettuce (e.g., *Lactuca sativa*), green beans (*Phaseolus vulgaris*), lima beans (*Phaseolus limensis*), peas (*Lathyrus* spp.), and members of the genus *Cucumis* such as cucumber (*C. sativus*), cantaloupe (*C. cantalupensis*), and musk melon (*C. melo*).

Ornamentals such as azalea (*Rhododendron* spp.), hydrangea (*Macrophylla hydrangea*), hibiscus (*Hibiscus rosasanensis*), roses (*Rosa* spp.), tulips (*Tulipa* spp.), daffodils (*Narcissus* spp.), petunias (*Petunia hybrida*), carnation (*Dianthus caryophyllus*), poinsettia (*Euphorbia pulcherrima*), and chrysanthemum are also included. Additional ornamentals within the scope of the invention include impatiens, Begonia, Pelargonium, Viola, Cyclamen, Verbena, Vinca, Tagetes, Primula, Saint Paulia, Agertum, Amaranthus, Antihirrhinum, Aquilegia, Cineraria, Clover, Cosmo, Cowpea, Dahlia, Datura, Delphinium, Gerbera, Gladiolus, Gloxinia, Hippeastrum, Mesembryanthemum, Salpiglossos, and Zinnia.

Conifers that may be employed in practicing the present invention include, for example, pines such as loblolly pine (*Pinus taeda*), slash pine (*Pinus elliotii*), ponderosa pine (*Pinus ponderosa*), lodgepole pine (*Pinus contorta*), and Monterey pine (*Pinus radiata*), Douglas-fir (*Pseudotsuga menziesii*); Western hemlock (*Tsuga ultilane*); Sitka spruce (*Picea glauca*); redwood (*Sequoia sempervirens*); true firs such as silver fir (*Abies amabilis*) and balsam fir (*Abies balsamea*); and cedars such as Western red cedar (*Thuja plicata*) and Alaska yellow-cedar (*Chamaecyparis nootkatensis*).

Leguminous plants which may be used in the practice of the present invention include beans and peas. Beans include guar, locust bean, fenugreek, soybean, garden beans, cowpea, mungbean, lima bean, fava bean, lentils, chickpea, etc. Legumes include, but are not limited to, *Arachis*, e.g., peanuts, *Vicia*, e.g., crown vetch, hairy vetch, adzuki bean, mung bean, and chickpea, *Lupinus*, e.g., lupine, trifolium, *Phaseolus*, e.g., common bean and lima bean, *Pisum*, e.g., field bean, *Melilotus*, e.g.,

clover, *Medicago*, e.g., alfalfa, Lotus, e.g., trefoil, lens, e.g., lentil, and false indigo. Preferred forage and turf grass for use in the methods of the invention include alfalfa, orchard grass, tall fescue, perennial ryegrass, creeping bent grass, and redtop. Other plants within the scope of the invention include *Acacia*, aneth, artichoke, arugula, blackberry, canola, cilantro, clementines, escarole, eucalyptus, fennel, grapefruit, honey dew, jicama, kiwifruit, lemon, lime, mushroom, nut, okra, orange, parsley, persimmon, plantain, pomegranate, poplar, radiata pine, radicchio, Southern pine, sweetgum, tangerine, triticale, vine, yams, apple, pear, quince, cherry, apricot, melon, hemp, buckwheat, grape, raspberry, chenopodium, blueberry, nectarine, peach, plum, strawberry, watermelon, eggplant, pepper, cauliflower, Brassica, e.g., broccoli, cabbage, ultilan sprouts, onion, carrot, leek, beet, broad bean, celery, radish, pumpkin, endive, gourd, garlic, snapbean, spinach, squash, turnip, ultilane, chicory, groundnut and zucchini.

Angiosperms are divided into two broad classes based on the number of cotyledons, which are seed leaves that generally store or absorb food; a monocotyledonous angiosperm has a single cotyledon, and a dicotyledonous angiosperm has two cotyledons. Angiosperms produce a variety of useful products including materials such as lumber, rubber, and paper; fibers such as cotton and linen; herbs and medicines such as quinine and vinblastine; ornamental flowers such as roses and orchids; and foodstuffs such as grains, oils, fruits and vegetables.

Angiosperms encompass a variety of flowering plants, including, for example, cereal plants, leguminous plants, oilseed plants, hardwood trees, fruit-bearing plants and ornamental flowers, which general classes are not necessarily exclusive. Cereal plants, which produce an edible grain cereal, include, for example, corn, rice, wheat, barley, oat, rye, orchardgrass, guinea grass, sorghum and turfgrass. Leguminous plants include members of the pea family (*Fabaceae*) and produce a characteristic fruit known as a legume. Examples of leguminous plants include, for example, soybean, pea, chickpea, moth bean, broad bean, kidney bean, lima bean, lentil, cowpea, dry bean, and peanut, as well as alfalfa, birdsfoot trefoil, clover and sainfoin. Oilseed plants, which have seeds that are useful as a source of oil, include soybean, sunflower, rapeseed (canola) and cottonseed.

Angiosperms also include hardwood trees, which are perennial woody plants that generally have a single stem (trunk). Examples of such trees include alder, ash, aspen, basswood (linden), beech, birch, cherry, cottonwood, elm, eucalyptus, hickory, locust, maple, oak, persimmon, poplar, sycamore, walnut, sequoia, and willow. Trees are useful, for example, as a source of pulp, paper, structural material and fuel.

Angiosperms are fruit-bearing plants that produce a mature, ripened ovary, which generally contains seeds. A fruit can be suitable for human or animal consumption or for collection of seeds to propagate the species. For example, hops are a member of the mulberry family that are prized for their flavoring in malt liquor. Fruit-bearing angiosperms also include grape, orange, lemon, grapefruit, avocado, date, peach, cherry, olive, plum, coconut, apple and pear trees and blackberry, blueberry, raspberry, strawberry, pineapple, tomato, cucumber and eggplant plants. An ornamental flower is an angiosperm cultivated for its decorative flower. Examples of commercially important ornamental flowers include rose, orchid, lily, tulip and chrysanthemum, snapdragon, camellia, carnation and petunia plants. The skilled artisan will recognize that the methods of the invention can be practiced using these or other angiosperms, as desired, as well as gymnosperms, which do not produce seeds in a fruit.

A method of producing a transgenic plant can be performed by introducing a polynucleotide portion of plant stress-regulated gene into a plant cell genome, whereby the polynucleotide portion of the plant stress-regulated gene modulates a response of the plant cell to a stress condition, thereby producing a transgenic plant, which comprises plant cells that exhibit altered responsiveness to the stress condition. In one embodiment, the polynucleotide portion of the plant stress-regulated gene encodes a stress-regulated polypeptide or functional peptide portion thereof, wherein expression of the stress-regulated polypeptide or functional peptide portion thereof either increases the stress tolerance of the transgenic plant, or decreases the stress tolerance of the transgenic plant. The polynucleotide portion of the plant stress-regulated gene encoding the stress-regulated polypeptide or functional peptide portion thereof can be operatively linked to a heterologous promoter.

In another embodiment, the polynucleotide portion of the plant stress-regulated gene comprises a stress-regulated regulatory element. The stress-regulated

regulatory element can integrate into the plant cell genome in a site-specific manner, whereupon it can be operatively linked to an endogenous nucleotide sequence, which can be expressed in response to a stress condition specific for the regulatory element; or can be a mutant regulatory element, which is not responsive to the stress condition, whereby upon integrating into the plant cell genome, the mutant regulatory element disrupts an endogenous stress-regulated regulatory element of a plant stress-regulated gene, thereby altering the responsiveness of the plant stress-regulated gene to the stress condition. Accordingly, the invention also provides genetically modified plants, including transgenic plants, produced by such a method, and a plant cell obtained from such genetically modified plant, wherein said plant cell exhibits altered responsiveness to the stress condition; a seed produced by a transgenic plant; and a cDNA library prepared from a transgenic plant.

Also provided is a method of modulating the responsiveness of a plant cell to a stress condition. Such a method can be performed, for example, by introducing a polynucleotide portion of a plant stress-regulated gene into the plant cell, thereby modulating the responsiveness of the plant cell to a stress condition. As disclosed herein, the responsiveness of the plant cell can be increased or decreased upon exposure to the stress condition, and the altered responsiveness can result in increased or decreased tolerance of the plant cell to a stress condition. The polynucleotide portion of the plant stress-regulated gene can, but need not, be integrated into the genome of the plant cell, thereby modulating the responsiveness of the plant cell to the stress condition. Accordingly, the invention also provide a genetically modified plant, including a transgenic plant, which contains an introduced polynucleotide portion of a plant stress-regulated gene, as well as plant cells, tissues, and the like, which exhibit modulated responsiveness to a stress condition.

The polynucleotide portion of the plant stress-regulated gene can encode a stress-regulated polypeptide or functional peptide portion thereof, which can be operatively linked to a heterologous promoter. As used herein, reference to a "functional peptide portion of a plant stress-regulated polypeptide" means a contiguous amino acid sequence of the polypeptide that has an activity of the full length polypeptide, or that has an antagonist activity with respect to the full length polypeptide, or that presents an epitope unique to the polypeptide. Thus, by

expressing a functional peptide portion of a plant stress-regulated polypeptide in a plant cell, the peptide can act as an agonist or an antagonist of the polypeptide, thereby modulating the responsiveness of the plant cell to a stress condition.

A polynucleotide portion of the plant stress-regulated nucleotide sequence also can contain a mutation, whereby upon integrating into the plant cell genome, the polynucleotide disrupts (knocks-out) an endogenous plant stress-regulated nucleotide sequence, thereby modulating the responsiveness of said plant cell to the stress condition. Depending on whether the knocked-out gene encodes an adaptive or a maladaptive stress-regulated polypeptide, the responsiveness of the plant will be modulated accordingly. Thus, a method of the invention provides a means of producing a transgenic plant having a knock-out phenotype of a plant stress-regulated nucleotide sequence.

Alternatively, the responsiveness of a plant or plant cell to a stress condition can be modulated by use of a suppressor construct containing dominant negative mutation for any of the stress-regulated sequences described herein. Expression of a suppressor construct containing a dominant mutant mutation generates a mutant transcript that, when coexpressed with the wild-type transcript inhibits the action of the wild-type transcript. Methods for the design and use of dominant negative constructs are well known (see, for example, in Herskowitz, Nature 329:219-222, 1987; Lagna and Hemmati-Brivanlou, Curr. Topics Devel. Biol. 36:75-98, 1998).

The polynucleotide portion of the plant stress-regulated gene also can comprise a stress-regulated regulatory element, which can be operatively linked to a heterologous nucleotide sequence, which, upon expression from the regulatory element in response to a stress condition, modulates the responsiveness of the plant cell to the stress condition. Such a heterologous nucleotide sequence can encode, for example, a stress-inducible transcription factor such as DREB1A, which, upon exposure to the stress condition, is expressed such that it can amplify the stress response (see Kasuga et al., *supra*, 1999). The heterologous nucleotide sequence also can encode a polynucleotide that is specific for a plant stress-regulated gene, for example, an antisense molecule, a ribozyme, and a triplexing agent, either of which, upon expression in the plant cell, reduces or inhibits expression of a stress-regulated polypeptide encoded by the gene, thereby modulating the responsiveness of the plant

cell to a stress condition, for example, an abnormal level of cold, osmotic pressure, and salinity. As used herein, the term "abnormal," when used in reference to a condition such as temperature, osmotic pressure, salinity, or any other condition that can be a stress condition, means that the condition varies sufficiently from a range generally considered optimum for growth of a plant that the condition results in an induction of a stress response in a plant. Methods of determining whether a stress response has been induced in a plant are disclosed herein or otherwise known in the art.

A plant stress-regulated regulatory element can be operatively linked to a heterologous polynucleotide sequence, such that the regulatory element can be introduced into a plant genome in a site-specific matter by homologous recombination. For example, a mutant plant stress-regulated regulatory element for a maladaptive stress-induced polypeptide can be transformed into a plant genome in a site specific manner by *in vivo* mutagenesis, using a hybrid RNA-DNA oligonucleotide ("chimeroplast" (TIBTECH 15:441- 447, 1997; WO 95/15972; Kren, Hepatology 25:1462-1468, 1997; Cole-Strauss, Science 273:1386-1389, 1996, each of which is incorporated herein by reference). Part of the DNA component of the RNA-DNA oligonucleotide is homologous to a nucleotide sequence comprising the regulatory element of the maladaptive gene, but includes a mutation or contains a heterologous region which is surrounded by the homologous regions. By means of base pairing of the homologous regions of the RNA-DNA oligonucleotide and of the endogenous nucleic acid molecule, followed by a homologous recombination the mutation contained in the DNA component of the RNA-DNA oligonucleotide or the heterologous region can be transferred to the plant genome, resulting in a "mutant" gene that, for example, is not induced in response to a stress and, therefore, does not confer the maladaptive phenotype. Such a method similarly can be used to knock-out the activity of a stress-regulated gene, for example, in an undesirable plant. Such a method can provide the advantage that a desirable wild-type plant need not compete with the undesirable plant, for example, for light, nutrients, or the like.

A method of modulating the responsiveness of a plant cell to a stress condition also can be performed by introducing a mutation in the chromosomal copy of a plant stress-regulated gene, for example, in the stress-regulated regulatory element, by

transforming a cell with a chimeric oligonucleotide composed of a contiguous stretch of RNA and DNA residues in a duplex conformation with double hairpin caps on the ends. An additional feature of the oligonucleotide is the presence of 2'-0- methylation at the RNA residues. The RNA/DNA sequence is designed to align with the sequence of a chromosomal copy of the target regulatory element and to contain the desired nucleotide change (see U.S. Pat. No. 5,501,967, which is incorporated herein by reference).

A plant stress-regulated regulatory element also can be operatively linked to a heterologous polynucleotide such that, upon expression from the regulatory element in the plant cell, confers a desirable phenotype on the plant cell. For example, the heterologous polynucleotide can encode an aptamer, which can bind to a stress-induced polypeptide. Aptamers are nucleic acid molecules that are selected based on their ability to bind to and inhibit the activity of a protein or metabolite. Aptamers can be obtained by the SELEX (Systematic Evolution of Ligands by Exponential Enrichment) method (see U.S. Pat. No. 5,270,163), wherein a candidate mixture of single stranded nucleic acids having regions of randomized sequence is contacted with a target, and those nucleic acids having a specific affinity to the target are partitioned from the remainder of the candidate mixture, and amplified to yield a ligand enriched mixture. After several iterations a nucleic acid molecule (aptamer) having optimal affinity for the target is obtained. For example, such a nucleic acid molecule can be operatively linked to a plant stress-regulated regulatory element and introduced into a plant. Where the aptamer is selected for binding to a polypeptide that normally is expressed from the regulatory element and is involved in an adaptive response of the plant to a stress, the recombinant molecule comprising the aptamer can be useful for inhibiting the activity of the stress-regulated polypeptide, thereby decreasing the tolerance of the plant to the stress condition.

The invention provides a genetically modified plant, which can be a transgenic plant, that is tolerant or resistant to a stress condition. As used herein, the term "tolerant" or "resistant," when used in reference to a stress condition of a plant, means that the particular plant, when exposed to a stress condition, shows less of an effect, or no effect, in response to the condition as compared to a corresponding reference plant (naturally occurring wild-type plant or a plant not containing a construct of the

present invention). As a consequence, a plant encompassed within the present invention grows better under more widely varying conditions, has higher yields and/or produces more seeds. Thus, a transgenic plant produced according to a method of the invention can demonstrate protection (as compared to a corresponding reference plant) from a delay to complete inhibition of alteration in cellular metabolism, or reduced cell growth or cell death caused by the stress. Preferably, the transgenic plant is capable of substantially normal growth under environmental conditions where the corresponding reference plant shows reduced growth, metabolism or viability, or increased male or female sterility.

The determination that a plant modified according to a method of the invention has increased resistance to a stress-inducing condition can be made by comparing the treated plant with a control (reference) plant using well known methods. For example, a plant having increased tolerance to saline stress can be identified by growing the plant on a medium such as soil, which contains a higher content of salt in the order of at least about 10% compared to a medium the corresponding reference plant is capable of growing on. Advantageously, a plant treated according to a method of the invention can grow on a medium or soil containing at least about 50%, or more than about 75%, particularly at least about more than 100%, and preferably more than about 200% salt than the medium or soil on which a corresponding reference plant can grow. In particular, such a treated plant can grow on medium or soil containing at least 40 mM, generally at least 100 mM, particularly at least 200 mM, and preferably at least 300 mM salt, including, for example, a water soluble inorganic salt such as sodium sulfate, magnesium sulfate, calcium sulfate, sodium chloride, magnesium chloride, calcium chloride, potassium chloride, or the like; salts of agricultural fertilizers, and salts associated with alkaline or acid soil conditions; particularly NaCl.

In another embodiment, the invention provides a plant that is less tolerant or less resistant to a stress condition as compared to a corresponding reference plant. As used herein, the term "less tolerant" or "less resistant," when used in reference to a stress condition of a plant, means that the particular plant, when exposed to a stress condition, shows an alteration in response to the condition as compared to a corresponding reference plant. As a consequence, such a plant, which generally is an

undesirable plant species, is less likely to grow when exposed to a stress condition than an untreated plant.

The present invention also relates to a method of expressing a heterologous nucleotide sequence in a plant cell. Such a method can be performed, for example, by introducing into the plant cell a plant stress-regulated regulatory element operatively linked to the heterologous nucleotide sequence, whereby, upon exposure of the plant cell to stress condition, the heterologous nucleotide sequence is expressed in the plant cell. The heterologous nucleotide sequence can encode a selectable marker, or preferably, a polypeptide that confers a desirable trait upon the plant cell, for example, a polypeptide that improves the nutritional value, digestibility or ornamental value of the plant cell, or a plant comprising the plant cell. Accordingly, the invention provides a transgenic plant that, in response to a stress condition, can produce a heterologous polypeptide from a plant stress-regulated regulatory element. Such transgenic plants can provide the advantage that, when grown in a cold environment for example, expression of the heterologous polypeptide from a plant cold-regulated regulatory element can result in increased nutritional value of the plant.

The present invention further relates to a method of modulating the activity of a biological pathway in a plant cell, wherein the pathway involves a stress-regulated polypeptide. As used herein, reference to a pathway that "involves" a stress-regulated polypeptide means that the polypeptide is required for normal function of the pathway. For example, plant stress-regulated polypeptides as disclosed herein include those acting as kinases or as transcription factors, which are well known to be involved in signal transduction pathways. As such, a method of the invention provides a means to modulate biological pathways involving plant stress-regulated polypeptides, for example, by altering the expression of the polypeptides in response to a stress condition. Thus, a method of the invention can be performed, for example, by introducing a polynucleotide portion of a plant stress-regulated gene into the plant cell, thereby modulating the activity of the biological pathway.

A method of the invention can be performed with respect to a pathway involving any of the stress-regulated polypeptides as encoded by a polynucleotide of SEQ ID NOS:1-2703, including for example, a stress-regulated transcription factor, an enzyme, including a kinase, a channel protein (see, for example, Tables 29-31; see,

also, Table 1). Pathways in which the disclosed stress-regulated stress factors are involved can be identified, for example, by searching the Munich Information Center for Protein Sequences (MIPS) *Arabidopsis thaliana* database (MATDB), which is at http://www.mips.biochem.mpg.de/proj/thal/.

The present invention also relates to a method of identifying a polynucleotide that modulates a stress response in a plant cell. Such a method can be performed, for example, by contacting an array of probes representative of a plant cell genome and nucleic acid molecules expressed in plant cell exposed to the stress; detecting a nucleic acid molecule that is expressed at a level different from a level of expression in the absence of the stress; introducing the nucleic acid molecule that is expressed differently into a plant cell; and detecting a modulated response of the plant cell containing the introduced nucleic acid molecule to a stress, thereby identifying a polynucleotide that modulates a stress response in a plant cell. The contacting is under conditions that allow for selective hybridization of a nucleic acid molecule with probe having sufficient complementarity, for example, under stringent hybridization conditions.

As used herein, the term "array of probes representative of a plant cell genome" means an organized group of oligonucleotide probes that are linked to a solid support, for example, a microchip or a glass slide, wherein the probes can hybridize specifically and selectively to nucleic acid molecules expressed in a plant cell. Such an array is exemplified herein by a GeneChip® Arabidopsis Genome Array (Affymetrix; see Example 1). In general, an array of probes that is "representative" of a plant genome will identify at least about 30% or the expressed nucleic acid molecules in a plant cell, generally at least about 50% or 70%, particularly at least about 80% or 90%, and preferably will identify all of the expressed nucleic acid molecules. It should be recognized that the greater the representation, the more likely all nucleotide sequences of cluster of stress-regulated genes will be identified.

A method of the invention is exemplified in Example 1, wherein clusters of *Arabidopsis* genes induced to cold, to increased salinity, to increased osmotic pressure, and to a combination of the above three stress conditions were identified. Based on the present disclosure, the artisan readily can obtain nucleic acid samples for *Arabidopsis* plants exposed to other stress conditions, or combinations of stress

conditions, and identify clusters of genes induced in response to the stress conditions. Similarly, the method is readily adaptable to identifying clusters of stress-regulated genes expressed in other plant species, particularly commercially valuable plant species, where a substantial amount of information is known regarding the genome.

The clusters of genes identified herein include those clusters of genes that are induced or repressed in response to a combination of stress conditions, but not to any of the stress conditions alone; and clusters of genes that are induced or repressed in response to a selected stress condition, but not to other stress conditions tested. Furthermore, clusters of genes that respond to a stress condition in a temporally regulated manner are also included, such as gene clusters that are induced early (for example, within about 3 hours), late (for example, after about 8 to 24 hours), or continuously in a stress response. In addition, the genes within a cluster are represented by a variety of cellular proteins, including transcription factors, enzymes such as kinases, channel proteins, and the like (see Tables 1 and 29-31). Thus, the present invention further characterizes nucleotide sequences that previously were known to encode cellular peptides by classifying them within clusters of stress-regulated genes.

The present invention additionally relates to a method of identifying a stress condition to which a plant cell was exposed. Such a method can be performed, for example, by contacting nucleic acid molecules expressed in the plant cell and an array of probes representative of the plant cell genome; and detecting a profile of expressed nucleic acid molecules characteristic of a stress response, thereby identifying the stress condition to which the plant cell was exposed. The contacting generally is under conditions that allow for selective hybridization of a nucleic acid molecule with probe having sufficient complementarity, for example, under stringent hybridization conditions. The profile can be characteristic of exposure to a single stress condition, for example, an abnormal level of cold, osmotic pressure, or salinity (Tables 3-14), or can be characteristic of exposure to more than one stress condition (Tables 15-26, for example, cold, increased osmotic pressure and increased salinity (see Tables 24-26).

The method can be practiced using at least one nucleic acid probe and can identify one or combination of stress conditions by detecting altered expression of one or a plurality of polynucleotides representative of plant stress-regulated genes. As

used herein, the term "at least one" includes one, two, three or more, for example, five, ten, twenty, fifty or more polynucleotides, nucleic acid probes, and the like. The term "plurality" is used herein to mean two or more, for example, three, four, five or more, including ten, twenty, fifty or more polynucleotides, nucleic acid probes, and the like.

In a method of the invention, nucleic acid samples from the plant cells to be collected can be contacted with an array, then the profile can be compared with known expression profiles prepared from nucleic acid samples of plants exposed to a known stress condition or combination of stress conditions. By creating a panel of such profiles, representative of various stress conditions, an unknown stress condition to which a plant was exposed can be identified simply by comparing the unknown profile with the known profiles and determining which known profile that matches the unknown profile. Preferably, the comparison is automated. Such a method can be useful, for example, to identify a cause of damage to a crop, where the condition causing the stress is not known or gradually increases over time. For example, accumulation in soils over time of salts from irrigation water can result in gradually decreasing crop yields. Because the accumulation is gradual, the cause of the decreased yield may not be readily apparent. Using the present methods, it is possible to evaluate the stress to which the plants are exposed, thus revealing the cause of the decreased yields.

The present invention, therefore includes a computer readable medium containing executable instructions form receiving expression data for sequences substantially similar to any of those disclosed herein and comparing expression data from a test plant to a reference plant that has been exposed to an abiotic stress. Also provided is a computer-readable medium containing sequence data for sequences substantially similar to any of the sequences described herein, or the complements thereof, and a module for comparing such sequences to other nucleic acid sequences.

Also provided are plants and plant cells comprising plant stress-regulatory elements of the present invention operably linked to a nucleotide sequence encoding a detectable signal. Such plants can be used as diagnostic or "sentinel" plants to provide early warning that nearby plants are being stressed so that appropriate actions can be taken. In one embodiment, the signal is one that alters the appearance of the

plant. For example, an osmotic stress regulatory element of the present invention can be operably linked to a nucleotide sequence encoding a fluorescent protein such as green fluorescent protein. When subjected to osmotic stress, the expression of the green fluorescent protein in the sentinel plant provides a visible signal so that appropriate actions can be taken to remove or alleviate the stress. The use of fluorescent proteins in plants is well known (see, for example, in Leffel et al., BioTechniques 23:912, 1997).

The invention further relates to a method of identifying an agent that modulates the activity of a stress-regulated regulatory element of a plant. As used herein, the term "modulate the activity," when used in reference to a plant stress-regulated regulatory element, means that expression of a polynucleotide from the regulatory element is increased or decreased. In particular, expression can be increased or decreased with respect to the basal activity of the promoter, i.e., the level of expression, if any, in the absence of a stress condition that normally induces expression from the regulatory element; or can be increased or decreased with respect to the level of expression in the presence of the inducing stress condition. As such, an agent can act as a mimic of a stress condition, or can act to modulate the response to a stress condition.

Such a method can be performed, for example, by contacting the regulatory element with an agent suspected of having the ability to modulate the activity of the regulatory element, and detecting a change in the activity of the regulatory element. In one embodiment, the regulatory element can be operatively linked to a heterologous polynucleotide encoding a reporter molecule, and an agent that modulates the activity of the stress-regulated regulatory element can be identified by detecting a change in expression of the reporter molecule due to contacting the regulatory element with the agent. Such a method can be performed *in vitro* in a plant cell-free system, or in a plant cell in culture or in a plant *in situ*.

A method of the invention also can be performed by contacting the agent is contacted with a genetically modified cell or a transgenic plant containing an introduced plant stress-regulated regulatory element, and an agent that modulates the activity of the regulatory element is identified by detecting a phenotypic change in the modified cell or transgenic plant.

A method of the invention can be performed in the presence or absence of the stress condition to which the particularly regulatory element is responsive. As such, the method can identify an agent that modulates the activity of plant stress-regulated promoter in response to the stress, for example, an agent that can enhance the stress response or can reduce the stress response. In particular, a method of the invention can identify an agent that selectively activates the stress-regulated regulatory elements of a cluster of plant stress-regulated genes, but does not affect the activity of other stress-regulated regulatory genes. As such, the method provides a means to identify an agent that acts as a stress mimic. Such agents can be particularly useful to prepare a plant to an expected stress condition. For example, a agent that acts as a cold mimic can be applied to a field of plants prior to the arrival of an expected cold front. Thus, the cold stress response can be induced prior to the actual cold weather, thereby providing the plants with the protection of the stress response, without the plants suffering from any initial damage due to the cold. Similarly, an osmotic pressure mimic can be applied to a crop of plants prior a field being flooded by a rising river.

In one embodiment, the present invention provides a method for marker-assisted selection. Marker-assisted selection involves the selection of plants having desirable phenotypes based on the presence of particular nucleotide sequences ("markers"). The use of markers allows plants to be selected early in development, often before the phenotype would normally be manifest. Because it allows for early selection, marker-assisted selection decreases the amount of time need for selection and thus allows more rapid genetic progress.

Briefly, marker-assisted selection involves obtaining nucleic acid from a plant to be selected. The nucleic acid obtained is then probed with probes that selectively hybridize under stringent, preferably highly stringent, conditions to a nucleotide sequence or sequences associated with the desired phenotype. In one embodiment, the probes hybridize to any of the stress-responsive genes or regulatory regions disclosed herein, for example, any one of SEQ ID NOS:1-2703. The presence of any hybridization products formed is detected and plants are then selected on the presence or absence of the hybridization products.

The following examples are intended to illustrate but not limit the invention.

EXAMPLE 1

PROFILING OF PLANT STRESS-REGULATED GENES

This example demonstrates that clusters of stress-regulated genes can be identified in plant cells exposed to various stress conditions, either alone or in combination.

A GeneChip® Arabidopsis Genome Array (Affymetrix, Santa Clara, CA) was used to identify clusters of genes that were coordinately induced in response to various stress conditions. The GeneChip® Arabidopsis Genome Array contains probes synthesized *in situ* and is designed to measure temporal and spatial gene expression of approximately 8700 genes in greater than 100 EST clusters. The sequences used to develop the array were obtained from GenBank (http://www.ncbi.nlm.nih.gov/) in collaboration with Torrey Mesa Research Institute (San Diego, CA), formerly known as Novartis Agriculture Discovery Institute. Eighty percent of the nucleotide sequences represented on the array are predicted coding sequences from genomic BAC entries; twenty percent are high quality cDNA sequences. The array also contains over 100 EST clusters that share homology with the predicted coding sequences from BAC clones (see, for example, world wide web at address (url) "affymetrix.com/products/Arabidopsis_content.html".

The Affymetrix GeneChip® array was used to define nucleotide sequences/ pathways affected by various abiotic stresses and to define which are uniquely regulated by one stress and those that respond to multiple stress, and to identify candidate nucleotide sequences for screening for insertional mutants. Of the approximately 8,700 nucleotide sequences represented on the Affymetrix GeneChip® array, 2862 nucleotide sequences showed at least a 2-fold change in expression in at least one sample, relative to no-treatment controls. Of those 2,862 nucleotide sequences 1,335 were regulated only by cold stress, 166 were regulated only mannitol stress and 209 were regulated only by saline stress. Furthermore, of the 2,862 nucleotide sequences 123 nucleotide sequences were regulated by salt and mannitol stress, 293 were regulated by mannitol and cold stress, 274 were regulated by cold and saline stress and 462 were regulated by cold, mannitol and salt. Of the 2,862 nucleotide sequences, 771 passed the higher stringency of showing at least a

2-fold change in expression in at least 2 samples, relative to control. And, 508 of the 771 nucleotide sequences were found in an in-house collection of insertion mutants.

The following describes in more detail how the experiments were done. Transcriptional profiling was performed by hybridizing fluorescence labeled cRNA with the oligonucleotides probes on the chip, washing, and scanning. Each gene is represented on the chip by about sixteen oligonucleotides (25-mers). Expression level is related to fluorescence intensity. Starting material contained 1 to 10 Tg total RNA; detection specificity was about $1:10^6$; approximately a 2-fold change was detectable, with less than 2% false positive; the dynamic range was approximately 500x. Nucleotide sequences having up to 70% to 80% identity could be discriminated using this system.

Seven day old axenic *Arabidopsis* seedlings were transferred to Magenta boxes with rafts floating on MS medium. Three weeks later (28 day old seedlings), stresses were applied as follows: Control - no treatment; Cold - Magenta box placed in ice; Mannitol - medium + 200 mM mannitol; Salt - medium + 100 mM NaCl. Tissue samples were collected at 3 hours and 27 hours into the stress, roots and aerial portions were harvested, RNA was purified, and the samples were analyzed using the GeneChip® Arabidopsis Genome Array (Affymetrix, Santa Clara, CA) following the manufacturer's protocol.

Raw fluorescence values as generated by Affymetrix software were processed as follows: the values were brought into Microsoft Excel and values of 25 or less were set to 25 (an empirically determined baseline, Zhu and Wang, Plant Physiol. 124:1472-1476; 2000). The values from the stressed samples were then converted to fold change relative to control by dividing the values from the stressed samples by the values from the no-treatment control samples. Expression patterns that were altered at least 2-fold with respect to the control were selected. This method gave very robust results and resulted in a larger number of nucleotide sequences called as stress-regulated than previous methods had permitted.

Based on the profiles obtained following hybridization of nucleic acid molecules obtained from plant cells exposed to various stress conditions to the probes in the microarray, clusters of nucleotide sequences that were altered in response to the stress

conditions were identified (see Tables 3-6, cold responsive; Tables 7-10, salt (saline) responsive; Tables 11 to 14, mannitol (osmotic) responsive; Tables 15-17, cold and mannitol responsive; Tables 18-20, 6 salt and cold responsive; Tables 21-23, salt and mannitol responsive; Tables 24-26, cold, salt and mannitol responsive. Examples of plant gene sequences that varied in expression at least two-fold in response to a combination of cold, saline and osmotic stress in root cells and leaf cells are shown in Tables 27 and 28, respectively. In addition, examples of plant gene sequences that encode transcription factors (Table 29), phosphatases (Table 30), and kinases (Table 31) and that varied at least two-fold in response to a combination of cold, saline and osmotic stress are provided.

Affymetrix ID numbers and corresponding SEQ ID NOS: for the respective *Arabidopsis* nucleotide sequences are provided Tables 3-26, and can be used to determine SEQ ID NOS: for the sequences shown by Affymetrix ID number in Tables 27-31. The Affymetrix ID number refers to a particular nucleotide sequence on the GeneChip® Arabidopsis Genome Array. In some cases, a particular plant stress-regulated gene sequence hybridized to more than one nucleotide sequence on the GeneChip® Arabidopsis Genome Array (see, for example, Table 3, where SEQ ID NO:36 is shown to have hybridized to the 12187_AT and 15920_I_AT nucleotide sequences on the GeneChip®). In addition, it should be recognized that the disclosed sequences are not limited to coding sequences but, in some cases, include 5' untranslated sequences (see Table 2) or a longest coding region. As such, while the sequences set forth as SEQ ID NOS:1-2073 generally start with an ATG codon, in most cases each comprises a longer nucleotide sequence, including a regulatory region (see Table 2).

The results disclosed herein demonstrate that several polynucleotides, some of which were known to function as transcription factors, enzymes, and structural proteins, also are involved in the response of a plant cell to stress. The identification of the clusters of stress-regulated genes as disclosed herein provides a means to identify stress-regulated regulatory elements present in *Arabidopsis thaliana* nucleotide sequences, including consensus regulatory elements. It should be recognized, however that the regulatory elements of the plant genes comprising a sequence as set forth in SEQ ID NOS:156, 229, 233, 558, 573, 606, 625, 635, 787, and 813, which previously have

been described as cold regulated genes, are not encompassed within the stress-regulated gene regulatory element of the invention, and the regulatory elements of the plant genes comprising the nucleotide sequences set forth as SED ID NOS:1263, 1386, 1391, 1405, 1445, 1484, 1589, 1609, 1634, 1726, 1866, 1918, and 1928, which previously have been identified as genes that are responsive to a single stress condition such as cold or saline stress, are not encompassed within the plant stress-regulated gene regulatory elements of the invention to the extent that they confer stress-regulated expression only with respect to the known single stress. Furthermore, the identification of the *Arabidopsis* stress-regulated genes provides a means to identify the corresponding homologs and orthologs in other plants, including commercially valuable food crops such as wheat, rice, soy, and barley, and ornamental plants. BLASTN and BLASTP searches to identify such sequences revealed the polynucleotide sequences set forth in Table 32.

EXAMPLE TWO

TOLERANCE TO STRESS IN TRANSGENIC PLANTS

Two *Arabidopsis* genes were selected as candidates for over-expression studies based on their regulated expression in response to abiotic stress. Each of two of the candidate genes, At1g80840 (SEQ ID NO:1785), which is predicted to encode a WRKY transcription factor, and At2g45680 (SEQ ID NO:1034), which is predicted to encode a PCF2-like transcription factor, was linked to the *Arabidopsis* Actin2 gene promoter, which directed constitutive over-expression of the encoded proteins. Tolerance to dehydration of transgenic *Arabidopsis* plants over-expressing the At1g80840 (SEQ ID NO:1785) gene product (referred to as "Line 5") and plants over-expressing the At2g45680 (SEQ ID NO:1034) gene product (referred to as "Line 2") was examined, and compared to a non-transgenic (negative) control plants ("Line 3").

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Line 2 plants, Line 5 plants, and Line 3 (control) plants were established in a greenhouse in San Diego county, then exposed to dehydration stress (withholding of water) in the greenhouse during August 2002, which is the hottest and driest month in San Diego. Similar dehydration stress experiments also were conducted during November and December 2002, which are somewhat wetter months for San Diego. In both experiments, Line 2 and Line 5 plants showed much better growth as compared to the Line 3 (negative control) plants grown under identical conditions, including after 13 days, 23 days and 27 days after beginning withholding of water. These results demonstrate that constitutive over-expression of the At1g80840 (SEQ ID NO:1785) gene product or At2g45680 (SEQ ID NO:1034) gene product results in improved tolerance of plants to dehydration stress.

Although the invention has been described with reference to the above example, it will be understood that modifications and variations are encompassed within the spirit and scope of the invention. Accordingly, the invention is limited only by the claims, which follows Tables 1 to 32.

Reference to any prior art in the specification is not, and should not be taken as, an acknowledgment or any form of suggestion that this prior art forms part of the common general knowledge in Australia or any other jurisdiction or that this prior art could reasonably be expected to be ascertained, understood and regarded as relevant by a person skilled in the art.

TABLE 1

SEQUENCE DESCRIPTIONS

Seq ID	Description
1	unknown protein
2	unknown protein
3	unknown protein
4	putative auxin-induced protein
5	unknown protein
6	hypothetical protein
7	putative protein
8	unknown protein
9	unknown protein
10	unknown protein
11	putative protein
12	Thioredoxin - like protein
13	putative RNA helicase
14	putative protein
15	putative protein
16	RING zinc finger protein, putative
17	putative cyclin
18	putative protein
19	putative protein
20	unknown protein
21	putative protein
22	putative protein
23	hypothetical protein
24	unknown protein
25	hypothetical protein
26	unknown protein
27	unknown protein
28	unknown protein
29	unknown protein
30	putative protein
31	putative protein
32	putative protein
33	unknown protein
34	putative ribonuclease III
35	unknown protein
36	unknown protein
37	unknown protein
38	unknown protein
39	unknown protein
40	putative histidine kinase
41	scarecrow-like 7 (SCL7)
42	putative protein
43	No function assigned by TIGR
44	unknown protein
45	unknown protein

SEQ ID	Description
46	succinyl-CoA-ligase alpha subunit
47	putative protein
48	CLV1 receptor kinase like protein
49	putative receptor-like protein kinase
50	putative squalene synthase
51	putative receptor protein kinase
52	somatic embryogenesis receptor-like kinase, putative
53	putative protein
54	putative beta-glucosidase
55	multi-drug resistance protein
56	receptor protein kinase (TMK1), putative
57	putative receptor-like protein kinase
58	putative pectate lyase
59	putative protein kinase
60	putative peroxidase
61	cytochrome P450-like protein
62	putative beta-amylase
63	monosaccharide transporter STP3
64	Lycopersicon esculentum proteinase TMP, Pir2:T07617
65	putative receptor-like protein kinase
66	G-box-binding factor 1
67	amino acid carrier, putative
68	myb-related protein
69	No function assigned by TIGR
70	SNF1 like protein kinase
71	Cu/Zn superoxide dismutase-like protein
72	putative protein kinase
73	small nuclear ribonucleoprotein U1A

TABLE 1 (cont)

74	ras-like GTP-binding protein
75	oleoyl-[acyl-carrier-protein] hydrolase-like protein
76	putative heat shock transcription factor
77	putative protein
78	membrane-bound small GTP-binding - like protein
79	putative protein (fragment)
80	indole-3-acetate beta-glucosyltransferase like protein
81	HD-zip transcription factor (athb-8)
82	putative cAMP-dependent protein kinase
83	glucuronosyl transferase-like protein
84	putative leucine-rich repeat disease resistance protein
85	98b like protein
86	putative receptor-like protein kinase
87	IAA-Ala hydrolase (IAR3)
88	putative AP2 domain transcription factor
89	putative expansin
90	putative Ap2 domain protein
91	expansin (At-EXP1)
92	cytochrome P450 - like protein
93	putative ATP-dependent RNA helicase A
94	unknown protein
95	predicted protein
96	putative glucosyltransferase
97	unknown protein
98	putative xyloglucan-specific glucanase
99	cysteine synthase
100	clathrin assembly protein AP19 homolog
101	dynein light chain like protein
102	chaperonin CPN10
103	putative bHLH transcription factor
104	putative glyoxysomal malate dehydrogenase precursor
105	ATP-dependent RNA helicase, putative
106	chlorophyll synthetase
107	similar to epoxide hydrolases
108	putative protein
109	unknown protein
110	hypothetical protein
111	putative membrane transporter
112	putative tyrosyl-tRNA synthetase
113	ARGININE/SERINE-RICH SPLICING FACTOR RSP31
114	putative oxidoreductase
115	unknown protein
116	linker histone protein, putative
117	hypothetical protein
118	putative protein
119	putative mitochondrial carrier protein
120	putative transcription factor
121	MYB-related protein
122	myb-related transcription factor, putative
123	unknown protein
124	unknown protein
125	putative glycine-rich protein
126	No function assigned by TIGR
127	unknown protein
128	unknown protein
129	unknown protein
130	unknown protein
131	putative membrane channel protein
132	putative protein
133	unknown protein
134	gamma glutamyl hydrolase, putative
135	40S ribosomal protein S5
136	DnaJ-like protein
137	40S ribosomal protein S26
138	putative WRKY-type DNA binding protein

TABLE 1 (cont)

139	putative protein
140	hypothetical protein
141	putative ubiquitin-conjugating enzyme
142	peptidylprolyl isomerase ROC1
143	glyceraldehyde-3-phosphate dehydrogenase C subunit (GapC)
144	No function assigned by TIGR
145	putative protein
146	putative thioredoxin
147	thioredoxin h, putative
148	thioredoxin-like
149	allene oxide synthase (emb|CAA73184.1)
150	anthranilate synthase component I-1 precursor (sp|P32068)
151	CELL DIVISION CONTROL PROTEIN 2 HOMOLOG A
152	protein kinase cdc2 homolog B
153	ethylene responsive element binding factor 1 (frameshift !)
154	ethylene responsive element binding factor 2 (ATERF2) (sp|O80338)
155	ethylene responsive element binding factor 5 (ATERF5) (sp|O80341)
156	glucose-6-phosphate dehydrogenase
157	photomorphogenesis repressor (COP1)
158	unknown protein
159	DNA (cytosine-5)-methyltransferase (DNA methyltransferase) (DNA metase) (sp|P34881)
160	PROLIFERA
161	putative photomorphogenesis repressor protein
162	SNF1-like protein kinase (AKin11)
163	thioredoxin h
164	thioredoxin
165	Ca2+-dependent lipid-binding protein, putative
166	putative auxin-induced protein
167	putative bZIP transcription factor
168	hypothetical protein
169	putative AVR9 elicitor response protein
170	putative serine/threonine protein kinase
171	bZIP transcription factor ATB2
172	putative spliceosome associated protein
173	3-hydroxyisobutyryl-coenzyme A hydrolase - like protein
174	putative protein
175	putative Mutator-like transposase
176	putative protein
177	unknown protein
178	putative protein
179	putative protein
180	putative galactinol synthase
181	putative transcriptional regulator
182	nuclear matrix constituent protein 1 (NMCP1)-like
183	putative DNA-binding protein RAV2
184	No function assigned by TIGR
185	basic blue protein, 5' partial
186	unknown protein
187	putative calcium-binding protein, calreticulin
188	putative pyrophosphate-fructose-6-phosphate 1-phosphotransferase
189	ribosomal protein L11, cytosolic
190	putative dTDP-glucose 4-6-dehydratase
191	40S ribosomal protein S20-like protein
192	60S ribosomal protein L24

TABLE 1 (cont)

193	coatomer-like protein, epsilon subunit
194	glycoprotein(EP1), putative
195	putative SPL1-related protein
196	unknown protein
197	putative transport protein SEC61 beta-subunit
198	unknown protein
199	putative cytochrome P450
200	UTP-glucose glucosyltransferase - like protein
201	60S ribosomal protein L23
202	40S ribosomal protein S17
203	40S ribosomal protein S26
204	protein translation factor Sui1 homolog, putative
205	unknown protein
206	gamma glutamyl hydrolase, putative
207	dTDP-glucose 4,6-dehydratase, putative
208	extensin - like protein
209	unknown protein
210	protein phosphatase 2C - like protein
211	ubiquitin-like protein
212	protein phosphatase 2C-like protein
213	unknown protein
214	putative RING zinc finger ankyrin protein
215	unknown protein
216	putative rubisco subunit binding-protein alpha subunit
217	putative acetone-cyanohydrin lyase
218	putative isoamylase
219	putative protein
220	HSP associated protein like
221	60S ribosomal protein L39
222	unknown protein
223	putative SF16 protein {Helianthus annuus}
224	unknown protein
225	thioredoxin
226	trehalose-6-phosphate phosphatase (AtTPPB)
227	chlorophyll a/b-binding protein
228	class IV chitinase (CHIV)
229	chalcone synthase (naringenin-chalcone synthase) (testa 4 protein) (sp|P13114)
230	unknown protein
231	cinnamyl-alcohol dehydrogenase ELI3-2
232	farnesyl-pyrophosphate synthetase FPS2
233	phospholipid hydroperoxide glutathione peroxidase
234	heat shock transcription factor HSF4
235	heat shock protein 101
236	17.6 kDa heat shock protein (AA 1-156)
237	heat shock protein 17.6A
238	heat-shock protein
239	HY5
240	putative auxin-induced protein, IAA12
241	early auxin-induced protein, IAA19
242	auxin-inducible gene (IAA2)
243	putative protein
244	putative choline kinase
245	thymidylate kinase - like protein
246	CTP synthase like protein
247	putative protein
248	putative amidase
249	4-alpha-glucanotransferase
250	hypothetical protein
251	similar to auxin-induced protein
252	putative protein
253	putative protein
254	putative protein
255	hyuC-like protein

TABLE 1 (cont)

256	putative tetracycline transporter protein
257	similar to early nodulins
258	putative protein
259	putative peptidyl-prolyl cis-trans isomerase
260	unknown protein
261	unknown protein
262	putative endochitinase
263	putative ABC transporter
264	No function assigned by TIGR
265	CONSTANS-like B-box zinc finger protein
266	unknown protein
267	unknown protein
268	putative mitochondrial processing peptidase alpha subunit
269	putative pre-mRNA splicing factor
270	putative phosphatidylserine decarboxylase
271	unknown protein
272	unknown protein
273	unknown protein
274	putative casein kinase I
275	unknown protein
276	60S ribosomal protein L23A
277	putative mitochondrial dicarboxylate carrier protein
278	enoyl-ACP reductase (enr-A)
279	putative isoamylase
280	formamidase - like protein
281	reticuline oxidase - like protein
282	unknown protein
283	putative transketolase precursor
284	putative protein
285	unknown protein
286	unknown protein
287	unknown protein
288	putative esterase D
289	predicted protein of unknown function
290	unknown protein
291	putative indole-3-glycerol phosphate synthase
292	isopentenyl pyrophosphate:dimethyllallyl pyrophosphate isomerase
293	kinase associated protein phosphatase
294	putative K+ channel, beta subunit
295	KNAT1 homeobox-like protein
296	PSI type II chlorophyll a/b-binding protein, putative
297	transcription factor
298	putative WD-40 repeat protein, MSI2
299	WD-40 repeat protein (MSI3)
300	putative WD-40 repeat protein, MSI4
301	unknown protein
302	hypothetical protein
303	putative protein
304	No function assigned by TIGR
305	polyphosphoinositide binding protein, putative
306	hypothetical protein
307	unknown protein
308	chloroplast ribosomal L1 - like protein
309	cold-regulated protein cor15b precursor
310	cyanohydrin lyase like protein
311	putative replication protein A1
312	putative protein
313	possible apospory-associated like protein
314	DNA binding protein GT-1, putative
315	AT-hook DNA-binding protein (AHP1)
316	putative phospholipase
317	chloroplast FtsH protease, putative

TABLE 1 (cont)

318	enoyl-CoA hydratase like protein
319	berberine bridge enzyme - like protein
320	putative sugar transporter
321	unknown protein
322	No function assigned by TIGR
323	hypothetical protein
324	putative acidic ribosomal protein
325	putative protein
326	unknown protein
327	hypothetical protein
328	putative protein
329	dihydroxypolyprenylbenzoate methyltransferase
330	unknown protein
331	myb-related protein
332	No function assigned by TIGR
333	putative protein
334	putative disease resistance response protein
335	hypothetical protein
336	No function assigned by TIGR
337	starch branching enzyme II
338	No function assigned by TIGR
339	putative enolase (2-phospho-D-glycerate hydroylase)
340	putative protein kinase
341	HD-Zip protein, putative
342	putative protein kinase
343	phenylalanyl-trna synthetase - like protein
344	putative aconitase
345	NAM(no apical meristem) protein, putative
346	unknown protein
347	putative phosphomannomutase
348	putative farnesylated protein
349	unknown protein
350	water stress-induced protein, putative
351	unknown protein
352	unknown protein
353	PEROXISOMAL MEMBRANE PROTEIN PMP22
354	putative peroxisomal membrane carrier protein
355	putative protein
356	unknown protein
357	putative protein
358	putative protein
359	argininosuccinate synthase -like protein
360	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase
361	putative JUN kinase activator protein
362	putative 60S ribosomal protein L35
363	nucleoid DNA-binding protein cnd41 - like protein
364	SigA binding protein
365	hypothetical protein
366	putative protein kinase
367	unknown protein
368	regulatory protein NPR1-like; transcription factor inhibitor I kappa B-like
369	putative protein
370	hypothetical protein
371	phosphoribosylanthranilate isomerase
372	phosphoribosylanthranilate isomerase
373	sterol glucosyltransferase, putative
374	putative gigantea protein
375	putative MYB family transcription factor
376	hypothetical protein
377	hypothetical protein
378	predicted protein
379	cytochrome P450, putative

TABLE 1 (cont)

380	putative Na+ dependent ileal bile acid transporter
381	unknown protein
382	RING-H2 finger protein RHF1a
383	putative protein
384	unknown protein
385	putative protein
386	putative auxin-regulated protein
387	hypothetical protein
388	unknown protein
389	unknown protein
390	putative protein
391	putative protein
392	unknown protein
393	histone H1
394	Argonaute (AGO1)-like protein
395	unknown protein
396	putative protein with C-terminal RING finger
397	unknown protein
398	unknown protein
399	unknown protein
400	unknown protein
401	unknown protein
402	putative copper amine oxidase
403	unknown protein
404	unknown protein
405	unknown protein
406	putative protein
407	putative protein
408	unknown protein
409	unknown protein
410	putative protein
411	putative protein
412	unknown protein
413	serine/threonine kinase - like protein
414	alcohol dehydrogenase, putative
415	anthranilate phosphoribosyltransferase, chloroplast precursor (sp|Q02166)
416	phytochrome C (sp|P14714)
417	putative phytochrome-associated protein 3
418	receptor serine/threonine kinase PR5K
419	Ran-binding protein (atranbp1a)
420	small Ras-like GTP-binding protein (gb|AAB58478.1)
421	sterol-C5-desaturase
422	tryptophan synthase beta chain 1 precursor (sp|P14671)
423	thioredoxin f2 (gb|AAD35004.1)
424	No function assigned by TIGR
425	putative WRKY DNA-binding protein
426	putative protein
427	unknown protein
428	unknown protein
429	14-3-3 protein homolog RCI1 (pir||S47969)
430	unknown protein
431	putative CCCH-type zinc finger protein
432	PINHEAD (gb|AAD40098.1); translation initiation factor
433	plasma membrane proton ATPase (PMA)
434	CHLOROPHYLL A-B BINDING PROTEIN 4 PRECURSOR homolog
435	membrane related protein CP5, putative
436	ABC transporter (AtMRP2)
437	putative embryo-abundant protein
438	putative anthocyanidin-3-glucoside rhamnosyltransferase
439	putative lipid transfer protein
440	unknown protein
441	unknown protein
442	galactinol synthase, putative
443	putative protein
444	putative protein
445	SCARECROW-like protein
446	unknown protein

TABLE 1 (cont)

447	unknown protein
448	unknown protein
449	unknown protein
450	asparagine--tRNA ligase
451	putative protein
452	glutamate-1-semialdehyde 2,1-aminomutase 1 precursor (GSA 1) (glutamate-1-semialdehyde aminotransferase 1) (GSA-AT 1) (sp|P42799)
453	hypothetical protein
454	putative serine protease-like protein
455	No function assigned by TIGR
456	unknown protein
457	unknown protein
458	gamma-adaptin, putative
459	UDP rhamnose--anthocyanidin-3-glucoside rhamnosyltransferase - like protein
460	carbonate dehydratase - like protein
461	putative microtubule-associated protein
462	putative ribophorin I
463	putative zinc finger protein
464	chloroplast FtsH protease, putative
465	putative protein
466	unknown protein
467	putative LEA protein
468	putative protein
469	putative protein
470	unknown protein
471	putative purple acid phosphatase
472	unknown protein
473	putative protein
474	unknown protein
475	chlorophyll binding protein, putative
476	phosphoenolpyruvate carboxylase (PPC)
477	chlorophyll a/b-binding protein - like
478	AtAGP4
479	putative cryptochrome 2 apoprotein
480	type 2 peroxiredoxin, putative
481	Atpm24.1 glutathione S transferase
482	delta tonoplast integral protein (delta-TIP)
483	20S proteasome subunit (PAA2)
484	dormancy-associated protein, putative
485	putative cytidine deaminase
486	No function assigned by TIGR
487	putative phospholipase D-gamma
488	cell elongation protein, Dwarf1
489	germin-like protein
490	hevein-like protein precursor (PR-4)
491	rac-like GTP binding protein (ARAC5)
492	phosphoprotein phosphatase, type 1 catalytic subunit
493	ubiquitin-protein ligase UBC9
494	xyloglucan endotransglycosylase-related protein XTR-7
495	cysteine synthase
496	putative villin 2
497	glutathione S-transferase
498	5-adenylylsulfate reductase
499	arginine decarboxylase
500	ATHP2, putative
501	ornithine carbamoyltransferase precursor
502	puative protein
503	putative protein
504	unknown protein
505	putative protein
506	putative protein
507	unknown protein
508	unknown protein
509	unknown protein
510	unknown protein
511	hypothetical protein

TABLE 1 (cont)

512	putative protein
513	putative DnaJ protein
514	plastocyanin
515	unknown protein
516	unknown protein
517	unknown protein
518	unknown protein
519	unknown protein
520	unknown protein
521	putative ATP-dependent RNA helicase
522	non-race specific disease resistance protein (NDR1)
523	hypothetical protein
524	putative protein
525	putative protein
526	putative protein
527	copper transport protein
528	putative protein
529	unknown protein
530	unknown protein
531	unknown protein
532	putative protein kinase
533	unknown protein
534	putative protein
535	putative protein
536	hypothetical protein
537	putative protein
538	putative AP2 domain transcription factor
539	putative nitrilase
540	putative protein
541	putative tetrahydrofolate synthase
542	heat-shock protein
543	unkown protein
544	unknown protein
545	histone H4
546	hypothetical protein
547	unknown protein
548	putative protein
549	predicted protein
550	putative dihydrolipoamide succinyltransferase
551	actin 3
552	putative CCCH-type zinc finger protein
553	MAP kinase kinase 2
554	ethylene-insensitive3-like1 (EIL1)
555	histidine transport protein (PTR2-B)
556	putative auxin-induced protein AUX2-11
557	hydroxyacylglutathione hydrolase cytoplasmic (glyoxalase II) (GLX II)
558	delta-8 sphingolipid desaturase
559	cellulose synthase catalytic subunit (Ath-A)
560	nitrate transporter (NTL1)
561	DNA-binding homeotic protein Athb-2
562	hypothetical protein
563	aspartate aminotransferase
564	4-coumarate:CoA ligase 1
565	pyruvate dehydrogenase E1 beta subunit, putative
566	nucleotide diphosphate kinase Ia (emb|CAB58230.1)
567	chloroplast Cpn21 protein
568	ATP dependent copper transporter
569	very-long-chain fatty acid condensing enzyme (CUT1)
570	putative purine-rich single-stranded DNA-binding protein
571	serine/threonine protein phosphatase (type 2A)
572	isopentenyl diphosphate:dimethylallyl diphosphate isomerase (IPP2)
573	putative c2h2 zinc finger transcription factor
574	putative 20S proteasome beta subunit PBC2
575	nucleoside diphosphate kinase 3 (ndpk3)
576	ras-related small GTP-binding protein
577	putative 4-coumarate:CoA ligase 2

TABLE 1 (cont)

578	transcription factor HBP-1b homolog (sp|P43273)
579	biotin synthase (Bio B)
580	homeobox protein HAT22
581	putative preprotein translocase SECY protein
582	carbamoylphosphate synthetase, putative
583	putative protein kinase, ADK1
584	putative nuclear DNA-binding protein G2p
585	hypothetical protein
586	hypothetical protein
587	unknown protein
588	unknown protein
589	molybdopterin synthase (CNX2)
590	putative ribosomal protein L6
591	unknown protein
592	En/Spm-like transposon protein
593	putative protein
594	putative protein
595	unknown protein
596	hypothetical protein
597	unknown protein
598	unknown protein
599	putative lysosomal acid lipase
600	unknown protein
601	unknown protein
602	NifS-like aminotranfserase
603	actin 8
604	hypothetical protein
605	putative protein
606	heat-shock protein (At-hsc70-3)
607	putative protein disulfide isomerase precursor
608	adenosine nucleotide translocator
609	photosystem II oxygen-evolving complex protein 3 - like
610	sedoheptulose-bisphosphatase precursor
611	glutathione S-transferase (GST6)
612	geranylgeranyl reductase
613	hypothetical protein
614	hypothetical protein
615	phosphoribulokinase precursor
616	high mobility group protein (HMG1), putative
617	protease inhibitor II
618	protease inhibitor II
619	cytochrome P450 90A1 (sp|Q42569)
620	unknown protein
621	heat shock protein 90
622	tubulin beta-9 chain
623	putative ubiquitin carboxyl terminal hydrolase
624	protein kinase
625	DRE/CRT-binding protein DREB1C
626	histidyl-tRNA synthetase
627	splicing factor, putative
628	glutamyl-tRNA synthetase
629	putative RING zinc finger protein
630	phytochelatin synthase (gb|AAD41794.1)
631	putative C2H2-type zinc finger protein
632	putative ligand-gated ion channel protein
633	putative ribosomal-protein S6 kinase (ATPK6)
634	MOLYBDOPTERIN BIOSYNTHESIS CNX1 PROTEIN
635	temperature-sensitive omega-3 fatty acid desaturase, chloroplast precursor (sp|P48622)
636	adenylosuccinate synthetase
637	putative 14-3-3 protein
638	putative cytochrome P450

TABLE 1 (cont)

639	putative two-component response regulator 3 protein
640	putative RING-H2 zinc finger protein ATL6
641	No function assigned by TIGR
642	small zinc finger-like protein
643	hypothetical protein
644	MAP kinase (ATMPK6)
645	vacuolar ATP synthase, putative
646	kinesin-like protein
647	serine/threonine-specific protein kinase NAK
648	No function assigned by TIGR
649	ACTIN 2/7 (sp|P53492)
650	phosphoglycerate kinase, putative
651	homeotic protein BEL1 homolog
652	proline iminopeptidase
653	pasticcino 1
654	serine/threonine protein kinase
655	cytochrome P450 monooxygenase (CYP71B4)
656	No function assigned by TIGR
657	putative GDSL-motif lipase/hydrolase
658	putative protein
659	unknown protein
660	hypothetical protein
661	putative glycosylation enzyme
662	No function assigned by TIGR
663	No function assigned by TIGR
664	unknown protein
665	putative ABC transporter
666	nifU-like protein
667	putative receptor-like protein kinase
668	putative disease resistance protein
669	receptor-like protein kinase - like
670	ubiquitin activating enzyme 2 (gb|AAB37569.1)
671	No function assigned by TIGR
672	putative receptor-like protein kinase
673	K+ transporter, AKT1
674	shaggy-like kinase beta
675	heat shock protein 70
676	plasma membrane intrinsic protein 1a
677	HSP90-like protein
678	histone H1, putative
679	unknown protein
680	dnaK-type molecular chaperone hsc70.1 - like
681	gamma-glutamylcysteine synthetase
682	peroxidase (ATP22a)
683	putative serine carboxypeptidase precursor
684	putative dioxygenase
685	glucose transporter
686	NOI protein, nitrate-induced
687	putative protein
688	putative protein
689	unknown protein
690	putative photosystem I reaction center subunit II precursor
691	putative protein
692	unknown protein
693	cobalamin biosynthesis protein
694	adenine nucleotide translocase
695	glutathione transferase, putative
696	putative 60S ribosomal protein L21
697	cytochrome P450 like protein
698	cytochrome b245 beta chain homolog RbohAp108, putative
699	RNA helicase, DRH1
700	putative aldolase
701	farnesyltransferase subunit A (FTA)

TABLE 1 (cont)

702	No function assigned by TIGR
703	putative putative sister-chromatide cohesion protein
704	calcium-dependent protein kinase
705	serine/threonine protein phosphatase type 2A, putative
706	40S ribosomal protein S28 (sp|P34789)
707	RNA polymerase subunit
708	DNA-damage-repair/toleration protein DRT102
709	putative C2H2-type zinc finger protein
710	putative adenosine phosphosulfate kinase
711	lipase
712	putative violaxanthin de-epoxidase precursor (U44133)
713	aromatic rich glycoprotein, putative
714	putative fumarase
715	flavonol synthase (FLS) (sp|Q96330)
716	response regulator 5, putative
717	sulfate transporter
718	putative floral homeotic protein, AGL9
719	putative ethylene-inducible protein
720	C-8,7 sterol isomerase
721	TCH4 protein (gb|AAA92363.1)
722	hypothetical protein
723	putative urease accessory protein
724	molybdopterin synthase sulphurylase (gb|AAD18050.1)
725	putative protein
726	NBD-like protein (gb|AAD20643.1)
727	AtHVA22c
728	unknown protein
729	phytoene synthase (gb|AAB65697.1)
730	protein kinase (AME2/AFC1)
731	hypothetical protein
732	cyclin-dependent protein kinase-like protein
733	photosystem II stability/assembly factor HCF136 (sp|O82660)
734	hypothetical protein
735	DNA binding-like protein
736	putative protein
737	chorismate mutase
738	putative LRR receptor protein kinase
739	putative chalcone synthase
740	putative protein kinase
741	replicase, putative
742	putative cysteine proteinase
743	60S ribosomal protein L36
744	unknown protein
745	CLC-b chloride channel protein
746	putative ribosomal protein S14
747	histone H2B like protein (emb|CAA69025.1)
748	60S ribosomal protein L2
749	60S ribosomal protein L15 homolog
750	ribosomal protein S27
751	ribosomal protein
752	60S ribosomal protein L12
753	60s ribosomal protein L34
754	putative ribosomal protein S10
755	drought-induced protein like
756	blue copper-binding protein, 15K (lamin)
757	calmodulin-like protein
758	putative protein
759	No function assigned by TIGR
760	alpha-mannosidase, putative
761	uncoupling protein (ucp/PUMP)

TABLE 1 (cont)

762 homeodomain - like protein
763 ribosomal protein S18, putative
764 similar to SOR1 from the fungus Cercospora nicotianae
765 60S ribosomal protein L13, BBC1 protein
766 50S ribosomal protein L24, chloroplast precursor
767 putative ribosomal protein
768 unknown protein
769 aspartate aminotransferase (AAT1)
770 potassium channel protein AtKC
771 unknown protein
772 peroxisomal targeting signal type 2 receptor
773 putative protein
774 Ras-related GTP-binding protein (ARA-4)
775 S-receptor kinase homolog 2 precursor
776 pathogenesis-related group 5 protein, putative
777 Nitrilase 4 (sp|P46011)
778 biotin carboxyl carrier protein of acetyl-CoA carboxylase precursor (BCCP) (sp|Q42533)
779 photosystem I reaction centre subunit psaN precursor (PSI-N) (sp|P49107)
780 3(2),5-bisphosphate nucleotidase
781 high affinity Ca2+ antiporter
782 putative cytoskeletal protein
783 putative peroxidase
784 respiratory burst oxidase protein
785 beta-glucosidase
786 calcium-dependent protein kinase (pir||S71196)
787 phosphoinositide specific phospholipase C
788 similarity to S-domain receptor-like protein kinase, Zea mays
789 mitosis-specific cyclin 1b
790 4-coumarate:CoA ligase 3
791 transcription factor IIB (TFIIB)
792 unknown protein
793 hypothetical protein
794 hypothetical protein
795 sugar transporter like protein
796 putative trypsin inhibitor
797 unknown protein
798 putative multispanning membrane protein
799 receptor-like kinase, putative
800 putative inosine-5-monophosphate dehydrogenase
801 inosine-5'-monophosphate dehydrogenase, putative
802 amino acid permease 6 (emb|CAA65051.1)
803 NADPH-ferrihemoprotein reductase (ATR2)
804 putative WRKY-type DNA binding protein
805 putative ankyrin
806 putative hexose transporter
807 aquaporin/MIP - like protein
808 Ser/Thr protein kinase isolog
809 pectate lyase like protein
810 putative 60S ribosomal protein L17
811 putative protein
812 unknown protein
813 phenylalanine ammonia-lyase
814 putative cytochrome P450 monooxygenase
815 ARR1 protein, putative
816 putative bHLH transcription factor
817 aminomethyltransferase-like precursor protein
818 purple acid phosphatase precursor

TABLE 1 (cont)

819 AP2 domain containing protein, putative
820 ubiquitin-conjugating enzyme E2-21 kD 1 (ubiquitin-protein ligase 4) (ubiquitin carrier protein 4) (sp|P42748)
821 translation initiation factor
822 putative VAMP-associated protein
823 spermidine synthase, putative
824 putative protein
825 unknown protein
826 AtKAP alpha
827 glyceraldehyde-3-phosphate dehydrogenase, putative
828 putative poly(A) binding protein
829 alpha-tubulin, putative
830 serine/threonine-specific protein kinase ATPK64 (pir||S20918)
831 putative aspartate-tRNA ligase
832 ras-related small GTP-binding protein RAB1c
833 cycloartenol synthase
834 No function assigned by TIGR
835 cytochrome P450
836 GTPase AtRAB8
837 3-phosphoserine phosphatase
838 transcription factor CRC
839 nuclear cap-binding protein; CBP20 (gb|AAD29697.1)
840 chloroplast membrane protein (ALBINO3)
841 biotin holocarboxylase synthetase
842 expansin AtEx6
843 unknown protein
844 mercaptopyruvate sulfurtransferase, putative
845 putative thiosulfate sulfurtransferase
846 dihydrolipoamide S-acetyltransferase
847 auxin transport protein REH1, putative
848 putative auxin transport protein
849 apyrase (Atapy1)
850 root cap 1 (RCP1)
851 hypothetical protein
852 putative protein
853 predicted protein of unknown function
854 hypothetical protein
855 hypothetical protein
856 hypothetical protein
857 putative aldehyde dehydrogenase
858 putative peroxidase
859 UDP-glucose 4-epimerase - like protein
860 indole-3-acetate beta-glucosyltransferase like protein
861 putative beta-1,3-glucanase
862 disease resistance protein-like
863 putative respiratory burst oxidase protein B
864 ubiquitin-conjugating enzyme UBC3
865 cytoplasmic aconitate hydratase
866 NADPH oxidoreductase, putative
867 PROTEIN TRANSPORT PROTEIN SEC61 GAMMA SUBUNIT -like
868 putative protein
869 unknown protein
870 60S acidic ribosomal protein P2
871 No function assigned by TIGR
872 1,4-alpha-glucan branching enzyme protein soform SBE2.2 precursor
873 calcium binding protein (CaBP-22)
874 putative phosphoglucomutase

TABLE 1 (cont)

875 shaggy-like protein kinase etha (EC 2.7.1.-)
876 pyruvate decarboxylase (gb|AAB16855.1)
877 hypothetical protein
878 putative protein kinase
879 putative protein kinase
880 putative leucine aminopeptidase
881 probable cytochrome P450
882 protein kinase 6-like protein
883 arginine methyltransferase (pam1)
884 MYB96 transcription factor-like protein
885 putative protein
886 metal ion transporter
887 No function assigned by TIGR
888 flax rust resistance protein, putative
889 fructose-2,6-bisphosphatase, putative
890 exonuclease RRP41
891 squamosa promoter binding protein-like 2 (emb|CAB56576.1)
892 putative squamosa-promoter binding protein
893 O-acetylserine(thiol) lyase, putative
894 snoRNA
895 snoRNA
896 ferredoxin-NADP+ reductase
897 H+-transporting ATP synthase chain 9 - like protein
898 photosystem I subunit III precursor, putative
899 photosystem I subunit VI precursor
900 auxin-binding protein 1 precursor
901 putative RAS superfamily GTP-binding protein
902 disease resistance protein-like
903 protein kinase like protein
904 glucuronosyl transferase-like protein
905 putative homeodomain transcription factor
906 putative flavonol reductase
907 putative protein
908 salt-tolerance protein
909 40S ribosomal protein S30
910 putative bZIP transcription factor
911 putative protein
912 putative cinnamoyl CoA reductase
913 unknown protein
914 putative RNA-binding protein
915 phosphatidylinositol synthase (PIS1)
916 unknown protein
917 hydroxyproline-rich glycoprotein homolog
918 50S ribosomal protein L15, chloroplast precursor
919 unknown protein
920 putative YME1 ATP-dependant protease
921 unknown protein
922 putative ribosomal protein L28
923 unknown protein
924 putative protein
925 protein ch-42 precursor, chloroplast
926 protein serine/threonine kinase, putative
927 beta-VPE
928 putative vacuolar sorting receptor
929 putative translation initiation factor IF-2
930 predicted protein of unknown function
931 putative protein
932 hypothetical protein
933 hypothetical protein
934 phosphate transporter, putative

TABLE 1 (cont)

935	No function assigned by TIGR
936	beta subunit of protein farnesyl transferase ERA1
937	putative glutamate decarboxylase
938	putative indole-3-acetate beta-glucosyltransferase
939	putative receptor-like protein kinase
940	UDP-galactose 4-epimerase-like protein
941	putative proliferating cell nuclear antigen, PCNA
942	ubiquitin conjugating enzyme E2 (UBC13)
943	cyclophilin (CYP2)
944	cystatin (emb|CAA03929.1)
945	putative alcohol dehydrogenase
946	acidic ribosomal protein p1
947	glutathione transferase AtGST 10 (emb|CAA10457.1)
948	putative tropinone reductase
949	ZIP4, a putative zinc transporter
950	unknown protein
951	putative protein
952	putative protein
953	putative C2H2-type zinc finger protein
954	putative RING zinc finger protein
955	putative microtubule-associated protein
956	unknown protein
957	putative protein
958	putative protein phosphatase-2c
959	V-ATPase subunit G (vag2 gene)
960	hypothetical protein
961	unknown protein
962	unknown protein
963	unknown protein
964	myrosinase-associated protein, putative
965	hypothetical protein
966	hypothetical protein
967	No function assigned by TIGR
968	unknown protein
969	hypothetical protein
970	LAX1 / AUX1 -like permease
971	putative UDP-N-acetylglucosamine--dolichyl-phosphate N-acetylglucosaminephosphotransferase
972	chorismate mutase CM2
973	inner mitochondrial membrane protein
974	DEF (CLA1) protein
975	decoy
976	citrate synthase
977	myosin
978	40S ribosomal protein S19
979	ripening-related protein - like
980	putative signal peptidase I
981	methionyl-tRNA synthetase (AtcpMetRS)
982	ribosomal protein precursor - like
983	50S ribosomal protein L21 chloroplast precursor (CL21)
984	putative MYB family transcription factor
985	cyclophilin - like protein
986	hypothetical protein
987	naringenin 3-dioxygenase like protein
988	WD-repeat protein -like protein
989	putative serine carboxypeptidase II
990	prenyltransferase, putative
991	putative ligand-gated ion channel protein
992	clathrin adaptor medium chain protein MU1B, putative
993	No function assigned by TIGR

TABLE 1 (cont)

994	putative Ta11-like non-LTR retroelement protein
995	putative 3-isopropylmalate dehydrogenase
996	3-isopropylmalate dehydratase, small subunit
997	unknown protein
998	unknown protein
999	unknown protein
1000	hypothetical protein
1001	putative protein
1002	No function assigned by TIGR
1003	putative beta-glucosidase
1004	putative pectate lyase A11
1005	putative beta-glucosidase
1006	HD-Zip protein
1007	putative ubiquitin conjugating enzyme
1008	homeobox-leucine zipper protein-like
1009	cytochrome P450 like protein
1010	putative cysteine proteinase inhibitor B (cystatin B)
1011	ethylene response sensor (ERS)
1012	putative SWH1 protein
1013	putative glutathione S-transferase
1014	putative protein
1015	unknown protein
1016	putative protein phosphatase 2C
1017	dnaJ protein homolog atj3
1018	ferredoxin
1019	hypothetical protein
1020	putative sugar transport protein, ERD6
1021	putative DnaJ protein
1022	putative AP2 domain transcription factor
1023	putative protein
1024	putative cyclin-dependent kinase regulatory subunit
1025	putative tropinone reductase
1026	signal response protein (GAI)
1027	putative steroid sulfotransferase
1028	hypothetical protein
1029	nucleic acid binding protein - like
1030	putative protein
1031	blue copper binding protein
1032	farnesylated protein (ATFP6)
1033	unknown protein
1034	putative PCF2-like DNA binding protein
1035	teosinte branched1 - like protein
1036	putative protein
1037	unknown protein
1038	unknown protein
1039	2-oxoglutarate dehydrogenase, E1 component
1040	unknown protein
1041	unknown protein
1042	CCAAT-binding transcription factor subunit A(CBF-A)
1043	hypothetical protein
1044	putative growth regulator protein
1045	putative presenilin
1046	putative expansin
1047	ribosomal - like protein
1048	unknown protein
1049	unknown protein
1050	putative protein
1051	putative protein
1052	unknown protein
1053	unknown protein
1054	unknown protein
1055	unknown protein
1056	unknown protein
1057	putative protein
1058	putative protein
1059	argininosuccinate lyase (AtArgH)
1060	disease resistance protein homolog
1061	aldehyde dehydrogenase like protein
1062	GBF2, G-box binding factor
1063	CDPK-related kinase
1064	endo-1,4-beta-glucanase
1065	putative serine protease

TABLE 1 (cont)

1066 serine/threonine-specific kinase lecRK1 precursor,lectin receptor-like
1067 putative MAP kinase
1068 RNase L inhibitor-like protein
1069 No function assigned by TIGR
1070 AP2 domain transcription factor
1071 polygalacturonase isoenzyme 1 beta subunit, putative
1072 putative lipid transfer protein
1073 putative protein kinase
1074 putative protein
1075 ATP-dependent RNA helicase like protein
1076 putative cyclic nucleotide-regulated ion channel protein
1077 COP1 like protein
1078 putative peroxidase
1079 putative NAK-like ser/thr protein kinase
1080 putative cytochrome C
1081 cytochrome c
1082 putative serine carboxypeptidase II
1083 acyl-(acyl carrier protein) thioesterase
1084 DNA-binding factor, putative
1085 MAP3K delta-1 protein kinase
1086 AtMlo-h1-like protein
1087 No function assigned by TIGR
1088 putative expansin
1089 defender against cell death protein, putative
1090 glycolate oxidase - like protein
1091 putative ATP-dependent RNA helicase
1092 putative protein
1093 putative HMG protein
1094 squalene monooxygenase 2 (squalene epoxidase 2) (SE 2) (sp|O65403)
1095 eukaryotic peptide chain release factor subunit 1, putative
1096 auxin-induced protein - like
1097 putative lipoamide dehydrogenase
1098 putative protein
1099 unknown protein
1100 putative oligopeptide transporter
1101 putative translation elongation factor ts
1102 putative CCAAT-binding transcription factor subunit
1103 putative ABC transporter
1104 putative superoxide-generating NADPH oxidase flavocytochrome
1105 aspartate kinase-homoserine dehydrogenase - like protein
1106 putative bHLH transcription factor
1107 putative geranylgeranyl transferase type I beta subunit
1108 putative ARP2/3 protein complex subunit p41
1109 sulphite reductase
1110 putative auxin-regulated protein
1111 transcription factor scarecrow-like 14, putative
1112 unknown protein
1113 monooxygenase 2 (MO2)
1114 putative amine oxidase
1115 zinc finger protein, putative
1116 DNA-binding protein, putative
1117 putative protein
1118 putative protein
1119 Avr9 elicitor response like protein
1120 putative protein
1121 hypothetical protein
1122 putative nucleotide-sugar dehydratase
1123 UFD1 like protein

TABLE 1 (cont)

1124 putative trans-prenyltransferase
1125 outward rectifying potassium channel KCO
1126 unknown protein
1127 putative pectinacetylesterase
1128 putative protein
1129 No function assigned by TIGR
1130 unknown protein
1131 unknown protein
1132 unknown protein
1133 protein phosphatase homolog (PPH1)
1134 unknown protein
1135 No function assigned by TIGR
1136 unknown protein
1137 unknown protein
1138 unknown protein
1139 putative protein
1140 unknown protein
1141 putative ubiquinol--cytochrome-c reductase
1142 unknown protein
1143 contains similarity to high-glucose-regulated protein 8 GB:AAF08813 GI:6449083 from [Homo sapiens]
1144 unknown protein
1145 putative cis-Golgi SNARE protein
1146 unknown protein
1147 glutamate-1-semialdehyde aminotransferase
1148 No function assigned by TIGR
1149 hypothetical protein
1150 unknown protein
1151 unknown protein
1152 unknown protein
1153 scarecrow-like 3
1154 putative proline-rich protein
1155 cytochrome c oxidoreductase like protein
1156 putative carboxymethylenebutenolidase
1157 unknown protein
1158 unknown protein
1159 unknown protein
1160 unknown protein
1161 unknown protein
1162 unknown protein
1163 auxin-induced protein (IAA20)
1164 50S ribosomal protein L4
1165 putative DNA topoisomerase III beta
1166 No function assigned by TIGR
1167 isp4 like protein
1168 putative protein kinase
1169 hypothetical protein
1170 putative pyrophosphate--fructose-6-phosphate 1-phosphotransferase
1171 putative protein
1172 putative protein
1173 putative protein
1174 unknown protein
1175 unknown protein
1176 putative protein
1177 putative protein
1178 unknown protein
1179 unknown protein
1180 putative protein
1181 brassinosteroid insensitive 1 gene (BRI1)
1182 putative receptor protein kinase
1183 vacuolar-type H+-translocating inorganic pyrophosphatase
1184 protein kinase - like protein
1185 glycyl tRNA synthetase, putative
1186 subtilisin protcinase - like
1187 hypothetical protein
1188 cytochrome P450-like protein
1189 cytochrome p450 like protein
1190 putative protein kinase
1191 pectinesterase - like protein
1192 putative receptor-like protein kinase

TABLE 1 (cont)

1193 peroxidase ATP17a -like protein
1194 No function assigned by TIGR
1195 cellulose synthase catalytic subunit - like protein
1196 RAS-related protein, RAB7
1197 putative aspartate aminotransferase
1198 cyclophilin
1199 putative SF2/ASF splicing modulator, Srp30
1200 putative cytochrome b5
1201 glutamyl-tRNA reductase, putative
1202 putative MADS-box protein
1203 ammonium transport protein (AMT1)
1204 No function assigned by TIGR
1205 putative beta-ketoacyl-CoA synthase
1206 thaumatin-like protein
1207 putative methionine aminopeptidase
1208 putative protein phosphatase 2C
1209 kinase-like protein
1210 receptor-associated kinase isolog
1211 mitochondrial ribosomal protein S14
1212 oleosin, 18.5K
1213 chalcone isomerase
1214 putative cyclin-dependent kinase regulatory subunit
1215 putative thaumatin-like protein
1216 putative two-component response regulator protein
1217 TATA binding protein-associated factor, putative
1218 predicted protein of unknown function
1219 putative AP2 domain transcription factor
1220 brassinosteroid receptor kinase, putative
1221 TINY-like protein
1222 glucose-6-phosphate isomerase
1223 putative protein
1224 putative NAM (no apical meristem)-like protein
1225 unknown protein
1226 putative nucleotide-binding protein
1227 bZIP transcription factor (POSF21)
1228 ubiquitin activating enzyme - like protein
1229 telomere repeat-binding protein
1230 unknown protein
1231 mevalonate kinase
1232 putative protein
1233 hypothetical protein
1234 disease resistance RPP5 like protein
1235 putative protein
1236 putative pectinesterase
1237 Ttg1 protein (emb|CAB45372.1)
1238 FUSCA PROTEIN FUS6
1239 NHE1 Na+/H+ exchanger
1240 No function assigned by TIGR
1241 Phospholipase like protein
1242 unknown protein
1243 unknown protein
1244 unknown protein
1245 AUX1-like amino acid permease
1246 unknown protein
1247 putative C2H2-type zinc finger protein
1248 putative protein
1249 putative protein
1250 putative glucosyltransferase
1251 putative lipase
1252 putative protein
1253 putative thioredoxin
1254 AIG2-like protein
1255 short-chain alcohol dehydrogenase like protein
1256 hypothetical protein

TABLE 1 (cont)

1257 putative protein
1258 putative protein
1259 glutathione peroxidase - like protein
1260 putative protein
1261 putative disease resistance response protein
1262 putative protein
1263 senescence-associated protein (SAG29)
1264 glycolate oxidase, putative
1265 extensin - like protein
1266 putative protein
1267 unknown protein
1268 putative disease resistance protein
1269 putative receptor-like protein kinase
1270 putative receptor-like protein kinase
1271 basic chitinase
1272 putative pectin methylesterase
1273 peroxidase ATP N
1274 class 2 non-symbiotic hemoglobin
1275 nitrate transporter
1276 Ca2+/H+-exchanging protein-like
1277 putative protein
1278 hydroxynitrile lyase like protein
1279 putative AP2 domain transcription factor
1280 pectin methylesterase, putative
1281 putative protein
1282 beta-glucosidase-like protein
1283 CCAAT box binding factor/ transcription factor Hap2a
1284 putative fibrillin
1285 xyloglucan endo-transglycosylase
1286 putative 10kd chaperonin
1287 No function assigned by TIGR
1288 serine/threonine protein kinase ATPK10
1289 putative lipase
1290 choline kinase GmCK2p -like protein
1291 putative sugar transport protein, ERD6
1292 MYB27 protein - like
1293 DNA-binding protein, putative
1294 similar to cold acclimation protein WCOR413 [Triticum aestivum]
1295 unknown protein
1296 aquaporin (plasma membrane intrinsic protein 2B)
1297 No function assigned by TIGR
1298 P-Protein - like protein
1299 No function assigned by TIGR
1300 putative cytochrome P450 monooxygenase
1301 putative cytochrome P450 monooxygenase
1302 putative thioredoxin
1303 stromal ascorbate peroxidase
1304 ethylene responsive element binding factor-like protein (AtERF6)
1305 auxin transport protein EIR1 (gb|AAC39513.1)
1306 putative CONSTANS-like B-box zinc finger protein
1307 putative protein kinase
1308 mitochondrial Lon protease homolog 1 precursor (sp|O64948)
1309 putative protein
1310 heme activated protein, putative
1311 putative cytochrome P450
1312 No function assigned by TIGR
1313 putative lipase
1314 putative protein
1315 putative sugar transporter protein
1316 putative sucrose transport protein, SUC2
1317 putative protein
1318 putative protein

TABLE 1 (cont)

1319 putative endochitinase
1320 putative acetone-cyanohydrin lyase
1321 putative protein
1322 calmodulin-like protein
1323 hypothetical protein
1324 cysteine proteinase like protein
1325 heat shock protein 17.6-II
1326 heat shock protein 18
1327 Arabidopsis mitochondrion-localized small heat shock protein (AtHSP23.6-mito)
1328 unknown protein
1329 putative WRKY-type DNA binding protein
1330 No function assigned by TIGR
1331 hypothetical protein
1332 putative integral membrane protein nodulin
1333 putative protein
1334 unknown protein
1335 3-isopropylmalate dehydratase, small subunit
1336 unknown protein
1337 putative homeodomain transcription factor
1338 unknown protein
1339 putative protein
1340 peroxidase ATP19a
1341 putative Na+/H+-exchanging protein
1342 putative auxin-regulated protein
1343 unknown protein
1344 unknown protein
1345 putative trehalose-6-phosphate synthase
1346 putative lectin
1347 Mlo protein-like
1348 unknown protein
1349 ethylene response factor, putative
1350 unknown protein
1351 unknown protein
1352 bZIP transcription factor - like protein
1353 Medicago nodulin N21-like protein
1354 putative endo-1,4-beta glucanase
1355 1-aminocyclopropane-1-carboxylate oxidase
1356 putative anion exchange protein
1357 SRG1-like protein
1358 putative protein
1359 putative phi-1-like phosphate-induced protein
1360 putative protein
1361 putative embryo-abundant protein
1362 putative hydrolase
1363 unknown protein
1364 unknown protein
1365 hexose transporter - like protein
1366 unknown protein
1367 unknown protein
1368 peptide transport - like protein
1369 unknown protein
1370 putative peptide transporter
1371 disease resistance protein, putative
1372 cysteine protease component of protease-inhibitor complex
1373 putative cytochrome P450
1374 putative protein
1375 hypothetical protein
1376 unknown protein
1377 putative phosphoribosylaminoimidazolecarboxamide formyltransferase
1378 putative protein
1379 HSP like protein
1380 unknown protein
1381 unknown protein
1382 putative cytochrome P450
1383 similar to pectinesterase
1384 putative glucosyltransferase
1385 thaumatin-like protein
1386 drought-inducible cysteine proteinase RD19A precursor
1387 vegetative storage protein Vsp2
1388 unknown protein

TABLE 1 (cont)

1389 unknown protein
1390 anthranilate N-benzoyltransferase - like protein
1391 delta-1-pyrroline 5-carboxylase synthetase (P5C1)
1392 glutathione S-conjugate transporting ATPase (AtMRP1)
1393 hypothetical protein
1394 hypothetical protein
1395 unknown protein
1396 putative protein
1397 putative protein
1398 No function assigned by TIGR
1399 unknown protein
1400 putative protein kinase
1401 unknown protein
1402 hypothetical protein
1403 unknown protein
1404 putative calcium-binding EF-hand protein
1405 cinnamyl-alcohol dehydrogenase ELI3-1
1406 putative protein
1407 unknown protein
1408 senescence-associated protein sen1
1409 hypothetical protein
1410 putative cytochrome P450
1411 proline oxidase, mitochondrial precursor (osmotic stress-induced proline dehydrogenase)
1412 putative response regulator 3
1413 hypothetical protein
1414 glutamine-dependent asparagine synthetase
1415 lysine-ketoglutarate reductase/saccharopine
1416 En/Spm-like transposon protein
1417 G-box binding bZIP transcription factor
1418 putative protein
1419 putative protein
1420 putative protein
1421 ATFP4-like
1422 unknown protein
1423 unknown protein
1424 putative protein
1425 invertase inhibitor homolog (emb|CAA73335.1)
1426 unknown protein
1427 unknown protein
1428 putative cytochrome b5
1429 putative protein
1430 putative protein
1431 putative protein
1432 No function assigned by TIGR
1433 putative copper/zinc superoxide dismutase
1434 protein phosphatase ABI1
1435 glutamate dehydrogenase 2
1436 No function assigned by TIGR
1437 low-temperature-induced protein 78 (sp|Q06738)
1438 putative myo-inositol 1-phosphate synthase
1439 phosphate transporter (gb|AAB17265.1)
1440 4-hydroxyphenylpyruvate dioxygenase (HPD)
1441 histone H1
1442 hypothetical protein
1443 No function assigned by TIGR
1444 neoxanthin cleavage enzyme-like protein
1445 dehydration-induced protein RD22
1446 zinc finger protein ZAT7
1447 unknown protein
1448 unknown protein
1449 unknown protein
1450 unknown protein
1451 putative protein
1452 putative protein
1453 RNA helicase, putative

TABLE 1 (cont)

1454 putative glycine-rich protein
1455 hypothetical protein
1456 putative protein
1457 peroxidase
1458 peroxidase ATP3a (emb|CAA67340.1)
1459 metallothionein-like protein
1460 endomembrane-associated protein
1461 ferritin 1 precursor
1462 dehydrin RAB18-like protein (sp|P30185)
1463 HSR201 like protein
1464 light regulated protein, putative
1465 Dr4(protease inhibitor)
1466 mitogen activated protein kinase kinase (nMAPKK)
1467 glutathione S-transferase
1468 transcriptional activator CBF1/ CRT/CRE binding factor 1
1469 homeobox-leucine zipper protein ATHB-12
1470 amino acid permease I
1471 MAP kinase (ATMPK7)
1472 potassium channel protein AKT3
1473 cytochrome P450 monooxygenase (CYP91A2)
1474 putative transport protein
1475 putative protein
1476 hypothetical protein
1477 putative protein
1478 hypothetical protein
1479 receptor protein kinase-like protein
1480 serine/threonine protein kinase - like protein
1481 putative auxin-regulated protein
1482 amino acid transport protein AAP2
1483 unknown protein
1484 cold and ABA inducible protein kin1
1485 gamma-VPE (vacuolar processing enzyme)
1486 putative protein 1 photosystem II oxygen-evolving complex
1487 myrosinase-associated protein, putative
1488 transcription factor ATMYB4
1489 H-protein promoter binding factor-2a
1490 ammonium transporter, puitative
1491 putative zeta-carotene desaturase precursor
1492 high-affinity nitrate transporter NRT2
1493 light induced protein like
1494 putative AT-hook DNA-binding protein
1495 putative glycogenin
1496 putative light repressible receptor protein kinase
1497 serine/threonine kinase - like protein
1498 putative peroxidase
1499 cytochrome P450 monooxygenase (CYP83A1)
1500 MYB-related transcription factor (CCA1)
1501 Terminal flower1 (TFL1)
1502 sulfate transporter ATST1
1503 RING-H2 finger protein RHA3b
1504 lipoxygenase, putative
1505 serine O-acetyltransferase (EC 2.3.1.30) Sat-52 (pir||S71207)
1506 ferulate-5-hydroxylase (FAH1)
1507 En/Spm-like transposon protein, putative
1508 calmodulin-binding - like protein
1509 hypothetical protein
1510 somatic embryogenesis receptor-like kinase -like protein
1511 putative giberellin beta-hydroxylase

TABLE 1 (cont)

1512 putative pectinesterase
1513 putative protein
1514 unknown protein
1515 ribosomal protein
1516 low-temperature-induced 65 kD protein (sp|Q04980)
1517 putative glucosyltransferase
1518 peroxidase (emb|CAA67551.1)
1519 ankyrin-like protein
1520 ribosomal protein S11 - like
1521 hypothetical protein
1522 glycoprotein(EP1), putative
1523 calnexin - like protein
1524 SRG1-like protein
1525 ethylene response factor 1 (ERF1)
1526 transcriptional activator CBF1-like protein
1527 xyloglucan endo-1,4-beta-D-glucanase (XTR-6)
1528 putative cinnamyl alcohol dehydrogenase
1529 gibberellin 3 beta-hydroxylase, putative
1530 auxin response transcription factor 3 (ETTIN/ARF3)
1531 No function assigned by TIGR
1532 putative protein
1533 similar to avrRpt2-induced protein 1
1534 unknown protein
1535 hypothetical protein
1536 putative protein kinase
1537 respiratory burst oxidase - like protein
1538 glucose-6-phosphate/phosphate-translocator precursor, putative
1539 class 1 non-symbiotic hemoglobin (AHB1)
1540 endochitinase isolog
1541 putative cytochrome P450
1542 60S acidic ribosomal protein P0
1543 putative protein
1544 auxin-induced protein, putative
1545 unknown protein
1546 hypothetical protein
1547 protein phosphatase 2C ABI2 (PP2C) (sp|O04719)
1548 peroxidase, prxr2
1549 putative peroxidase ATP12a
1550 putative beta-amylase
1551 putative acetone-cyanohydrin lyase
1552 fatty acid elongase 3-ketoacyl-CoA synthase 1
1553 putative citrate synthase
1554 pEARLI 1-like protein
1555 putative MYB family transcription factor
1556 putative transcription factor MYB28
1557 RNA helicase-like protein
1558 snoRNA
1559 putative protein kinase
1560 growth regulator like protein
1561 putative potassium transporter
1562 putative protein
1563 60S ribosomal protein L14
1564 unknown protein
1565 putative RING-H2 zinc finger protein
1566 putative pollen surface protein
1567 unknown protein
1568 unknown protein
1569 unknown protein
1570 putative Ca2+-ATPase
1571 1-aminocyclopropane-1-carboxylate synthase -like protein
1572 putative beta-glucosidase
1573 transcription factor ZAP1
1574 oligopeptide transporter, putative
1575 putative protein
1576 putative glucosyltransferase
1577 putative serine/threonine kinase
1578 squalene epoxidase - like protein
1579 similar to 14KD proline-rich protein DC2.15 precursor

TABLE 1 (cont)

(sp|P14009); similar to ESTs emb|Z17709 and emb|Z47685
1580 unknown protein
1581 unknown protein
1582 hypothetical protein
1583 60S ribosomal protein L38
1584 flavin-containing monooxygenase, putative
1585 remorin
1586 unknown protein
1587 putative protein
1588 lipoxygenase
1589 cold-regulated protein COR6.6 (KIN2)
1590 Myb transcription factor homolog (ATR1)
1591 putative protein
1592 unknown protein
1593 unknown protein
1594 Ca2+-transporting ATPase - like protein
1595 protein phosphatase 2C (AtP2C-HA)
1596 peroxidase ATP24a
1597 branched-chain alpha keto-acid dehydrogenase, putative
1598 putative beta-ketoacyl-CoA synthase
1599 putative protein
1600 putative beta-galactosidase
1601 putative protein
1602 60S ribosomal protein L27
1603 putative annexin
1604 NAC domain protein, putative
1605 unknown protein
1606 late embryogenesis abundant protein LEA like
1607 unknown protein
1608 putative protein
1609 dehydrin Xero2
1610 putative zinc finger protein
1611 unknown protein
1612 DnaJ-like protein
1613 putative inositol polyphosphate-5-phosphatase
1614 putative cytochrome P450
1615 putative protein
1616 unknown protein
1617 putative protein
1618 hypothetical protein
1619 putative protein
1620 sucrose-UDP glucosyltransferase
1621 glucose-6-phosphate 1-dehydrogenase
1622 unknown protein
1623 mitochondrial chaperonin (HSP60)
1624 sucrose transport protein SUC1
1625 putative protein disulfide isomerase
1626 putative pollen-specific protein
1627 integral membrane protein, putative
1628 rubredoxin, putative
1629 putative protein
1630 disease resistance protein RPS4, putative
1631 putative peptide/amino acid transporter
1632 peroxidase, putative
1633 ethylene receptor, putative (ETR2)
1634 protein phosphatase 2C (PP2C)
1635 putative glutathione S-transferase
1636 homeodomain transcription factor (ATHB-7)
1637 putative nitrate transporter
1638 putative ribosomal protein L9, cytosolic
1639 putative DNA-binding protein
1640 beta-1,3-glucanase-like protein
1641 putative zinc transporter
1642 transcription factor TINY
1643 putative aspartate kinase-homoserine dehydrogenase
1644 ethylene reponse factor-like AP2 domain transcription factor
1645 peptide transporter - like protein
1646 trehalose-6-phosphate synthase like protein

TABLE 1 (cont)

1647 putative ribonuclease
1648 hypothetical protein
1649 putative DNA-binding protein
1650 nodulin-like protein
1651 trehalose-6-phosphate phosphatase - like protein
1652 succinate dehydrogenase flavoprotein alpha subunit (emb|CAA05025.1)
1653 unknown protein
1654 stress related protein, putative
1655 putative chloroplast initiation factor 3
1656 putative protein
1657 hypothetical protein
1658 putative CCCH-type zinc finger protein
1659 similar to harpin-induced protein hin1 from tobacco
1660 unknown protein
1661 unknown protein
1662 hypothetical protein
1663 No function assigned by TIGR
1664 putative protein
1665 putative glutathione S-transferase TSI-1
1666 putative protein
1667 putative PTR2 family peptide transporter
1668 receptor kinase-like protein
1669 putative sugar transport protein, ERD6
1670 putative protein
1671 nodulin-like protein
1672 unknown protein
1673 putative receptor-like protein kinase
1674 glutathione-conjugate transporter AtMRP4
1675 ascorbate oxidase-like protein
1676 pathogenesis-related protein 1 precursor, 19.3K
1677 R2R3-MYB transcription factor
1678 hypothetical protein
1679 putative chitinase
1680 Mlo protein, putative
1681 putative WRKY-type DNA binding protein
1682 putative acyl-CoA synthetase
1683 putative pathogenesis-related protein
1684 putative chitinase
1685 germin precursor oxalate oxidase
1686 endoxyloglucan transferase, putative
1687 putative protein
1688 putative cytochrome P450
1689 similar to Mlo proteins from H. vulgare
1690 putative tropinone reductase
1691 extensin-like protein
1692 putative sarcosine oxidase
1693 putative protein
1694 hypothetical protein
1695 late embryogenesis-abundant protein, putative
1696 beta-carotene hydroxylase
1697 putative calcium binding protein
1698 unknown protein
1699 unknown protein
1700 predicted glycosyl transferase
1701 hypothetical protein
1702 hypothetical protein
1703 hypothetical protein
1704 putative protein
1705 unknown protein
1706 putative protein
1707 putative protein
1708 serine/threonine kinase - like protein
1709 No function assigned by TIGR
1710 putative pectinesterase
1711 peroxidase like protein
1712 No function assigned by TIGR

TABLE 1 (cont)

1713 phenylalanine ammonia lyase (PAL1)
1714 peroxidase (emb|CAA68212.1)
1715 putative AMP deaminase
1716 putative MYB family transcription factor
1717 DNA-directed RNA polymerase II, third largest subunit
1718 nucleotide pyrophosphatase -like protein
1719 putative peroxidase
1720 calcium sensor homolog (gb|AAC26110.1)
1721 putative GDSL-motif lipase/hydrolase
1722 putative nonspecific lipid-transfer protein
1723 acyl-carrier protein (ACP), putative
1724 putative glycine dehydrogenase
1725 ATG1
1726 ACC synthase (AtACS-6)
1727 cyclin delta-3
1728 putative RING zinc finger protein
1729 aldose 1-epimerase - like protein
1730 putative phospholipase
1731 phosphoenolpyruvate carboxylase
1732 putative galactinol synthase
1733 unknown protein
1734 putative protein
1735 1-aminocyclopropane-1-carboxylate oxidase
1736 thioredoxin (clone GIF1) (pir||S58118)
1737 trehalose-6-phosphate phosphatase
1738 beta-1,3-glucanase 2 (BG2) (PR-2)
1739 putative S-adenosyl-L-methionine:trans-caffeoyl-Coenzyme A 3-O-methyltransferase
1740 disease resistance protein EDS1
1741 putative protein kinase
1742 Gluthatione reductase, chloroplast precursor
1743 putative heat shock protein
1744 aspartate kinase
1745 putative major intrinsic (channel) protein
1746 matrix metalloproteinase, putative
1747 putative GDSL-motif lipase/hydrolase
1748 putative protein
1749 DAG-like protein
1750 serine/threonine kinase -like protein
1751 formamidase - like protein
1752 CER2
1753 26S proteasome subunit 4
1754 pectinesterase like protein
1755 putative disease resistance protein
1756 putative RNA methyltransferase
1757 unknown protein
1758 HOMEOBOX PROTEIN KNOTTED-1 LIKE 4 (KNAT4)
1759 glycine-rich RNA-binding protein AtGRP2 - like
1760 putative acetylornithine transaminase
1761 putative Sec24-like COPII protein
1762 putative berberine bridge enzyme
1763 putative GH3-like protein
1764 putative ABC transporter
1765 putative reticuline oxidase-like protein
1766 pectate lyase - like protein
1767 protein disulfide-isomerase-like protein
1768 putative protein
1769 putative membrane transporter
1770 unknown protein
1771 unknown protein
1772 putative RING-H2 zinc finger protein

TABLE 1 (cont)

1773 unknown protein
1774 unknown protein
1775 unknown protein
1776 MADS-box protein (AGL20)
1777 amidophosphoribosyltransferase 2 precursor
1778 putative dihydrodipicolinate synthase
1779 hypothetical protein
1780 ABA-responsive protein - like
1781 putative protein
1782 hypothetical protein
1783 DNA-binding protein-like
1784 No function assigned by TIGR
1785 transcription factor, putative
1786 nitrate reductase, putative
1787 putative protein
1788 putative protein
1789 putative protein
1790 putative protein
1791 unknown protein
1792 unknown protein
1793 tryptophan synthase beta-subunit (TSB2)
1794 hypothetical protein
1795 putative protein
1796 putative DNA-binding protein
1797 putative 40S ribosomal protein S10
1798 putative protein
1799 putative cytochrome P450
1800 putative protein
1801 putative protein
1802 putative glucosyltransferase
1803 No function assigned by TIGR
1804 putative protein
1805 putative protein
1806 unknown protein
1807 glycine-rich RNA binding protein 7
1808 dehydrin, putative
1809 putative endoxyloglucan glycosyltransferase
1810 glutamate decarboxylase 1 (GAD 1) (sp|Q42521)
1811 delta 9 desaturase
1812 UDP-glucose glucosyltransferase
1813 CARBONIC ANHYDRASE 2
1814 response reactor 2 (ATRR2)
1815 S-adenosyl-methionine-sterol-C-methyltransferase, putative
1816 putative DNA-binding protein (RAV2-like)
1817 gamma glutamyl hydrolase, putative
1818 protein phosphatase - like
1819 unknown protein
1820 unknown protein
1821 unknown protein
1822 copper transport protein - like protein
1823 hypothetical protein
1824 unknown protein
1825 putative peptide methionine sulfoxide reductase
1826 putative obtusifoliol 14-alpha demethylase
1827 glutamate dehydrogenase (EC 1.4.1.-) 1 (pir||S71217)
1828 unknown protein
1829 xyloglucan endo-1,4-beta-D-glucanase precursor
1830 unknown protein
1831 SNF1 related protein kinase (ATSRPK1)
1832 putative protein
1833 putative chloroplast nucleoid DNA binding protein
1834 hypothetical protein
1835 putative protein
1836 putative thiamin biosynthesis protein
1837 unknown protein

TABLE 1 (cont)

1838 unknown protein
1839 putative RNA helicase
1840 putative SF21 protein {Helianthus annuus}
1841 unknown protein
1842 NBS/LRR disease resistance protein, putative
1843 hypothetical protein
1844 unknown protein
1845 No function assigned by TIGR
1846 glycine-rich protein (AtGRP2)
1847 No function assigned by TIGR
1848 putative protein
1849 putative glucosyltransferase
1850 hypothetical protein
1851 hypothetical protein
1852 putative protein
1853 putative disease resistance protein
1854 thaumatin, putative
1855 putative proline-rich protein
1856 sterol-C-methyltransferase
1857 superoxidase dismutase
1858 TINY-like protein
1859 calcium-dependent protein kinase, putative
1860 hypothetical protein
1861 putative protein kinase
1862 DNA-directed RNA polymerase (mitochondrial)
1863 putaive DNA-binding protein
1864 late embryogenesis abundant M17 protein
1865 putative protein
1866 delta-1-pyrroline-5-carboxylate synthetase
1867 putative 60s ribosomal protein L10
1868 cytochrome P450 CYP86A1
1869 putative tyrosine aminotransferase
1870 thionin
1871 No function assigned by TIGR
1872 APETALA2 protein
1873 MADS-box protein (AGL3)
1874 putative monooxygenase
1875 ZFP3 zinc finger protein
1876 cell division protein FtsZ chloroplast homolog precursor (sp|Q42545)
1877 calreticulin, putative
1878 phosphoserine aminotransferase
1879 12-oxophytodienoate-10,11-reductase
1880 putative bHLH transcription factor
1881 pectin methylesterase (PMEU1), putative
1882 DNA-binding protein
1883 carnitine racemase like protein
1884 putative protein
1885 endoxyloglucan transferase (dbj|BAA81669.1)
1886 RMA1 RING zinc finger protein
1887 ammonium transporter
1888 apyrase (gb|AAF00612.1)
1889 potassium uptake transporter - like protein
1890 putative ABC transporter
1891 potassium transporter-like protein
1892 integral membrane protein, putative
1893 putative protein
1894 pyruvate decarboxylase-1 (Pdc1)
1895 putative malate oxidoreductase
1896 putative histone H2B
1897 snoRNA
1898 symbiosis-related like protein
1899 unknown protein
1900 unknown protein
1901 hypothetical protein
1902 putative protein
1903 copper-binding protein-like
1904 putative protein
1905 unknown protein
1906 putative glyoxalase II

TABLE 1 (cont)

1907 No function assigned by TIGR
1908 hypothetical protein
1909 flavanone 3-hydroxylase (FH3)
1910 putative laccase
1911 putative protein kinase
1912 myb-related protein, 33.3K (pir||S71284)
1913 unknown protein
1914 endo-xyloglucan transferase - like protein
1915 TMV resistance protein N - like
1916 putative xyloglucan endotransglycosylase
1917 unknown protein
1918 proline transporter 2
1919 resistance protein, putative
1920 actin, putative
1921 putative related to microbial divalent cation tolerance proteins
1922 unknown protein
1923 putative glycosyl transferase
1924 unknown protein
1925 putative protein phosphatase 2C
1926 unknown protein
1927 serpin, putative
1928 cinnamyl-alcohol dehydrogenase CAD1
1929 putative protein import receptor
1930 unknown protein
1931 unknown protein
1932 putative protein
1933 putative CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase
1934 unknown protein
1935 putative LRR receptor-like protein kinase
1936 serine/threonine protein kinase, putative
1937 potassium transporter - like protein
1938 lactate dehydrogenase (LDH1)
1939 hypothetical protein
1940 unknown protein
1941 putative thaumatin
1942 putative reticuline oxidase-like protein
1943 uracil phosphoribosyltransferase, putative
1944 transcription factor, putative
1945 unknown protein
1946 unknown protein
1947 GATA transcription factor 4
1948 unknown protein
1949 unknown protein
1950 senescence-associated protein -like
1951 putative pollen allergen
1952 unknown protein
1953 putative protein
1954 glycine-rich protein
1955 putative protein
1956 3-methyladenine DNA glycosylase, putative
1957 endoplasmic reticulum-type calcium-transporting ATPase 4
1958 putative pectinesterase
1959 cytochrome P450-like protein
1960 RNA-binding protein (cp33)
1961 CONSTANS-like 1
1962 putative small heat shock protein
1963 hypothetical protein
1964 unknown protein
1965 cytochrome P450 - like protein
1966 cysteine proteinase inhibitor like protein
1967 nicotianamine synthase (dbj|BAA74589.1)
1968 copper amine oxidase like protein (fragment2)
1969 putative SCARECROW gene regulator
1970 unknown protein
1971 unknown protein

TABLE 1 (cont)

1972 putative alanine acetyl transferase
1973 unknown protein
1974 unknown protein
1975 unknown protein
1976 putative extensin
1977 putative protein kinase
1978 putative protein kinase
1979 NADPH-dependent codeinone reductase, putative
1980 peroxidase
1981 putative cytochrome P450
1982 No function assigned by TIGR
1983 putative zinc-finger protein (B-box zinc finger domain)
1984 putative tyrosine aminotransferase
1985 hypothetical protein
1986 DNA binding protein
1987 putative fatty acid elongase
1988 bZIP transcription factor - like protein
1989 xyloglucan fucosyltransferase, putative
1990 unknown protein
1991 unknown protein
1992 putative protein
1993 myb factor, putative
1994 Myb-family transcription factor, putative
1995 putative fructose bisphosphate aldolase
1996 myrosinase-associated protein, putative
1997 cytochrome P450 like protein
1998 similar to SOR1 from the fungus Cercospora nicotianae
1999 similar to embryo-abundant protein GB:L47672 GI:1350530 from [Picea glauca]
2000 alcohol dehydrogenase
2001 auxin response factor 1
2002 pathogenesis-related protein 1 precursor, 18.9K
2003 hypothetical protein
2004 unknown protein
2005 zinc finger protein Zat12
2006 unknown protein
2007 unknown protein
2008 cyclin, putative
2009 2-dehydro-3-deoxyphosphoheptonate aldolase
2010 glutathione synthetase gsh2
2011 heat shock protein 17
2012 putative Na+-dependent inorganic phosphate cotransporter
2013 No function assigned by TIGR
2014 unknown protein
2015 putative protein
2016 similar to RING-H2 finger protein RHC1a GB:AAC69854 GI:3790583 from [Arabidopsis thaliana]
2017 calcium-binding protein - like
2018 putative protein
2019 putative aldehyde dehydrogenase
2020 auxin-responsive GH3 - like protein
2021 putative protein
2022 Phosphoglycerate dehydrogenase - like protein
2023 unknown protein
2024 unknown protein
2025 PSI type III chlorophyll a/b-binding protein, putative
2026 putative protein
2027 putative protein
2028 glutaredoxin, putative
2029 hypothetical protein
2030 No function assigned by TIGR
2031 putative protein
2032 jasmonate inducible protein, putative
2033 putative polygalacuronase isoenzyme 1 beta subunit
2034 putative small heat shock protein

TABLE 1 (cont)

2035 unknown protein
2036 putative disease resistance protein
2037 putative protein
2038 ethylene-responsive element binding factor, putative
2039 putative protein
2040 Pollen-specific protein precursor like
2041 putative protein
2042 unknown protein
2043 EF-Hand containing protein -like
2044 unknown protein
2045 puative calcium-transporting ATPase
2046 antifungal protein-like (PDF1.2)
2047 pathogenesis-related PR-1-like protein
2048 similar to Mlo proteins from H. vulgare
2049 putative steroid sulfotransferase
2050 trehalase - like protein
2051 thioredoxin f1
2052 unknown protein
2053 alanine-glyoxylate aminotransferase
2054 integral membrane protein, putative
2055 hypothetical protein
2056 unknown protein
2057 hypothetical protein
2058 unknown protein
2059 unknown protein
2060 unknown protein
2061 drought-induced-19-like 1
2062 unknown protein
2063 putative protein
2064 putative protein
2065 AIG2-like protein
2066 Lhca2 protein
2067 phytocyanin
2068 putative chlorophyll A-B binding protein
2069 Lhcb3 chlorophyll a/b binding protein (gb|AAD28773.1)
2070 luminal binding protein (dbj|BAA13948.1)
2071 hydroxypyruvate reductase (HPR)
2072 epoxide hydrolase (ATsEH)
2073 putative protein (fragment)
2074 unknown protein
2075 hypothetical protein
2076 putative glucosyl transferase
2077 putative glucosyl transferase
2078 putative 3-methylcrotonyl-CoA carboxylase
2079 putative peroxidase
2080 acyl-CoA oxidase (gb|AAC13497.1)
2081 alternative oxidase 1a precursor
2082 putative transcription factor (MYB4)
2083 serine acetyltransferase
2084 ATP-sulfurylase
2085 calreticulin (crt1)
2086 putative prohibitin 2
2087 putative monodehydroascorbate reductase
2088 branched-chain alpha-keto acid decarboxylase E1 beta subunit
2089 cytokinin oxidase - like protein
2090 putative receptor-like protein kinase
2091 unknown protein
2092 hypothetical protein
2093 No function assigned by TIGR
2094 putative APG protein
2095 glutathione S-transferase, putative
2096 phytochrome-associated protein 1 (PAP1)
2097 amidophosphoribosyltransferase
2098 nonphototropic hypocotyl 1
2099 3-keto-acyl-CoA thiolase 2 (gb|AAC17877.1)
2100 pEARLI 1
2101 glutathione reductase, cytosolic

TABLE 1 (cont)

2102 putative protein
2103 putative protein
2104 putative aldehyde oxidase
2105 probable photosystem I chain XI precursor
2106 photosystem II polypeptide, putative
2107 photosystem II reaction center 6.1KD protein
2108 33 kDa polypeptide of oxygen-evolving complex (OEC) in photosystem II (emb|CAA75629.1)
2109 60S ribosomal protein L11B
2110 extA (emb|CAA47807.1)
2111 zinc finger protein OBP4 - like
2112 sterol delta7 reductase
2113 putative RAS-related protein, RAB11C
2114 glucosyltransferase like protein
2115 zinc finger protein (PMZ), putative
2116 6,7-dimethyl-8-ribityllumazine synthase precursor
2117 putative protein
2118 osmotin precursor
2119 No function assigned by TIGR
2120 ferredoxin precusor isolog
2121 GH3 like protein
2122 non-specific lipid transfer protein
2123 homeodomain transcription factor (HAT9)
2124 putative cytochrome P450 monooxygenase
2125 putative protein kinase
2126 putative protein
2127 glyceraldehyde-3-phosphate dehydrogenase
2128 putative protein disulfide-isomerase
2129 unknown protein
2130 beta-1,3-glucanase class I precursor
2131 homeobox-leucine zipper protein HAT5 (HD-ZIP protein 5) (HD-ZIP protein ATHB-1)
2132 putative cyclic nucleotide-regulated ion channel protein
2133 P II nitrogen sensing protein GLB I
2134 H-protein promoter binding factor-1 (gb|AAC24592.1)
2135 GAST1-like protein
2136 cytochrome P450 GA3
2137 putative protein
2138 Myb-related transcription factor-like protein
2139 putative phloem-specific lectin
2140 protein kinase - like protein
2141 unknown protein
2142 SCARECROW transcriptional regulator-like
2143 unknown protein
2144 unknown protein
2145 putative protein
2146 calnexin homolog
2147 PP1/PP2A phosphatases pleiotropic regulator PRL2
2148 xyloglucan endotransglycosylase, putative
2149 putative calmodulin
2150 spermine synthase (ACL5)
2151 snoRNA
2152 photosystem I subunit V precursor, putative
2153 putative potassium transporter
2154 Homeodomain - like protein
2155 putative protein
2156 unknown protein
2157 CALMODULIN-RELATED PROTEIN 2, TOUCH-INDUCED (TCH2)
2158 putative protein phosphatase 2C

TABLE 1 (cont)

2159 monosaccharide transport protein, STP4
2160 hypothetical protein
2161 unknown protein
2162 hypothetical protein
2163 putative protein kinase
2164 putative serine/threonine protein kinase
2165 jasmonate inducible protein, putative
2166 similar to several small proteins (~100 aa) that are induced by heat, auxin, ethylene and wounding such as Phaseolus aureus indole-3-acetic acid induced protein ARG (SW:32292)
2167 unknown protein
2168 MYB-like protein
2169 putative protein kinase
2170 unknown protein
2171 CLC-d chloride channel protein
2172 cytochrome P450-like protein
2173 putative glutathione S-transferase
2174 putative mandelonitrile lyase
2175 hypothetical protein
2176 putative trypsin inhibitor
2177 male sterility 2-like protein (emb|CAA68191.1)
2178 unknown protein
2179 unknown protein
2180 putative protein
2181 putative peroxidase
2182 putative thromboxane-A synthase
2183 putative cytochrome P450
2184 peroxidase ATP21a
2185 unknown protein
2186 putative glutathione S-transferase
2187 defender against cell death protein
2188 AP2 domain containing protein, putative
2189 actin depolymerizing factor - like protein
2190 putative calcium-dependent protein kinase (U90439)
2191 phosphoribosylanthranilate transferase, putative
2192 oligopeptide transporter, putative
2193 calmodulin-like protein
2194 putative protease inhibitor
2195 MAP kinase
2196 DNA binding protein MybSt1, putative
2197 putative protein
2198 putative protein
2199 unknown protein
2200 unknown protein
2201 unknown protein
2202 putative protein
2203 unknown protein
2204 unknown protein
2205 hypothetical protein
2206 uncharacterized protein
2207 putative protein
2208 hypothetical protein
2209 peroxidase (emb|CAA66967.1)
2210 putative flavonol 3-O-glucosyltransferase
2211 putative flavonol 3-O-glucosyltransferase
2212 putative protein
2213 glycerol-3-phosphate acyltransferase
2214 putative beta-1,3-glucanase
2215 putative ethylene response element binding protein (EREBP)
2216 putative CONSTANS-like B-box zinc finger protein
2217 putative protein
2218 unknown protein
2219 putative trehalose-6-phosphate phosphatase (AtTPPA)
2220 putative protein

TABLE 1 (cont)

2221 putative protein
2222 unknown protein
2223 unknown prptein
2224 unknown protein
2225 hypothetical protein
2226 putative metal-binding protein
2227 putative phosphoribosylglycinamide synthetase
2228 unknown protein
2229 putative protein
2230 unknown protein
2231 unknown protein
2232 putative beta-galactosidase
2233 putative protein kinase
2234 putative protein
2235 putative protein phosphatase 2C
2236 putative growth regulator protein
2237 putative ABC transporter
2238 chloride channel (emb|CAA70310.1)
2239 adrenodoxin - like protein
2240 NAM (no apical meristem)-like protein
2241 putative transcription factor MYB41
2242 Myb DNA binding protein - like
2243 AtMYB84
2244 photosystem II type I chlorophyll a/b binding protein
2245 putative aspartic proteinase
2246 jasmonate inducible protein, putative
2247 putative protein
2248 No function assigned by TIGR
2249 putative phosphatidylserine synthase
2250 putative nicotianamine synthase
2251 lysine and histidine specific transporter, putative
2252 putative protein
2253 putative protein
2254 putative sugar transporter protein
2255 12S cruciferin seed storage protein
2256 putative auxin-induced protein, IAA17/AXR3-1
2257 putative cyclin D
2258 farnesyl diphosphate synthase precursor (gb|AAB49290.1)
2259 putative potassium transport protein (TRH1)
2260 putative NPK1-related MAP kinase
2261 putative protein
2262 putative ABC transporter
2263 putative DNA-directed RNA polymerase subunit
2264 putative small nuclear ribonucleoprotein E
2265 unknown protein
2266 reticuline oxidase - like protein
2267 putative 1-aminocyclopropane-1-carboxylate oxidase
2268 similar to Mlo proteins from H. vulgare
2269 long-chain-fatty-acid--CoA ligase-like protein
2270 putative protein
2271 chromatin remodelling complex ATPase chain ISWI -like protein
2272 hypothetical protein
2273 latex-abundant protein, putative
2274 N-acetylornithine deacetylase-like protein, fragment
2275 putative DNA-binding protein
2276 putative anthranilate N-hydroxycinnamoyl/benzoyltransferase
2277 putative DNA binding protein
2278 cytochrome P450 - like protein
2279 putative DNA-binding protein
2280 putative peptide transporter
2281 putative reticuline oxidase-like protein

TABLE 1 (cont)

2282	thioredoxin, putative
2283	nodulin-like protein
2284	UDP-galactose transporter - like protein
2285	putative fibrillin
2286	unknown protein
2287	unknown protein
2288	unknown protein
2289	hypothetical protein
2290	glyceraldehyde 3-phosphate dehydrogenase A subunit (GapA)
2291	predicted protein of unknown function
2292	putative protein
2293	putative protein
2294	myb-like protein
2295	hypothetical protein
2296	putative U5 small nuclear ribonucleoprotein, an RNA helicase
2297	unknown protein
2298	cinnamyl alcohol dehydrogenase - like protein
2299	hypothetical protein similar to extensin-like protein
2300	unknown protein
2301	putative chlorophyll a/b binding protein
2302	probable plasma membrane intrinsic protein 1c
2303	hexokinase (ATHXK2)
2304	calcium-dependent protein kinase
2305	5'-adenylylphosphosulfate reductase, putative
2306	Erd1 protein precursor (sp|P42762)
2307	putative protein
2308	putative protein
2309	unknown protein
2310	BCS1 protein-like protein
2311	putative protein
2312	putative protein
2313	putative protein kinase
2314	indoleacetic acid (IAA)-inducible gene (IAA7)
2315	ATP-dependent Clp protease regulatory subunit CLPX
2316	DNA-binding protein RAV1
2317	putative protein
2318	hypothetical protein
2319	unknown protein
2320	unknown protein
2321	putative protein
2322	putative thioredoxin reductase
2323	unknown protein
2324	putative lectin
2325	No function assigned by TIGR
2326	beta-fructosidase
2327	chlorophyll a/b-binding protein CP29
2328	photosystem I subunit PSI-E - like protein
2329	peroxidase ATP8a
2330	putative fructose bisphosphate aldolase
2331	zinc finger protein ATZF1, putative
2332	DegP protease precursor
2333	transcription factor-like protein
2334	calcium-dependent protein kinase
2335	hypothetical protein
2336	putative protein
2337	glucose-1-phosphate adenylyltransferase (APL3)
2338	No function assigned by TIGR
2339	putative Eukaryotic initiation factor 4A
2340	No function assigned by TIGR
2341	unknown protein
2342	beta tubulin 1, putative
2343	one helix protein (OHP)
2344	No function assigned by TIGR
2345	zinc finger protein 5, ZFP5
2346	putative MYB family transcription factor
2347	putative amino acid transporter protein

TABLE 1 (cont)

2348 putative potassium transporter
2349 protein kinase (AFC2)
2350 putative protein
2351 No function assigned by TIGR
2352 putative ubiquitin-conjugating enzyme E2
2353 unknown protein
2354 cytochrome P450 monooxygenase (CYP71B3)
2355 putative myrosinase-binding protein
2356 putative vacuolar sorting receptor
2357 uridine diphosphate glucose epimerase
2358 shaggy related protein kinase, ASK-GAMMA
2359 ankyrin repeat protein EMB506
2360 putative beta-alanine-pyruvate aminotransferase
2361 putative alcohol dehydrogenase
2362 putative receptor-like protein kinase
2363 unknown protein
2364 putative methylmalonate semi-aldehyde dehydrogenase
2365 hypothetical protein
2366 unknown protein
2367 peroxidase ATP13a
2368 putative glutathione peroxidase
2369 squamosa promoter binding protein-like 7
2370 photosystem II core complex protein, putative
2371 snoRNA
2372 photosystem I subunit X precursor
2373 MYB transcription factor (Atmyb2)
2374 putative PHD-type zinc finger protein
2375 nuclear RNA binding protein A-like protein
2376 unknown protein
2377 unknown protein
2378 unknown protein
2379 putative amino-cyclopropane-carboxylic acid oxidase (ACC oxidase)
2380 hypothetical protein
2381 indole-3-acetate beta-glucosyltransferase like protein
2382 predicted protein
2383 unknown protein
2384 No function assigned by TIGR
2385 putative photosystem I reaction center subunit IV
2386 putative homeodomain transcription factor
2387 putative purple acid phosphatase precursor
2388 No function assigned by TIGR
2389 nitrate reductase 1 (NR1)
2390 putative casein kinase II beta subunit
2391 pEARLI 1-like protein
2392 putative protein
2393 No function assigned by TIGR
2394 unknown protein
2395 putative cell wall-plasma membrane disconnecting CLCT protein (AIR1A)
2396 unknown protein
2397 scarecrow-like 11 - like
2398 putative anthocyanidin synthase
2399 putative AP2 domain transcription factor
2400 caffeoyl-CoA O-methyltransferase - like protein
2401 unknown protein
2402 putative protein kinase
2403 cytochrome P450 -like protein
2404 putative MADS-box protein ANR1
2405 putative glutathione S-transferase

TABLE 1 (cont)

2406 hypothetical protein
2407 similar to gibberellin-regulated proteins
2408 unknown protein
2409 putative sensory transduction histidine kinase
2410 similar to late embryogenesis abundant proteins
2411 unknown protein
2412 putative protein
2413 putative ATP-dependent RNA helicase
2414 putative protein
2415 putative sucrose synthetase
2416 beta-fructofuranosidase 1
2417 putative indole-3-acetate beta-glucosyltransferase
2418 hypothetical protein
2419 DNA-directed RNA polymerase II, third largest subunit
2420 putative transcription factor
2421 homeobox-leucine zipper protein ATHB-5 (HD-zip protein ATHB-5) (sp|P46667)
2422 putative ftsH chloroplast protease
2423 replication protein A1 - like
2424 hypothetical protein
2425 unknown protein
2426 unknown protein
2427 putative methionine aminopeptidase
2428 unknown protein
2429 fatty acid elongase - like protein (cer2-like)
2430 unknown protein
2431 putative disease resistance response protein
2432 putative protein
2433 unknown protein
2434 putative protein
2435 putative protein
2436 unknown protein
2437 putative protein
2438 unknown protein
2439 unknown protein
2440 putative protein
2441 No function assigned by TIGR
2442 MADS-box protein AGL14
2443 No function assigned by TIGR
2444 peptidylprolyl isomerase
2445 putative s-adenosylmethionine synthetase
2446 peroxidase
2447 ferrochelatase-I
2448 putative eukaryotic initiation factor 4, eIF4
2449 drought-inducible cysteine proteinase RD21A precursor -like protein
2450 unknown protein
2451 unknown protein
2452 No function assigned by TIGR
2453 No function assigned by TIGR
2454 salt-inducible like protein
2455 glucose-6-phosphate 1-dehydrogenase
2456 3-hydroxy-3-methylglutaryl CoA reductase (AA 1-592)
2457 hypothetical protein
2458 putative protein
2459 putative putative 60S ribosomal protein L17
2460 putative inorganic pyrophosphatase
2461 putative gamma-glutamyltransferase
2462 heat shock transcription factor - like protein
2463 mitochondrial chaperonin hsp60
2464 unknown protein
2465 putative zinc finger protein identical to T10M13.22
2466 putative uridylyl transferase
2467 nodulin-like protein
2468 putative B-box zinc finger protein
2469 No function assigned by TIGR
2470 putative metalloproteinase

TABLE 1 (cont)

2471 putative cellular apoptosis susceptibility protein
2472 hypothetical protein
2473 hypothetical protein
2474 scarecrow-like 13 (SCL13)
2475 putative nucleoside triphosphatase
2476 unknown protein
2477 No function assigned by TIGR
2478 hypothetical protein
2479 putative phospholipase
2480 putative snRNP protein
2481 putative protein
2482 putative lipase
2483 putative nonsense-mediated mRNA decay protein
2484 No function assigned by TIGR
2485 protochlorophyllide reductase precursor
2486 No function assigned by TIGR
2487 trehalose-6-phosphate synthase, putative
2488 unknown protein
2489 germin-like protein
2490 plastid protein
2491 putative protein
2492 hypothetical protein
2493 unknown protein
2494 unknown protein
2495 histone deacetylase-like protein
2496 unknown protein
2497 unknown protein
2498 putative protein
2499 putative protein
2500 No function assigned by TIGR
2501 putative zinc transporter ZIP2 - like
2502 unknown protein
2503 putative ribosomal-protein S6 kinase (ATPK19)
2504 unknown protein
2505 unknown protein
2506 60S ribosomal protein L10A
2507 putative protein
2508 receptor protein kinase (IRK1), putative
2509 putative nematode-resistance protein
2510 tubulin alpha-5 chain-like protein
2511 putative DNA-binding protein
2512 unknown protein
2513 putative RGA1, giberellin repsonse modulation protein
2514 non phototropic hypocotyl 1-like
2515 RING-H2 finger protein RHA1b
2516 putative myb-protein
2517 hydroperoxide lyase (HPOL) like protein
2518 serine/threonine-protein kinase, PK7
2519 putative vacuolar proton-ATPase subunit
2520 putative polygalacturonase
2521 putative ribosomal protein L8
2522 putative adenylate kinase
2523 germin-like protein (GLP10)
2524 putative chlorophyll a/b binding protein
2525 chloroplast single subunit DNA-dependent RNA polymerase
2526 putative protein
2527 hypothetical protein
2528 hypothetical protein
2529 b-keto acyl reductase, putative
2530 cellulose synthase catalytic subunit
2531 putative 1-aminocyclopropane-1-carboxylate oxidase
2532 S-linalool synthase, putative
2533 phosphoribosyl-ATP pyrophosphohydrolase (At-IE)
2534 disease resistance RPP5 like protein (fragment)
2535 putative protein
2536 beta-galactosidase like protein

TABLE 1 (cont)

2537 putative translation initiation factor eIF-2, gamma subunit
2538 ankyrin like protein
2539 histone H2A- like protein
2540 putative protein
2541 salt-tolerance zinc finger protein
2542 unknown protein
2543 putative protein
2544 fructose-bisphosphate aldolase
2545 peroxidase (emb|CAA66964.1)
2546 patatin-like protein
2547 salt-inducible protein homolog
2548 hypothetical protein
2549 xyloglucan endo-transglycosylase-like protein
2550 trihelix DNA-binding protein (GT2)
2551 ubiquitin-conjugating enzyme 16, putative
2552 homeobox protein
2553 envelope Ca2+-ATPase
2554 snap25a
2555 putative annexin
2556 putative protein
2557 homeodomain transcription factor (ATHB-14)
2558 heat shock protein, putative
2559 peroxidase ATP23a
2560 p68 RNA helicase, putative
2561 potassium transporter, putative
2562 putative eukaryotic translation initiation factor 2 alpha subunit, eIF2
2563 hypothetical protein
2564 carnitine racemase like protein
2565 No function assigned by TIGR
2566 unknown protein
2567 unknown protein
2568 unknown protein
2569 serine/threonine kinase - like protein
2570 peroxidase (emb|CAA66960.1)
2571 putative protein
2572 hypothetical protein
2573 glycine-rich protein 2 (GRP2)
2574 unknown protein
2575 berberine bridge enzyme-like protein
2576 unknown protein
2577 putative WD-repeat protein
2578 serine/threonine kinase - like protein
2579 serine /threonine kinase - like protein
2580 Cu2+-transporting ATPase-like protein
2581 translation initiation factor eIF4E
2582 O-methyltransferase - like protein
2583 translation initiation factor eIF3 - like protein
2584 No function assigned by TIGR
2585 unknown protein
2586 hypothetical protein
2587 unknown protein
2588 unknown protein
2589 glycine-rich protein like
2590 putative disease resistance protein
2591 putative Na+/Ca2+ antiporter
2592 putative hydroxymethylglutaryl-CoA lyase
2593 putative phosphoribosylaminoimidazole carboxylase
2594 SAR DNA-binding protein - like
2595 response regulator, putative
2596 fibrillin precursor-like protein
2597 beta-ketoacyl-CoA synthase (FIDDLEHEAD)
2598 lectin like protein
2599 No function assigned by TIGR

TABLE 1 (cont)

2600 acidic endochitinase (dbj|BAA21861.1)
2601 unknown protein
2602 hypothetical protein
2603 predicted OR23 protein of unknown function
2604 putative protein
2605 hypothetical protein
2606 glycerol-3-phosphate dehydrogenase
2607 hypothetical protein
2608 tat-binding protein, putative
2609 putative protein
2610 putative trehalose-6-phosphate phosphatase
2611 hypothetical protein
2612 putative flavonol 3-O-glucosyltransferase
2613 60S ribosomal protein L30
2614 putative auxin-induced protein
2615 putative nonspecific lipid-transfer protein precursor
2616 AtRer1A
2617 putative aquaporin (tonoplast intrinsic protein gamma)
2618 hypothetical protein
2619 putative alanine acetyl transferase
2620 putative NADP-dependent glyceraldehyde-3-phosphate dehydrogenase
2621 putative DNA binding protein
2622 putative cystathionine gamma-synthase
2623 unknown protein
2624 malate oxidoreductase (malic enzyme)
2625 unknown protein
2626 cyclic nucleotide-gated cation channel
2627 glyoxalase II, putative
2628 putative trypsin inhibitor
2629 unknown protein
2630 unknown protein
2631 unknown protein
2632 nucleosome assembly protein I-like protein
2633 membrane channel like protein
2634 anthocyanin2, putative
2635 TWIN SISTER OF FT (TSF)
2636 putative myb-related transcription factor
2637 hypothetical protein
2638 putative RING zinc finger protein
2639 amino acid transport protein AAT1
2640 putative protein
2641 putative protein
2642 xanthine dehydrogenase
2643 xanthine dehydrogenase - like protein
2644 receptor protein kinase (IRK1), putative
2645 dehydrin-like protein
2646 unknown protein
2647 aldehyde dehydrogenase homolog, putative
2648 Ran binding protein (AtRanBP1b)
2649 putative squamosa-promoter binding protein
2650 putative protein
2651 kinesin like protein
2652 putative cellulose synthase
2653 calmodulin (cam2)
2654 fibrillarin - like protein
2655 putative transmembrane protein G5p
2656 putative peroxidase
2657 putative SNF1-related protein kinase
2658 glutathione S-transferase, putative
2659 unknown protein
2660 hypothetical protein
2661 putative protein
2662 phosphatidylinositol-4-phosphate 5-kinase isolog
2663 putative tyrosine decarboxylase
2664 unknown protein

TABLE 1 (cont)

2665 SGP1 monomeric G-protein (emb|CAB54517.1)
2666 putative serine carboxypeptidase II
2667 putative L5 ribosomal protein
2668 putative glucosyltransferase
2669 flavonoid 3,5-hydroxylase like protein
2670 putative protein
2671 putative protein
2672 putative Fe(II)/ascorbate oxidase
2673 putative anthocyanin 5-aromatic acyltransferase
2674 casein kinase I
2675 putative 2,3-bisphosphoglycerate-independent phosphoglycerate mutase
2676 putative glutathione S-transferase TSI-1
2677 ATP-dependent RNA helicase
2678 putative cytochrome P450
2679 putative WD-40 repeat protein
2680 No function assigned by TIGR
2681 No function assigned by TIGR
2682 putative protein
2683 putative extensin
2684 nodulin-26 - like protein
2685 RNA helicase (emb|CAA09212.1)
2686 predicted protein of unknown function
2687 putative berberine bridge enzyme
2688 thioredoxin, putative
2689 putative serine carboxypeptidase I
2690 cytochrome P450-like protein
2691 putative pyrophosphate-dependent phosphofructokinase alpha subunit
2692 putative flavonol glucosyltransferase
2693 peroxidase ATP20a (emb|CAA67338.1)
2694 TOPP8 serine/threonine protein phosphatase type one
2695 auxin regulated protein IAA18, putative
2696 putative WRKY-type DNA binding protein
2697 putative glucan synthase
2698 squalene monooxygenase
2699 putative proline-rich protein
2700 G2484-1 protein
2701 heat shock protein 70 like protein
2702 unknown protein
2703 unknown protein

TABLE 2

ABIOTIC STRESS RESPONSIVE GENE REGULATORY SEQUENCES

SEQ ID NO:	REGULATORY REGION	SEQ ID NO:	REGULATORY REGION	SEQ ID NO:	REGULATORY REGION
1	2704	51	2753	101	2802
2	2705	52	2754	102	2803
3	2706	53	2755	103	2804
4	2707	54	2756	104	2805
5	2708	55	2757	105	2806
6	2709	56	2758	106	2807
7	2710	57	2759	107	2808
8	2711	58	2760	108	2809
9	2712	59	2761	109	2810
10	2713	60	2762	110	2811
11	2714	61	2763	111	2812
12	2715	62	2764	112	2813
13	2716	63	2765	113	2814
14	2717	64	2766	114	2815
15	2718	65	2767	115	2816
16	2719	66	2768	116	2817
17	2720	67	2769	117	2818
18	2721	68	2770	118	2819
19	2722	69	NONE	119	2820
20	2723	70	2771	120	2821
21	2724	71	2772	121	2822
22	2725	72	2773	122	2823
23	2726	73	2774	123	2824
24	2727	74	2775	124	2825
25	2728	75	2776	125	2826
26	2729	76	2777	126	2827
27	2730	77	2778	127	2828
28	2731	78	2779	128	2829
29	2732	79	2780	129	2830
30	2733	80	2781	130	2831
31	2734	81	2782	131	2832
32	2735	82	2783	132	2833
33	2736	83	2784	133	2834
34	2737	84	2785	134	2835
35	2738	85	2786	135	2836
36	2739	86	2787	136	2837
37	2740	87	2788	137	2838
38	2741	88	2789	138	2839
39	2742	89	2790	139	2840
40	2743	90	2791	140	2841
41	2744	91	2792	141	2842
42	2745	92	2793	142	2843
43	NONE	93	2794	143	2844
44	2746	94	2795	144	NONE
45	2747	95	2796	145	2845
46	2748	96	2797	146	2846
47	2749	97	2798	147	2847
48	2750	98	2799	148	2848
49	2751	99	2800	149	2849
50	2752	100	2801	150	2850

TABLE 2 (cont)

151	2851	205	2905	259	2959
152	2852	206	2906	260	2960
153	2853	207	2907	261	2961
154	2854	208	2908	262	2962
155	2855	209	2909	263	2963
156	2856	210	2910	264	2964
157	2857	211	2911	265	2965
158	2858	212	2912	266	2966
159	2859	213	2913	267	2967
160	2860	214	2914	268	2968
161	2861	215	2915	269	2969
162	2862	216	2916	270	2970
163	2863	217	2917	271	2971
164	2864	218	2918	272	2972
165	2865	219	2919	273	2973
166	2866	220	2920	274	2974
167	2867	221	2921	275	2975
168	2868	222	2922	276	2976
169	2869	223	2923	277	2977
170	2870	224	2924	278	2978
171	2871	225	2925	279	2979
172	2872	226	2926	280	2980
173	2873	227	2927	281	2981
174	2874	228	2928	282	2982
175	2875	229	2929	283	2983
176	2876	230	2930	284	2984
177	2877	231	2931	285	2985
178	2878	232	2932	286	2986
179	2879	233	2933	287	2987
180	2880	234	2934	288	2988
181	2881	235	2935	289	2989
182	2882	236	2936	290	2990
183	2883	237	2937	291	2991
184	2884	238	2938	292	2992
185	2885	239	2939	293	2993
186	2886	240	2940	294	2994
187	2887	241	2941	295	2995
188	2888	242	2942	296	2996
189	2889	243	2943	297	2997
190	2890	244	2944	298	2998
191	2891	245	2945	299	2999
192	2892	246	2946	300	3000
193	2893	247	2947	301	3001
194	2894	248	2948	302	3002
195	2895	249	2949	303	3003
196	2896	250	2950	304	NONE
197	2897	251	2951	305	3004
198	2898	252	2952	306	3005
199	2899	253	2953	307	3006
200	2900	254	2954	308	3007
201	2901	255	2955	309	3008
202	2902	256	2956	310	3009
203	2903	257	2957	311	3010
204	2904	258	2958	312	3011

TABLE 2 (cont)

313	3012	367	3066	421	3120
314	3013	368	3067	422	3121
315	3014	369	3068	423	3122
316	3015	370	3069	424	3123
317	3016	371	3070	425	3124
318	3017	372	3071	426	3125
319	3018	373	3072	427	3126
320	3019	374	3073	428	3127
321	3020	375	3074	429	3128
322	3021	376	3075	430	3129
323	3022	377	3076	431	3130
324	3023	378	3077	432	3131
325	3024	379	3078	433	3132
326	3025	380	3079	434	3133
327	3026	381	3080	435	3134
328	3027	382	3081	436	3135
329	3028	383	3082	437	3136
330	3029	384	3083	438	3137
331	3030	385	3084	439	3138
332	3031	386	3085	440	3139
333	3032	387	3086	441	3140
334	3033	388	3087	442	3141
335	3034	389	3088	443	3142
336	3035	390	3089	444	3143
337	3036	391	3090	445	3144
338	3037	392	3091	446	3145
339	3038	393	3092	447	3146
340	3039	394	3093	448	3147
341	3040	395	3094	449	3148
342	3041	396	3095	450	3149
343	3042	397	3096	451	3150
344	3043	398	3097	452	3151
345	3044	399	3098	453	3152
346	3045	400	3099	454	3153
347	3046	401	3100	455	3154
348	3047	402	3101	456	3155
349	3048	403	3102	457	3156
350	3049	404	3103	458	3157
351	3050	405	3104	459	3158
352	3051	406	3105	460	3159
353	3052	407	3106	461	3160
354	3053	408	3107	462	3161
355	3054	409	3108	463	3162
356	3055	410	3109	464	3163
357	3056	411	3110	465	3164
358	3057	412	3111	466	3165
359	3058	413	3112	467	3166
360	3059	414	3113	468	3167
361	3060	415	3114	469	3168
362	3061	416	3115	470	3169
363	3062	417	3116	471	3170
364	3063	418	3117	472	3171
365	3064	419	3118	473	3172
366	3065	420	3119	474	3173

TABLE 2 (cont)

475	3174	529	3228	583	3282
476	3175	530	3229	584	3283
477	3176	531	3230	585	3284
478	3177	532	3231	586	3285
479	3178	533	3232	587	3286
480	3179	534	3233	588	3287
481	3180	535	3234	589	3288
482	3181	536	3235	590	3289
483	3182	537	3236	591	3290
484	3183	538	3237	592	3291
485	3184	539	3238	593	3292
486	3185	540	3239	594	3293
487	3186	541	3240	595	3294
488	3187	542	3241	596	3295
489	3188	543	3242	597	3296
490	3189	544	3243	598	3297
491	3190	545	3244	599	3298
492	3191	546	3245	600	3299
493	3192	547	3246	601	3300
494	3193	548	3247	602	3301
495	3194	549	3248	603	3302
496	3195	550	3249	604	3303
497	3196	551	3250	605	3304
498	3197	552	3251	606	3305
499	3198	553	3252	607	3306
500	3199	554	3253	608	3307
501	3200	555	3254	609	3308
502	3201	556	3255	610	3309
503	3202	557	3256	611	3310
504	3203	558	3257	612	3311
505	3204	559	3258	613	3312
506	3205	560	3259	614	3313
507	3206	561	3260	615	3314
508	3207	562	3261	616	3315
509	3208	563	3262	617	3316
510	3209	564	3263	618	3317
511	3210	565	3264	619	3318
512	3211	566	3265	620	3319
513	3212	567	3266	621	3320
514	3213	568	3267	622	3321
515	3214	569	3268	623	3322
516	3215	570	3269	624	3323
517	3216	571	3270	625	3324
518	3217	572	3271	626	3325
519	3218	573	3272	627	3326
520	3219	574	3273	628	3327
521	3220	575	3274	629	3328
522	3221	576	3275	630	3329
523	3222	577	3276	631	3330
524	3223	578	3277	632	3331
525	3224	579	3278	633	3332
526	3225	580	3279	634	3333
527	3226	581	3280	635	3334
528	3227	582	3281	636	3335

TABLE 2 (cont)

637	3336	691	3390	745	3444
638	3337	692	3391	746	3445
639	3338	693	3392	747	3446
640	3339	694	3393	748	3447
641	3340	695	3394	749	3448
642	3341	696	3395	750	3449
643	3342	697	3396	751	3450
644	3343	698	3397	752	3451
645	3344	699	3398	753	3452
646	3345	700	3399	754	3453
647	3346	701	3400	755	3454
648	3347	702	3401	756	3455
649	3348	703	3402	757	3456
650	3349	704	3403	758	3457
651	3350	705	3404	759	3458
652	3351	706	3405	760	3459
653	3352	707	3406	761	3460
654	3353	708	3407	762	3461
655	3354	709	3408	763	3462
656	3355	710	3409	764	3463
657	3356	711	3410	765	3464
658	3357	712	3411	766	3465
659	3358	713	3412	767	3466
660	3359	714	3413	768	3467
661	3360	715	3414	769	3468
662	3361	716	3415	770	3469
663	3362	717	3416	771	3470
664	3363	718	3417	772	3471
665	3364	719	3418	773	3472
666	3365	720	3419	774	3473
667	3366	721	3420	775	3474
668	3367	722	3421	776	3475
669	3368	723	3422	777	3476
670	3369	724	3423	778	3477
671	3370	725	3424	779	3478
672	3371	726	3425	780	3479
673	3372	727	3426	781	3480
674	3373	728	3427	782	3481
675	3374	729	3428	783	3482
676	3375	730	3429	784	3483
677	3376	731	3430	785	3484
678	3377	732	3431	786	3485
679	3378	733	3432	787	3486
680	3379	734	3433	788	3487
681	3380	735	3434	789	3488
682	3381	736	3435	790	3489
683	3382	737	3436	791	3490
684	3383	738	3437	792	3491
685	3384	739	3438	793	3492
686	3385	740	3439	794	3493
687	3386	741	3440	795	3494
688	3387	742	3441	796	3495
689	3388	743	3442	797	3496
690	3389	744	3443	798	3497

TABLE 2 (cont)

799	3498	853	3552	907	3603
800	3499	854	3553	908	3604
801	3500	855	3554	909	3605
802	3501	856	3555	910	3606
803	3502	857	3556	911	3607
804	3503	858	3557	912	3608
805	3504	859	3558	913	3609
806	3505	860	3559	914	3610
807	3506	861	3560	915	3611
808	3507	862	3561	916	3612
809	3508	863	3562	917	3613
810	3509	864	3563	918	3614
811	3510	865	3564	919	3615
812	3511	866	3565	920	3616
813	3512	867	3566	921	3617
814	3513	868	3567	922	3618
815	3514	869	3568	923	3619
816	3515	870	3569	924	3620
817	3516	871	3570	925	3621
818	3517	872	3571	926	3622
819	3518	873	3572	927	3623
820	3519	874	3573	928	3624
821	3520	875	3574	929	3625
822	3521	876	3575	930	3626
823	3522	877	3576	931	3627
824	3523	878	3577	932	3628
825	3524	879	3578	933	3629
826	3525	880	3579	934	3630
827	3526	881	3580	935	NONE
828	3527	882	3581	936	3631
829	3528	883	3582	937	3632
830	3529	884	3583	938	3633
831	3530	885	3584	939	3634
832	3531	886	3585	940	3635
833	3532	887	NONE	941	3636
834	3533	888	3586	942	3637
835	3534	889	3587	943	3638
836	3535	890	3588	944	3639
837	3536	891	3589	945	3640
838	3537	892	3590	946	3641
839	3538	893	3591	947	3642
840	3539	894	NONE	948	3643
841	3540	895	NONE	949	3644
842	3541	896	3592	950	3645
843	3542	897	3593	951	3646
844	3543	898	3594	952	3647
845	3544	899	3595	953	3648
846	3545	900	3596	954	3649
847	3546	901	3597	955	3650
848	3547	902	3598	956	3651
849	3548	903	3599	957	3652
850	3549	904	3600	958	3653
851	3550	905	3601	959	3654
852	3551	906	3602	960	3655

TABLE 2 (cont)

961	3656	1015	3710	1069	3764
962	3657	1016	3711	1070	3765
963	3658	1017	3712	1071	3766
964	3659	1018	3713	1072	3767
965	3660	1019	3714	1073	3768
966	3661	1020	3715	1074	3769
967	3662	1021	3716	1075	3770
968	3663	1022	3717	1076	3771
969	3664	1023	3718	1077	3772
970	3665	1024	3719	1078	3773
971	3666	1025	3720	1079	3774
972	3667	1026	3721	1080	3775
973	3668	1027	3722	1081	3776
974	3669	1028	3723	1082	3777
975	3670	1029	3724	1083	3778
976	3671	1030	3725	1084	3779
977	3672	1031	3726	1085	3780
978	3673	1032	3727	1086	3781
979	3674	1033	3728	1087	NONE
980	3675	1034	3729	1088	3782
981	3676	1035	3730	1089	3783
982	3677	1036	3731	1090	3784
983	3678	1037	3732	1091	3785
984	3679	1038	3733	1092	3786
985	3680	1039	3734	1093	3787
986	3681	1040	3735	1094	3788
987	3682	1041	3736	1095	3789
988	3683	1042	3737	1096	3790
989	3684	1043	3738	1097	3791
990	3685	1044	3739	1098	3792
991	3686	1045	3740	1099	3793
992	3687	1046	3741	1100	3794
993	3688	1047	3742	1101	3795
994	3689	1048	3743	1102	3796
995	3690	1049	3744	1103	3797
996	3691	1050	3745	1104	3798
997	3692	1051	3746	1105	3799
998	3693	1052	3747	1106	3800
999	3694	1053	3748	1107	3801
1000	3695	1054	3749	1108	3802
1001	3696	1055	3750	1109	3803
1002	3697	1056	3751	1110	3804
1003	3698	1057	3752	1111	3805
1004	3699	1058	3753	1112	3806
1005	3700	1059	3754	1113	3807
1006	3701	1060	3755	1114	3808
1007	3702	1061	3756	1115	3809
1008	3703	1062	3757	1116	3810
1009	3704	1063	3758	1117	3811
1010	3705	1064	3759	1118	3812
1011	3706	1065	3760	1119	3813
1012	3707	1066	3761	1120	3814
1013	3708	1067	3762	1121	3815
1014	3709	1068	3763	1122	3816

TABLE 2 (cont)

1123	3817	1177	3871	1231	3925
1124	3818	1178	3872	1232	3926
1125	3819	1179	3873	1233	3927
1126	3820	1180	3874	1234	3928
1127	3821	1181	3875	1235	3929
1128	3822	1182	3876	1236	3930
1129	3823	1183	3877	1237	3931
1130	3824	1184	3878	1238	3932
1131	3825	1185	3879	1239	3933
1132	3826	1186	3880	1240	3934
1133	3827	1187	3881	1241	3935
1134	3828	1188	3882	1242	3936
1135	3829	1189	3883	1243	3937
1136	3830	1190	3884	1244	3938
1137	3831	1191	3885	1245	3939
1138	3832	1192	3886	1246	3940
1139	3833	1193	3887	1247	3941
1140	3834	1194	3888	1248	3942
1141	3835	1195	3889	1249	3943
1142	3836	1196	3890	1250	3944
1143	3837	1197	3891	1251	3945
1144	3838	1198	3892	1252	3946
1145	3839	1199	3893	1253	3947
1146	3840	1200	3894	1254	3948
1147	3841	1201	3895	1255	3949
1148	3842	1202	3896	1256	3950
1149	3843	1203	3897	1257	3951
1150	3844	1204	3898	1258	3952
1151	3845	1205	3899	1259	3953
1152	3846	1206	3900	1260	3954
1153	3847	1207	3901	1261	3955
1154	3848	1208	3902	1262	3956
1155	3849	1209	3903	1263	3957
1156	3850	1210	3904	1264	3958
1157	3851	1211	3905	1265	3959
1158	3852	1212	3906	1266	3960
1159	3853	1213	3907	1267	3961
1160	3854	1214	3908	1268	3962
1161	3855	1215	3909	1269	3963
1162	3856	1216	3910	1270	3964
1163	3857	1217	3911	1271	3965
1164	3858	1218	3912	1272	3966
1165	3859	1219	3913	1273	3967
1166	3860	1220	3914	1274	3968
1167	3861	1221	3915	1275	3969
1168	3862	1222	3916	1276	3970
1169	3863	1223	3917	1277	3971
1170	3864	1224	3918	1278	3972
1171	3865	1225	3919	1279	3973
1172	3866	1226	3920	1280	3974
1173	3867	1227	3921	1281	3975
1174	3868	1228	3922	1282	3976
1175	3869	1229	3923	1283	3977
1176	3870	1230	3924	1284	3978

TABLE 2 (cont)

1285	3979	1339	4032	1393	4086
1286	3980	1340	4033	1394	4087
1287	3981	1341	4034	1395	4088
1288	3982	1342	4035	1396	4089
1289	3983	1343	4036	1397	4090
1290	3984	1344	4037	1398	4091
1291	3985	1345	4038	1399	4092
1292	3986	1346	4039	1400	4093
1293	3987	1347	4040	1401	4094
1294	3988	1348	4041	1402	4095
1295	3989	1349	4042	1403	4096
1296	3990	1350	4043	1404	4097
1297	3991	1351	4044	1405	4098
1298	3992	1352	4045	1406	4099
1299	3993	1353	4046	1407	4100
1300	3994	1354	4047	1408	4101
1301	3995	1355	4048	1409	4102
1302	3996	1356	4049	1410	4103
1303	3997	1357	4050	1411	4104
1304	3998	1358	4051	1412	4105
1305	3999	1359	4052	1413	4106
1306	4000	1360	4053	1414	4107
1307	4001	1361	4054	1415	4108
1308	4002	1362	4055	1416	4109
1309	4003	1363	4056	1417	4110
1310	4004	1364	4057	1418	4111
1311	4005	1365	4058	1419	4112
1312	4006	1366	4059	1420	4113
1313	4007	1367	4060	1421	4114
1314	4008	1368	4061	1422	4115
1315	4009	1369	4062	1423	4116
1316	4010	1370	4063	1424	4117
1317	4011	1371	4064	1425	4118
1318	4012	1372	4065	1426	4119
1319	4013	1373	4066	1427	4120
1320	4014	1374	4067	1428	4121
1321	4015	1375	4068	1429	4122
1322	4016	1376	4069	1430	4123
1323	4017	1377	4070	1431	4124
1324	4018	1378	4071	1432	NONE
1325	4019	1379	4072	1433	4125
1326	4020	1380	4073	1434	4126
1327	4021	1381	4074	1435	4127
1328	4022	1382	4075	1436	4128
1329	4023	1383	4076	1437	4129
1330	NONE	1384	4077	1438	4130
1331	4024	1385	4078	1439	4131
1332	4025	1386	4079	1440	4132
1333	4026	1387	4080	1441	4133
1334	4027	1388	4081	1442	4134
1335	4028	1389	4082	1443	4135
1336	4029	1390	4083	1444	4136
1337	4030	1391	4084	1445	4137
1338	4031	1392	4085	1446	4138

TABLE 2 (cont)

1447	4139	1501	4193	1555	4247
1448	4140	1502	4194	1556	4248
1449	4141	1503	4195	1557	4249
1450	4142	1504	4196	1558	NONE
1451	4143	1505	4197	1559	4250
1452	4144	1506	4198	1560	4251
1453	4145	1507	4199	1561	4252
1454	4146	1508	4200	1562	4253
1455	4147	1509	4201	1563	4254
1456	4148	1510	4202	1564	4255
1457	4149	1511	4203	1565	4256
1458	4150	1512	4204	1566	4257
1459	4151	1513	4205	1567	4258
1460	4152	1514	4206	1568	4259
1461	4153	1515	4207	1569	4260
1462	4154	1516	4208	1570	4261
1463	4155	1517	4209	1571	4262
1464	4156	1518	4210	1572	4263
1465	4157	1519	4211	1573	4264
1466	4158	1520	4212	1574	4265
1467	4159	1521	4213	1575	4266
1468	4160	1522	4214	1576	4267
1469	4161	1523	4215	1577	4268
1470	4162	1524	4216	1578	4269
1471	4163	1525	4217	1579	4270
1472	4164	1526	4218	1580	4271
1473	4165	1527	4219	1581	4272
1474	4166	1528	4220	1582	4273
1475	4167	1529	4221	1583	4274
1476	4168	1530	4222	1584	4275
1477	4169	1531	4223	1585	4276
1478	4170	1532	4224	1586	4277
1479	4171	1533	4225	1587	4278
1480	4172	1534	4226	1588	4279
1481	4173	1535	4227	1589	4280
1482	4174	1536	4228	1590	4281
1483	4175	1537	4229	1591	4282
1484	4176	1538	4230	1592	4283
1485	4177	1539	4231	1593	4284
1486	4178	1540	4232	1594	4285
1487	4179	1541	4233	1595	4286
1488	4180	1542	4234	1596	4287
1489	4181	1543	4235	1597	4288
1490	4182	1544	4236	1598	4289
1491	4183	1545	4237	1599	4290
1492	4184	1546	4238	1600	4291
1493	4185	1547	4239	1601	4292
1494	4186	1548	4240	1602	4293
1495	4187	1549	4241	1603	4294
1496	4188	1550	4242	1604	4295
1497	4189	1551	4243	1605	4296
1498	4190	1552	4244	1606	4297
1499	4191	1553	4245	1607	4298
1500	4192	1554	4246	1608	4299

TABLE 2 (cont)

1609	4300	1663	NONE	1717	4406
1610	4301	1664	4354	1718	4407
1611	4302	1665	4355	1719	4408
1612	4303	1666	4356	1720	4409
1613	4304	1667	4357	1721	4410
1614	4305	1668	4358	1722	4411
1615	4306	1669	4359	1723	4412
1616	4307	1670	4360	1724	4413
1617	4308	1671	4361	1725	4414
1618	4309	1672	4362	1726	4415
1619	4310	1673	4363	1727	4416
1620	4311	1674	4364	1728	4417
1621	4312	1675	4365	1729	4418
1622	4313	1676	4366	1730	4419
1623	4314	1677	4367	1731	4420
1624	4315	1678	4368	1732	4421
1625	4316	1679	4369	1733	4422
1626	4317	1680	4370	1734	4423
1627	4318	1681	4371	1735	4424
1628	4319	1682	4372	1736	4425
1629	4320	1683	4373	1737	4426
1630	4321	1684	4374	1738	4427
1631	4322	1685	4375	1739	4428
1632	4323	1686	4376	1740	4429
1633	4324	1687	4377	1741	4430
1634	4325	1688	4378	1742	4431
1635	4326	1689	4379	1743	4432
1636	4327	1690	4380	1744	4433
1637	4328	1691	4381	1745	4434
1638	4329	1692	4382	1746	4435
1639	4330	1693	4383	1747	4436
1640	4331	1694	4384	1748	4437
1641	4332	1695	4385	1749	4438
1642	4333	1696	4386	1750	4439
1643	4334	1697	4387	1751	4440
1644	4335	1698	4388	1752	4441
1645	4336	1699	4389	1753	4442
1646	4337	1700	4390	1754	4443
1647	4338	1701	4391	1755	4444
1648	4339	1702	4392	1756	4445
1649	4340	1703	4393	1757	4446
1650	4341	1704	4394	1758	4447
1651	4342	1705	4395	1759	4448
1652	4343	1706	4396	1760	4449
1653	4344	1707	4397	1761	4450
1654	4345	1708	4398	1762	4451
1655	4346	1709	4399	1763	4452
1656	4347	1710	4400	1764	4453
1657	4348	1711	4401	1765	4454
1658	4349	1712	NONE	1766	4455
1659	4350	1713	4402	1767	4456
1660	4351	1714	4403	1768	4457
1661	4352	1715	4404	1769	4458
1662	4353	1716	4405	1770	4459

TABLE 2 (cont)

1771	4460	1825	4512	1879	4566
1772	4461	1826	4513	1880	4567
1773	4462	1827	4514	1881	4568
1774	4463	1828	4515	1882	4569
1775	4464	1829	4516	1883	4570
1776	4465	1830	4517	1884	4571
1777	4466	1831	4518	1885	4572
1778	4467	1832	4519	1886	4573
1779	4468	1833	4520	1887	4574
1780	4469	1834	4521	1888	4575
1781	4470	1835	4522	1889	4576
1782	4471	1836	4523	1890	4577
1783	4472	1837	4524	1891	4578
1784	NONE	1838	4525	1892	4579
1785	4473	1839	4526	1893	4580
1786	4474	1840	4527	1894	4581
1787	4475	1841	4528	1895	4582
1788	4476	1842	4529	1896	4583
1789	4477	1843	4530	1897	NONE
1790	4478	1844	4531	1898	4584
1791	4479	1845	4532	1899	4585
1792	4480	1846	4533	1900	4586
1793	4481	1847	4534	1901	4587
1794	4482	1848	4535	1902	4588
1795	4483	1849	4536	1903	4589
1796	4484	1850	4537	1904	4590
1797	4485	1851	4538	1905	4591
1798	4486	1852	4539	1906	4592
1799	4487	1853	4540	1907	NONE
1800	4488	1854	4541	1908	4593
1801	4489	1855	4542	1909	4594
1802	4490	1856	4543	1910	4595
1803	NONE	1857	4544	1911	4596
1804	4491	1858	4545	1912	4597
1805	4492	1859	4546	1913	4598
1806	4493	1860	4547	1914	4599
1807	4494	1861	4548	1915	4600
1808	4495	1862	4549	1916	4601
1809	4496	1863	4550	1917	4602
1810	4497	1864	4551	1918	4603
1811	4498	1865	4552	1919	4604
1812	4499	1866	4553	1920	4605
1813	4500	1867	4554	1921	4606
1814	4501	1868	4555	1922	4607
1815	4502	1869	4556	1923	4608
1816	4503	1870	4557	1924	4609
1817	4504	1871	4558	1925	4610
1818	4505	1872	4559	1926	4611
1819	4506	1873	4560	1927	4612
1820	4507	1874	4561	1928	4613
1821	4508	1875	4562	1929	4614
1822	4509	1876	4563	1930	4615
1823	4510	1877	4564	1931	4616
1824	4511	1878	4565	1932	4617

TABLE 2 (cont)

1933	4618	1987	4672	2041	4725
1934	4619	1988	4673	2042	4726
1935	4620	1989	4674	2043	4727
1936	4621	1990	4675	2044	4728
1937	4622	1991	4676	2045	4729
1938	4623	1992	4677	2046	4730
1939	4624	1993	4678	2047	4731
1940	4625	1994	4679	2048	4732
1941	4626	1995	4680	2049	4733
1942	4627	1996	4681	2050	4734
1943	4628	1997	4682	2051	4735
1944	4629	1998	4683	2052	4736
1945	4630	1999	4684	2053	4737
1946	4631	2000	4685	2054	4738
1947	4632	2001	4686	2055	4739
1948	4633	2002	4687	2056	4740
1949	4634	2003	4688	2057	4741
1950	4635	2004	4689	2058	4742
1951	4636	2005	4690	2059	4743
1952	4637	2006	4691	2060	4744
1953	4638	2007	4692	2061	4745
1954	4639	2008	4693	2062	4746
1955	4640	2009	4694	2063	4747
1956	4641	2010	4695	2064	4748
1957	4642	2011	4696	2065	4749
1958	4643	2012	4697	2066	4750
1959	4644	2013	4698	2067	4751
1960	4645	2014	4699	2068	4752
1961	4646	2015	4700	2069	4753
1962	4647	2016	4701	2070	4754
1963	4648	2017	4702	2071	4755
1964	4649	2018	4703	2072	4756
1965	4650	2019	4704	2073	4757
1966	4651	2020	4705	2074	4758
1967	4652	2021	4706	2075	4759
1968	4653	2022	4707	2076	4760
1969	4654	2023	4708	2077	4761
1970	4655	2024	4709	2078	4762
1971	4656	2025	4710	2079	4763
1972	4657	2026	4711	2080	4764
1973	4658	2027	4712	2081	4765
1974	4659	2028	4713	2082	4766
1975	4660	2029	4714	2083	4767
1976	4661	2030	NONE	2084	4768
1977	4662	2031	4715	2085	4769
1978	4663	2032	4716	2086	4770
1979	4664	2033	4717	2087	4771
1980	4665	2034	4718	2088	4772
1981	4666	2035	4719	2089	4773
1982	4667	2036	4720	2090	4774
1983	4668	2037	4721	2091	4775
1984	4669	2038	4722	2092	4776
1985	4670	2039	4723	2093	4777
1986	4671	2040	4724	2094	4778

TABLE 2 (cont)

2095	4779	2149	4833	2203	4886
2096	4780	2150	4834	2204	4887
2097	4781	2151	NONE	2205	4888
2098	4782	2152	4835	2206	4889
2099	4783	2153	4836	2207	4890
2100	4784	2154	4837	2208	4891
2101	4785	2155	4838	2209	4892
2102	4786	2156	4839	2210	4893
2103	4787	2157	4840	2211	4894
2104	4788	2158	4841	2212	4895
2105	4789	2159	4842	2213	4896
2106	4790	2160	4843	2214	4897
2107	4791	2161	4844	2215	4898
2108	4792	2162	4845	2216	4899
2109	4793	2163	4846	2217	4900
2110	4794	2164	4847	2218	4901
2111	4795	2165	4848	2219	4902
2112	4796	2166	4849	2220	4903
2113	4797	2167	4850	2221	4904
2114	4798	2168	4851	2222	4905
2115	4799	2169	4852	2223	4906
2116	4800	2170	4853	2224	4907
2117	4801	2171	4854	2225	4908
2118	4802	2172	4855	2226	4909
2119	4803	2173	4856	2227	4910
2120	4804	2174	4857	2228	4911
2121	4805	2175	4858	2229	4912
2122	4806	2176	4859	2230	4913
2123	4807	2177	4860	2231	4914
2124	4808	2178	4861	2232	4915
2125	4809	2179	4862	2233	4916
2126	4810	2180	4863	2234	4917
2127	4811	2181	4864	2235	4918
2128	4812	2182	4865	2236	4919
2129	4813	2183	4866	2237	4920
2130	4814	2184	4867	2238	4921
2131	4815	2185	4868	2239	4922
2132	4816	2186	4869	2240	4923
2133	4817	2187	4870	2241	4924
2134	4818	2188	4871	2242	4925
2135	4819	2189	4872	2243	4926
2136	4820	2190	4873	2244	4927
2137	4821	2191	4874	2245	4928
2138	4822	2192	4875	2246	4929
2139	4823	2193	4876	2247	4930
2140	4824	2194	4877	2248	NONE
2141	4825	2195	4878	2249	4931
2142	4826	2196	4879	2250	4932
2143	4827	2197	4880	2251	4933
2144	4828	2198	4881	2252	4934
2145	4829	2199	4882	2253	4935
2146	4830	2200	4883	2254	4936
2147	4831	2201	4884	2255	4937
2148	4832	2202	4885	2256	4938

TABLE 2 (cont)

2257	4939	2311	4993	2365	5046
2258	4940	2312	4994	2366	5047
2259	4941	2313	4995	2367	5048
2260	4942	2314	4996	2368	5049
2261	4943	2315	4997	2369	5050
2262	4944	2316	4998	2370	5051
2263	4945	2317	4999	2371	NONE
2264	4946	2318	5000	2372	5052
2265	4947	2319	5001	2373	5053
2266	4948	2320	5002	2374	5054
2267	4949	2321	5003	2375	5055
2268	4950	2322	5004	2376	5056
2269	4951	2323	5005	2377	5057
2270	4952	2324	5006	2378	5058
2271	4953	2325	5007	2379	5059
2272	4954	2326	5008	2380	5060
2273	4955	2327	5009	2381	5061
2274	4956	2328	5010	2382	5062
2275	4957	2329	5011	2383	5063
2276	4958	2330	5012	2384	5064
2277	4959	2331	5013	2385	5065
2278	4960	2332	5014	2386	5066
2279	4961	2333	5015	2387	5067
2280	4962	2334	5016	2388	5068
2281	4963	2335	5017	2389	5069
2282	4964	2336	5018	2390	5070
2283	4965	2337	5019	2391	5071
2284	4966	2338	5020	2392	5072
2285	4967	2339	5021	2393	5073
2286	4968	2340	NONE	2394	5074
2287	4969	2341	5022	2395	5075
2288	4970	2342	5023	2396	5076
2289	4971	2343	5024	2397	5077
2290	4972	2344	5025	2398	5078
2291	4973	2345	5026	2399	5079
2292	4974	2346	5027	2400	5080
2293	4975	2347	5028	2401	5081
2294	4976	2348	5029	2402	5082
2295	4977	2349	5030	2403	5083
2296	4978	2350	5031	2404	5084
2297	4979	2351	5032	2405	5085
2298	4980	2352	5033	2406	5086
2299	4981	2353	5034	2407	5087
2300	4982	2354	5035	2408	5088
2301	4983	2355	5036	2409	5089
2302	4984	2356	5037	2410	5090
2303	4985	2357	5038	2411	5091
2304	4986	2358	5039	2412	5092
2305	4987	2359	5040	2413	5093
2306	4988	2360	5041	2414	5094
2307	4989	2361	5042	2415	5095
2308	4990	2362	5043	2416	5096
2309	4991	2363	5044	2417	5097
2310	4992	2364	5045	2418	5098

TABLE 2 (cont)

2419	5099	2473	5151	2527	5205
2420	5100	2474	5152	2528	5206
2421	5101	2475	5153	2529	5207
2422	5102	2476	5154	2530	5208
2423	5103	2477	5155	2531	5209
2424	5104	2478	5156	2532	5210
2425	5105	2479	5157	2533	5211
2426	5106	2480	5158	2534	5212
2427	5107	2481	5159	2535	5213
2428	5108	2482	5160	2536	5214
2429	5109	2483	5161	2537	5215
2430	5110	2484	5162	2538	5216
2431	5111	2485	5163	2539	5217
2432	5112	2486	5164	2540	5218
2433	5113	2487	5165	2541	5219
2434	5114	2488	5166	2542	5220
2435	5115	2489	5167	2543	5221
2436	5116	2490	5168	2544	5222
2437	5117	2491	5169	2545	5223
2438	5118	2492	5170	2546	5224
2439	5119	2493	5171	2547	5225
2440	5120	2494	5172	2548	5226
2441	5121	2495	5173	2549	5227
2442	5122	2496	5174	2550	5228
2443	NONE	2497	5175	2551	5229
2444	5123	2498	5176	2552	5230
2445	5124	2499	5177	2553	5231
2446	5125	2500	5178	2554	5232
2447	5126	2501	5179	2555	5233
2448	5127	2502	5180	2556	5234
2449	5128	2503	5181	2557	5235
2450	5129	2504	5182	2558	5236
2451	5130	2505	5183	2559	5237
2452	5131	2506	5184	2560	5238
2453	5132	2507	5185	2561	5239
2454	5133	2508	5186	2562	5240
2455	5134	2509	5187	2563	5241
2456	5135	2510	5188	2564	5242
2457	5136	2511	5189	2565	5243
2458	5137	2512	5190	2566	5244
2459	5138	2513	5191	2567	5245
2460	5139	2514	5192	2568	5246
2461	5140	2515	5193	2569	5247
2462	5141	2516	5194	2570	5248
2463	5142	2517	5195	2571	5249
2464	5143	2518	5196	2572	5250
2465	5144	2519	5197	2573	5251
2466	5145	2520	5198	2574	5252
2467	5146	2521	5199	2575	5253
2468	5147	2522	5200	2576	5254
2469	NONE	2523	5201	2577	5255
2470	5148	2524	5202	2578	5256
2471	5149	2525	5203	2579	5257
2472	5150	2526	5204	2580	5258

TABLE 2 (cont)

2581	5259	2635	5312	2689	5365
2582	5260	2636	5313	2690	5366
2583	5261	2637	5314	2691	5367
2584	5262	2638	5315	2692	5368
2585	5263	2639	5316	2693	5369
2586	5264	2640	5317	2694	5370
2587	5265	2641	5318	2695	5371
2588	5266	2642	5319	2696	5372
2589	5267	2643	5320	2697	5373
2590	5268	2644	5321	2698	5374
2591	5269	2645	5322	2699	5375
2592	5270	2646	5323	2700	5376
2593	5271	2647	5324	2701	5377
2594	5272	2648	5325	2702	5378
2595	5273	2649	5326	2703	5379
2596	5274	2650	5327		
2597	5275	2651	5328		
2598	5276	2652	5329		
2599	NONE	2653	5330		
2600	5277	2654	5331		
2601	5278	2655	5332		
2602	5279	2656	5333		
2603	5280	2657	5334		
2604	5281	2658	5335		
2605	5282	2659	5336		
2606	5283	2660	5337		
2607	5284	2661	5338		
2608	5285	2662	5339		
2609	5286	2663	5340		
2610	5287	2664	5341		
2611	5288	2665	5342		
2612	5289	2666	5343		
2613	5290	2667	5344		
2614	5291	2668	5345		
2615	5292	2669	5346		
2616	5293	2670	5347		
2617	5294	2671	5348		
2618	5295	2672	5349		
2619	5296	2673	5350		
2620	5297	2674	5351		
2621	5298	2675	5352		
2622	5299	2676	5353		
2623	5300	2677	5354		
2624	5301	2678	5355		
2625	5302	2679	5356		
2626	5303	2680	5357		
2627	5304	2681	NONE		
2628	5305	2682	5358		
2629	5306	2683	5359		
2630	5307	2684	5360		
2631	5308	2685	5361		
2632	5309	2686	5362		
2633	5310	2687	5363		
2634	5311	2688	5364		

TABLE 3

COLD RESPONSIVE SEQUENCES

SEQ ID NO:	AFFYMETRIX ID NO:
1	11991_G_AT
2	11992_AT
3	11997_AT
4	11998_AT
5	12001_AT
6	12006_S_AT
7	12007_AT
8	12009_AT
9	12018_AT
10	12022_AT
11	12026_AT
12	12031_AT
13	12047_AT
14	12051_AT
15	12052_AT
16	12053_AT
17	12060_AT
18	12072_AT
19	12074_AT
20	12102_AT
21	12112_AT
22	12117_AT
23	12125_AT
24	12130_AT
25	12143_AT
26	12145_S_AT
27	12149_AT
28	12156_AT
29	12163_AT
30	12166_I_AT
31	12167_AT
32	12169_I_AT
33	12175_AT
34	12176_AT
35	12179_AT
36	12187_AT
	15920_I_AT
37	12195_AT
38	12196_AT
39	12198_AT
40	12200_AT
41	12202_AT
42	12214_G_AT
43	12219_AT
44	12224_AT
45	12226_AT
46	12233_AT
47	12240_AT
48	12253_G_AT
49	12256_AT
50	12269_S_AT
51	12270_AT
52	12284_AT
53	12287_S_AT
	17570_G_AT
54	12293_AT
55	12294_S_AT
56	12300_AT
57	12307_AT
58	12312_AT
59	12315_AT
60	12324_I_AT
61	12331_S_AT
62	12336_AT
63	12344_AT
64	12348_AT
65	12353_AT
66	12359_S_AT
67	12372_AT
68	12374_I_AT
	12726_F_AT
69	12390_AT
70	12395_S_AT
71	12405_AT
72	12408_AT
73	12410_G_AT
74	12419_AT
75	12427_AT
76	12431_AT
77	12436_AT
78	12438_AT
79	12443_S_AT
80	12447_AT
81	12450_S_AT
82	12452_AT
83	12474_AT
84	12477_AT
85	12491_AT
86	12497_AT
87	12500_S_AT
88	12503_AT
89	12515_AT
90	12516_S_AT
91	12523_AT
92	12526_AT
93	12527_AT
94	12532_AT
95	12534_G_AT
96	12544_AT
97	12549_S_AT
98	12550_S_AT
	17103_S_AT
99	12552_AT
100	12555_S_AT
101	12576_S_AT
102	12581_S_AT
	16645_S_AT
103	12587_AT
104	12597_AT
105	12602_AT
106	12610_AT
107	12631_AT
108	12646_AT
109	12649_AT
110	12650_AT
111	12653_AT
112	12661_AT
113	12666_AT
114	12674_AT
115	12675_S_AT
116	12678_I_AT
117	12681_S_AT
118	12688_AT
119	12702_AT
120	12705_F_AT
121	12736_F_AT
122	12737_F_AT
123	12758_AT
124	12760_G_AT
125	12762_R_AT
126	12764_F_AT
127	12766_AT
	15115_F_AT
128	12767_AT
129	12768_AT
130	12772_AT
131	12773_AT
132	12776_AT
133	12788_AT
134	12793_AT
135	12794_AT
136	12802_AT
137	12809_G_AT
138	12812_AT
139	12815_AT
140	12816_AT
141	12818_AT
142	12824_S_AT
143	12828_S_AT
144	12842_S_AT

TABLE 3 (cont)

145	12846_S_AT	194	13086_R_AT	238	13285_S_AT
146	12858_AT	195	13087_AT	239	13288_S_AT
147	12860_S_AT	196	13090_AT		17043_S_AT
148	12861_S_AT	197	13092_S_AT	240	13292_S_AT
149	12881_S_AT		16950_S_AT	241	13296_S_AT
	17600_S_AT	198	13098_AT	242	13297_S_AT
150	12889_S_AT	199	13100_AT	243	13299_S_AT
151	12901_S_AT	200	13103_AT		15166_S_AT
152	12902_AT	201	13105_AT	244	13332_AT
153	12904_S_AT	202	13107_S_AT	245	13347_AT
154	12905_S_AT	203	13108_AT	246	13351_AT
155	12908_S_AT	204	13109_AT	247	13352_AT
156	12910_S_AT	205	13114_AT	248	13355_AT
	16385_S_AT	206	13118_F_AT	249	13404_AT
157	12914_S_AT	207	13119_AT	250	13422_AT
	15783_S_AT	208	13120_AT	251	13459_AT
	17645_S_AT	209	13123_AT	252	13460_AT
158	12916_S_AT	210	13128_AT	253	13461_S_AT
159	12923_S_AT	211	13133_S_AT	254	13467_AT
160	12926_S_AT		17430_S_AT	255	13488_AT
161	12927_S_AT	212	13135_S_AT	256	13523_S_AT
162	12931_S_AT	213	13139_AT	257	13529_AT
163	12937_R_AT	214	13140_AT	258	13539_I_AT
164	12941_G_AT	215	13143_AT		14631_S_AT
165	12942_AT	216	13151_G_AT	259	13541_AT
166	12947_AT	217	13160_AT	260	13542_AT
167	12949_AT	218	13161_AT	261	13545_S_AT
168	12953_AT	219	13162_AT	262	13552_AT
169	12956_I_AT	220	13165_AT	263	13556_I_AT
170	12959_AT	221	13166_AT	264	13561_AT
171	12966_S_AT	222	13167_AT	265	13563_S_AT
172	12975_AT	223	13179_AT	266	13567_AT
173	12983_AT	224	13181_AT	267	13568_AT
174	12984_AT	225	13185_AT	268	13571_AT
175	12987_S_AT	226	13193_S_AT	269	13575_AT
176	12994_S_AT	227	13213_S_AT	270	13576_AT
177	13002_AT		16004_S_AT	271	13583_AT
178	13009_I_AT	228	13219_S_AT	272	13598_AT
179	13011_AT		20288_G_AT	273	13601_AT
180	13018_AT	229	13220_S_AT	274	13604_AT
181	13023_AT		13221_AT	275	13613_AT
182	13024_AT		18929_S_AT	276	13616_S_AT
183	13034_S_AT	230	13233_AT		16544_S_AT
184	13046_G_AT		14301_S_AT	277	13617_AT
185	13048_S_AT	231	13243_R_AT	278	13618_S_AT
	13495_S_AT	232	13254_S_AT	279	13619_AT
186	13054_AT	233	13260_S_AT	280	13621_G_AT
187	13067_S_AT		15660_S_AT	281	13623_R_AT
188	13068_AT	234	13273_S_AT	282	13629_S_AT
189	13073_S_AT		16105_S_AT	283	13631_AT
190	13078_S_AT	235	13274_S_AT	284	13635_AT
191	13079_AT		17077_S_AT	285	13646_AT
192	13081_S_AT	236	13276_S_AT	286	13650_AT
193	13083_AT	237	13278_F_AT	287	13653_AT

TABLE 3 (cont)

288	13655_AT	332	13989_AT	383	14393_AT
289	13656_AT		20674_S_AT	384	14421_AT
290	13657_AT	333	14010_AT	385	14436_AT
291	13666_S_AT	334	14013_AT	386	14448_AT
	17083_S_AT	335	14014_AT	387	14450_AT
292	13667_S_AT	336	14019_AT	388	14454_AT
293	13669_S_AT	337	14021_R_AT	389	14459_AT
	17074_S_AT	338	14025_S_AT	390	14478_AT
294	13670_S_AT		18909_S_AT	391	14482_AT
	15206_S_AT	339	14027_AT	392	14485_AT
295	13671_S_AT	340	14030_AT	393	14492_S_AT
	16805_S_AT	341	14044_AT	394	14505_AT
296	13678_S_AT	342	14048_AT	395	14510_AT
297	13688_S_AT	343	14056_AT	396	14511_AT
298	13690_S_AT	344	14057_AT	397	14517_AT
	16065_S_AT	345	14058_AT	398	14519_AT
299	13691_S_AT	346	14059_AT	399	14525_S_AT
	16117_S_AT	347	14061_AT	400	14527_AT
300	13692_S_AT	348	14068_S_AT	401	14534_S_AT
	16118_S_AT	349	14072_AT	402	14538_R_AT
301	13700_AT	350	14073_AT	403	14554_AT
302	13704_S_AT	351	14074_AT	404	14558_AT
303	13714_AT	352	14084_AT	405	14559_S_AT
304	13715_AT	353	14095_S_AT	406	14566_AT
305	13724_AT	354	14100_AT	407	14572_AT
306	13748_AT	355	14101_AT	408	14579_AT
307	13759_AT	356	14103_AT	409	14587_AT
308	13767_AT	357	14105_AT	410	14591_AT
309	13785_AT	358	14106_AT	411	14595_AT
310	13803_AT	359	14121_AT	412	14602_AT
311	13850_I_AT	360	14129_S_AT	413	14603_AT
312	13876_AT	361	14133_S_AT	414	14605_AT
313	13880_S_AT	362	14143_AT	415	14620_S_AT
314	13883_AT	363	14145_AT	416	14626_S_AT
315	13887_S_AT	364	14148_AT	417	14630_S_AT
316	13895_AT	365	14186_AT		16559_S_AT
317	13904_S_AT	366	14194_AT	418	14637_S_AT
	18722_S_AT	367	14196_AT		17122_S_AT
318	13906_S_AT	368	14223_AT	419	14642_F_AT
319	13908_S_AT	369	14234_AT	420	14650_S_AT
	18597_AT	370	14236_AT		15150_S_AT
320	13923_AT	371	14251_F_AT	421	14654_S_AT
321	13927_AT	372	14252_F_AT	422	14667_S_AT
322	13932_AT	373	14270_AT		18299_S_AT
323	13935_AT	374	14298_G_AT	423	14669_S_AT
324	13940_AT		17581_G_AT		16136_S_AT
325	13949_S_AT	375	14303_S_AT	424	14672_S_AT
326	13954_G_AT	376	14312_AT	425	14679_S_AT
327	13971_S_AT	377	14316_AT	426	14682_I_AT
328	13973_AT	378	14339_AT	427	14689_AT
329	13983_AT	379	14366_AT	428	14697_G_AT
330	13985_S_AT	380	14369_AT		16902_AT
331	13987_S_AT	381	14388_AT	429	14701_S_AT
	18738_F_AT	382	14392_G_AT		14734_S_AT

TABLE 3 (cont)

430	14703_AT	483	15130_S_AT	534	15489_AT
431	14711_S_AT	484	15131_S_AT	535	15490_AT
432	14712_S_AT	485	15132_S_AT	536	15503_AT
	20530_S_AT		17585_S_AT	537	15505_AT
433	14713_S_AT	486	15139_S_AT	538	15510_R_AT
434	14715_S_AT	487	15143_S_AT	539	15512_AT
435	14728_S_AT	488	15146_S_AT	540	15514_AT
436	14731_S_AT	489	15159_S_AT	541	15515_R_AT
437	14781_AT		15160_S_AT	542	15517_S_AT
438	14797_S_AT	490	15162_S_AT	543	15518_AT
439	14800_AT	491	15167_S_AT	544	15529_AT
440	14809_AT	492	15171_S_AT	545	15534_F_AT
441	14843_AT	493	15174_F_AT	546	15538_AT
442	14847_AT	494	15178_S_AT	547	15541_AT
443	14872_AT	495	15185_S_AT	548	15543_AT
444	14886_AT		18023_S_AT	549	15544_AT
445	14896_AT	496	15188_S_AT	550	15551_AT
446	14900_AT	497	15193_S_AT	551	15574_S_AT
447	14908_AT	498	15196_S_AT	552	15576_S_AT
448	14912_AT	499	15197_S_AT	553	15577_S_AT
449	14914_AT	500	15201_F_AT	554	15578_S_AT
450	14942_AT	501	15213_S_AT	555	15583_S_AT
451	14945_AT	502	15243_AT	556	15588_S_AT
452	14955_AT	503	15256_AT	557	15595_S_AT
453	14957_S_AT	504	15270_AT	558	15600_S_AT
454	14958_AT	505	15319_AT	559	15602_F_AT
455	14965_AT	506	15325_AT	560	15608_S_AT
456	14974_AT	507	15337_AT	561	15613_S_AT
457	14980_AT	508	15341_AT	562	15616_S_AT
458	14981_AT	509	15343_AT	563	15618_S_AT
459	14984_S_AT	510	15348_AT	564	15620_S_AT
460	14995_AT	511	15350_AT	565	15627_S_AT
461	15004_AT	512	15355_S_AT	566	15634_S_AT
462	15009_AT	513	15367_AT		16125_S_AT
463	15010_AT	514	15372_AT		18046_S_AT
464	15024_AT	515	15379_AT	567	15637_S_AT
465	15026_AT	516	15381_AT	568	15639_S_AT
466	15036_R_AT	517	15383_AT	569	15642_S_AT
467	15054_AT	518	15384_AT	570	15643_S_AT
468	15056_AT	519	15385_AT	571	15651_F_AT
469	15057_AT	520	15387_AT	572	15652_S_AT
470	15066_AT	521	15410_AT	573	15665_S_AT
471	15073_AT	522	15417_S_AT	574	15667_S_AT
472	15081_AT	523	15422_AT		18610_S_AT
473	15083_AT	524	15423_AT	575	15668_S_AT
474	15091_AT	525	15431_AT	576	15671_S_AT
475	15097_S_AT	526	15433_AT	577	15675_S_AT
476	15101_S_AT	527	15452_AT	578	15679_S_AT
477	15102_S_AT	528	15464_AT	579	15685_S_AT
478	15107_S_AT	529	15468_AT	580	15687_F_AT
479	15112_S_AT	530	15471_AT	581	15688_S_AT
480	15116_F_AT	531	15472_AT	582	15689_S_AT
481	15118_S_AT	532	15475_S_AT	583	15692_S_AT
482	15122_S_AT	533	15485_AT	584	15694_S_AT

TABLE 3 (cont)

585	15712_S_AT	634	16089_S_AT	686	16496_S_AT
586	15808_AT	635	16090_S_AT	687	16499_AT
587	15845_AT	636	16102_S_AT	688	16510_AT
588	15848_AT	637	16103_S_AT	689	16511_AT
589	15850_AT	638	16108_S_AT	690	16512_S_AT
	20406_G_AT	639	16112_S_AT		18085_R_AT
590	15858_AT	640	16134_S_AT	691	16514_AT
591	15862_AT	641	16137_S_AT	692	16516_AT
592	15868_AT	642	16138_S_AT	693	16517_AT
593	15878_AT	643	16140_S_AT	694	16526_AT
594	15894_AT	644	16143_S_AT	695	16528_AT
595	15900_AT	645	16145_S_AT	696	16531_S_AT
596	15901_AT	646	16148_S_AT	697	16535_S_AT
597	15902_AT	647	16151_S_AT	698	16537_S_AT
598	15912_AT	648	16155_S_AT	699	16538_S_AT
599	15913_AT	649	16158_F_AT	700	16543_S_AT
600	15928_AT	650	16160_F_AT	701	16550_S_AT
601	15940_AT	651	16162_S_AT	702	16554_S_AT
602	15941_AT	652	16168_S_AT	703	16567_S_AT
603	15945_AT	653	16169_S_AT	704	16571_S_AT
604	15948_S_AT	654	16171_S_AT	705	16576_F_AT
605	15956_AT	655	16172_S_AT	706	16577_S_AT
606	15960_AT	656	16184_AT	707	16579_S_AT
	16466_S_AT	657	16192_AT	708	16580_S_AT
607	15976_AT	658	16222_AT	709	16583_S_AT
608	15978_AT	659	16242_AT	710	16584_S_AT
609	15986_S_AT	660	16244_AT		18706_S_AT
610	15990_AT	661	16250_AT	711	16593_S_AT
611	16009_S_AT	662	16286_AT	712	16595_S_AT
612	16015_AT	663	16288_AT	713	16598_S_AT
613	16019_AT	664	16294_S_AT	714	16604_S_AT
614	16024_AT	665	16296_AT	715	16605_S_AT
615	16034_AT	666	16297_AT	716	16610_S_AT
616	16036_I_AT	667	16325_AT	717	16611_S_AT
	18729_AT	668	16346_S_AT	718	16614_S_AT
617	16039_S_AT	669	16357_AT	719	16617_S_AT
618	16040_AT	670	16380_AT	720	16618_S_AT
619	16042_S_AT	671	16382_AT	721	16620_S_AT
620	16047_AT	672	16393_S_AT	722	16621_S_AT
621	16049_S_AT	673	16402_S_AT	723	16631_S_AT
622	16051_S_AT	674	16411_S_AT	724	16634_S_AT
623	16055_S_AT	675	16442_S_AT	725	16635_S_AT
624	16059_S_AT	676	16446_AT	726	16636_S_AT
625	16062_S_AT	677	16448_G_AT	727	16639_S_AT
626	16066_S_AT	678	16453_S_AT	728	16640_S_AT
627	16069_S_AT	679	16457_S_AT	729	16650_S_AT
628	16074_S_AT	680	16465_AT	730	16652_S_AT
629	16076_S_AT		16916_S_AT	731	16654_AT
630	16077_S_AT	681	16470_S_AT	732	16672_AT
	17579_S_AT		18735_S_AT	733	16673_AT
631	16079_S_AT	682	16481_S_AT	734	16687_S_AT
632	16084_S_AT	683	16486_AT	735	16747_AT
	17998_S_AT	684	16487_AT	736	16753_AT
633	16087_S_AT	685	16488_AT	737	16768_AT

TABLE 3 (cont)

738	16777_AT	790	17123_S_AT	843	17562_AT
739	16784_AT	791	17129_S_AT	844	17564_S_AT
740	16807_AT	792	17132_AT		19361_S_AT
741	16811_AT	793	17166_AT	845	17565_S_AT
742	16845_AT	794	17206_AT	846	17568_AT
743	16894_AT	795	17207_AT	847	17573_AT
744	16899_AT	796	17215_AT	848	17577_G_AT
745	16911_AT	797	17237_AT	849	17578_AT
746	16920_AT	798	17247_AT	850	17596_AT
747	16921_AT	799	17254_AT	851	17627_AT
748	16924_S_AT	800	17286_AT	852	17631_AT
749	16926_S_AT	801	17288_S_AT	853	17632_AT
750	16931_S_AT	802	17292_AT	854	17672_AT
751	16934_S_AT	803	17300_AT	855	17675_AT
752	16937_AT	804	17303_S_AT	856	17677_AT
753	16938_AT	805	17318_AT	857	17732_AT
754	16942_AT	806	17319_AT	858	17743_AT
755	16943_S_AT	807	17322_AT	859	17748_AT
	18231_AT	808	17323_AT	860	17782_AT
756	16949_S_AT	809	17332_S_AT	861	17823_S_AT
757	16952_S_AT	810	17374_AT	862	17841_AT
758	16956_AT	811	17381_AT	863	17849_S_AT
759	16962_S_AT	812	17388_AT	864	17852_G_AT
760	16965_S_AT	813	17392_S_AT	865	17857_AT
761	16970_S_AT	814	17405_AT	866	17865_AT
	18010_S_AT	815	17415_AT	867	17882_AT
762	16977_AT	816	17418_S_AT	868	17885_AT
763	16984_AT	817	17420_AT	869	17900_S_AT
764	16996_S_AT	818	17423_S_AT	870	17910_AT
765	16997_AT	819	17426_AT	871	17911_AT
766	17000_AT	820	17427_AT	872	17916_AT
767	17005_AT	821	17429_S_AT	873	17917_S_AT
768	17010_S_AT	822	17431_AT	874	17918_AT
769	17017_S_AT	823	17439_G_AT	875	17921_S_AT
770	17031_S_AT	824	17457_AT	876	17922_AT
771	17033_S_AT	825	17458_AT	877	17926_S_AT
772	17053_S_AT	826	17462_S_AT	878	17933_AT
773	17055_S_AT	827	17463_AT	879	17935_AT
774	17063_S_AT	828	17465_AT	880	17956_I_AT
775	17068_S_AT	829	17466_S_AT	881	17966_AT
776	17070_S_AT	830	17475_AT	882	17967_AT
777	17075_S_AT	831	17479_AT	883	17970_I_AT
778	17084_S_AT	832	17482_S_AT	884	17978_S_AT
779	17087_S_AT	833	17495_S_AT		20635_S_AT
780	17092_S_AT	834	17508_S_AT	885	17986_S_AT
781	17095_S_AT	835	17522_S_AT	886	17993_AT
782	17096_S_AT	836	17523_S_AT	887	18001_AT
783	17102_S_AT	837	17537_S_AT	888	18003_AT
784	17105_S_AT	838	17538_S_AT	889	18004_AT
785	17109_S_AT	839	17539_S_AT	890	18005_AT
786	17110_S_AT	840	17546_S_AT	891	18029_G_AT
787	17113_S_AT		18694_S_AT		18030_I_AT
788	17115_S_AT	841	17557_S_AT	892	18040_S_AT
789	17116_S_AT	842	17560_S_AT	893	18045_AT

TABLE 3 (cont)

894	18064_R_AT	947	18580_AT	1001	18889_AT
895	18065_R_AT	948	18581_AT	1002	18892_S_AT
896	18074_AT	949	18584_AT	1003	18901_AT
897	18076_S_AT	950	18587_S_AT	1004	18911_AT
898	18077_AT	951	18588_AT	1005	18917_I_AT
899	18081_AT	952	18591_AT	1006	18939_AT
900	18154_S_AT	953	18592_S_AT	1007	18947_I_AT
	18365_S_AT	954	18600_AT	1008	18950_AT
901	18165_AT	955	18601_S_AT	1009	18951_S_AT
902	18174_AT	956	18607_S_AT	1010	18954_AT
903	18176_AT	957	18611_AT	1011	18956_AT
904	18194_I_AT	958	18616_AT	1012	18959_AT
905	18197_AT	959	18622_G_AT	1013	18966_AT
906	18198_AT	960	18623_AT	1014	18974_AT
907	18213_AT	961	18628_AT	1015	18976_AT
908	18219_AT	962	18631_AT	1016	18980_AT
909	18221_AT	963	18635_AT	1017	18989_S_AT
910	18222_AT	964	18636_AT	1018	18994_AT
911	18226_S_AT	965	18638_AT	1019	19030_AT
912	18232_AT	966	18652_AT	1020	19039_AT
913	18237_AT	967	18657_AT	1021	19049_AT
914	18241_AT	968	18659_AT	1022	19083_AT
915	18257_AT	969	18660_S_AT	1023	19115_AT
916	18258_S_AT	970	18667_AT	1024	19117_S_AT
917	18269_S_AT	971	18675_AT	1025	19122_AT
918	18274_S_AT	972	18684_AT	1026	19125_S_AT
919	18275_AT	973	18686_S_AT	1027	19127_AT
920	18278_AT	974	18688_S_AT	1028	19130_AT
921	18282_AT	975	18693_S_AT	1029	19144_AT
922	18283_AT	976	18698_S_AT	1030	19157_S_AT
923	18290_AT	977	18705_AT	1031	19178_AT
924	18291_AT	978	18707_AT	1032	19190_G_AT
925	18306_AT	979	18708_AT	1033	19198_AT
926	18316_AT	980	18726_S_AT	1034	19202_AT
927	18317_AT	981	18727_AT	1035	19209_S_AT
928	18327_S_AT	982	18732_I_AT	1036	19211_AT
929	18337_S_AT	983	18736_AT	1037	19218_AT
930	18339_AT	984	18750_F_AT	1038	19222_AT
931	18347_S_AT	985	18754_AT	1039	19226_G_AT
932	18383_AT	986	18778_AT	1040	19229_AT
933	18390_AT	987	18806_S_AT	1041	19230_AT
934	18439_S_AT	988	18823_S_AT	1042	19232_S_AT
935	18465_S_AT	989	18829_AT	1043	19285_AT
936	18487_AT	990	18835_AT	1044	19326_AT
937	18508_S_AT	991	18844_AT	1045	19332_AT
938	18512_AT	992	18859_AT	1046	19346_AT
939	18543_AT	993	18864_AT	1047	19347_AT
940	18544_AT	994	18866_AT	1048	19362_AT
941	18552_AT	995	18880_AT	1049	19363_AT
942	18555_AT	996	18883_G_AT	1050	19364_AT
943	18556_AT	997	18885_AT	1051	19367_AT
944	18561_AT	998	18886_AT	1052	19373_AT
945	18567_AT	999	18887_AT	1053	19381_AT
946	18573_AT	1000	18888_AT	1054	19382_AT

TABLE 3 (cont)

1055	19384_AT	1109	19833_S_AT	1163	20093_I_AT
1056	19401_AT	1110	19834_AT	1164	20099_AT
1057	19406_AT	1111	19836_AT	1165	20100_AT
1058	19413_AT	1112	19841_AT	1166	20113_S_AT
1059	19416_AT	1113	19845_G_AT	1167	20117_AT
1060	19426_S_AT	1114	19854_AT	1168	20123_AT
1061	19439_AT	1115	19855_AT	1169	20127_S_AT
1062	19441_S_AT	1116	19866_AT	1170	20129_AT
1063	19442_AT	1117	19867_AT	1171	20150_AT
1064	19448_S_AT	1118	19870_S_AT	1172	20154_AT
1065	19454_AT	1119	19871_AT	1173	20156_AT
1066	19462_S_AT	1120	19872_AT	1174	20165_AT
1067	19464_AT	1121	19875_S_AT	1175	20173_AT
1068	19470_AT	1122	19876_AT	1176	20178_S_AT
1069	19483_AT	1123	19879_S_AT	1177	20183_AT
1070	19489_S_AT	1124	19881_AT	1178	20188_AT
1071	19513_AT	1125	19897_S_AT	1179	20189_AT
1072	19548_AT	1126	19903_AT	1180	20197_AT
1073	19562_AT	1127	19905_AT	1181	20210_G_AT
1074	19563_S_AT	1128	19906_AT	1182	20213_AT
1075	19567_AT	1129	19907_AT	1183	20229_AT
1076	19581_AT	1130	19910_AT	1184	20232_S_AT
1077	19589_S_AT	1131	19913_AT	1185	20255_AT
1078	19595_S_AT	1132	19920_S_AT	1186	20257_AT
1079	19606_AT	1133	19932_AT	1187	20262_AT
1080	19623_AT	1134	19939_AT	1188	20275_AT
1081	19624_AT	1135	19945_AT	1189	20278_S_AT
1082	19627_S_AT	1136	19947_AT	1190	20282_S_AT
1083	19636_AT	1137	19951_AT	1191	20284_AT
1084	19652_AT	1138	19956_AT	1192	20293_AT
1085	19655_AT	1139	19962_AT	1193	20294_AT
1086	19657_S_AT	1140	19963_AT	1194	20312_S_AT
1087	19658_AT	1141	19969_AT	1195	20315_I_AT
1088	19660_AT	1142	19970_S_AT	1196	20330_S_AT
1089	19665_S_AT	1143	19971_AT	1197	20331_AT
1090	19667_AT	1144	19972_AT	1198	20350_S_AT
1091	19671_AT	1145	19981_AT	1199	20354_S_AT
1092	19677_AT	1146	19990_AT	1200	20355_AT
1093	19686_AT	1147	19996_AT	1201	20360_AT
1094	19689_AT	1148	20003_S_AT	1202	20363_AT
1095	19690_S_AT	1149	20009_S_AT	1203	20369_S_AT
1096	19695_AT	1150	20013_AT	1204	20378_G_AT
1097	19698_AT	1151	20018_AT	1205	20383_AT
1098	19700_S_AT	1152	20024_S_AT	1206	20384_AT
1099	19708_AT	1153	20027_AT	1207	20387_AT
1100	19717_AT	1154	20045_AT	1208	20393_AT
1101	19726_S_AT	1155	20047_AT	1209	20396_AT
1102	19744_AT	1156	20048_AT	1210	20399_AT
1103	19752_S_AT	1157	20050_AT	1211	20409_G_AT
1104	19759_AT	1158	20051_AT	1212	20412_S_AT
1105	19782_AT	1159	20058_AT	1213	20413_AT
1106	19803_S_AT	1160	20067_AT	1214	20439_AT
1107	19828_AT	1161	20068_AT	1215	20440_AT
1108	19831_I_AT	1162	20069_AT	1216	20444_AT

TABLE 3 (cont)

1217	20445_AT
1218	20449_AT
1219	20456_AT
1220	20462_AT
1221	20471_AT
1222	20474_AT
1223	20495_S_AT
1224	20499_AT
1225	20501_AT
1226	20511_AT
1227	20515_S_AT
1228	20516_AT
1229	20517_AT
1230	20518_AT
1231	20520_S_AT
1232	20536_S_AT
1233	20538_S_AT
1234	20539_S_AT
1235	20558_AT
1236	20561_AT
1237	20567_AT
1238	20571_AT
1239	20582_S_AT
1240	20586_I_AT
1241	20590_AT
1242	20592_AT
1243	20594_AT
1244	20608_S_AT
1245	20612_S_AT
1246	20616_AT
1247	20620_G_AT
1248	20637_AT
1249	20643_AT
1250	20649_AT
1251	20651_AT
1252	20654_S_AT
1253	20670_AT
1254	20684_AT
1255	20685_AT
1256	20693_AT
1257	20701_S_AT
1258	20704_AT
1259	20705_AT
1260	20715_AT
1261	20719_AT

TABLE 4: 2X UP IN COLD, ONLY

11997_at	12688_at	13274_s_at	14145_at	15083_at	15639_s_at
11998_at	12701_i_at	13278_f_at	14170_at	15084_at	15641_s_at
12018_at	12702_at	13279_s_at	14186_at	15096_at	15660_s_at
12031_at	12719_f_at	13285_s_at	14196_at	15101_s_at	15665_s_at
12047_at	12726_f_at	13288_s_at	14227_at	15105_s_at	15687_f_at
12051_at	12736_f_at	13292_s_at	14234_at	15112_s_at	15694_s_at
12053_at	12754_g_at	13297_s_at	14250_r_at	15115_f_at	15712_s_at
12060_at	12762_r_at	13299_s_at	14270_at	15116_f_at	15783_s_at
12072_at	12766_at	13332_at	14298_g_at	15122_s_at	15808_at
12074_at	12767_at	13351_at	14303_s_at	15126_s_at	15837_at
12102_at	12768_at	13352_at	14312_at	15131_s_at	15850_at
12112_at	12773_at	13422_at	14339_at	15132_s_at	15862_at
12117_at	12788_at	13435_at	14388_at	15137_s_at	15868_at
12130_at	12802_at	13461_s_at	14393_at	15144_s_at	15878_at
12145_s_at	12860_s_at	13467_at	14511_at	15148_s_at	15901_at
12151_at	12861_s_at	13488_at	14525_s_at	15153_s_at	15912_at
12163_at	12879_s_at	13495_s_at	14527_at	15159_s_at	15920_i_at
12175_at	12891_at	13539_i_at	14534_s_at	15160_s_at	15941_at
12187_at	12914_s_at	13542_at	14554_at	15166_s_at	15945_at
12195_at	12927_s_at	13575_at	14566_at	15174_f_at	15960_at
12219_at	12947_at	13577_s_at	14579_at	15197_s_at	15990_at
12256_at	12956_i_at	13617_at	14591_at	15270_at	16001_at
12269_s_at	12966_s_at	13634_s_at	14595_at	15319_at	16009_s_at
12307_at	12974_at	13656_at	14600_at	15325_at	16010_s_at
12315_at	12987_s_at	13671_s_at	14631_s_at	15337_at	16034_at
12336_at	12994_s_at	13691_s_at	14635_s_at	15341_at	16036_i_at
12349_s_at	12998_at	13700_at	14679_s_at	15343_at	16039_s_at
12353_at	13002_at	13704_s_at	14691_at	15355_s_at	16040_at
12359_s_at	13018_at	13709_s_at	14697_g_at	15367_at	16042_s_at
12390_at	13023_at	13715_at	14709_at	15379_at	16047_at
12395_s_at	13046_g_at	13785_at	14711_s_at	15381_at	16049_s_at
12431_at	13054_at	13803_at	14728_s_at	15410_at	16051_s_at
12436_at	13086_r_at	13812_s_at	14731_s_at	15417_s_at	16062_s_at
12443_s_at	13087_at	13825_s_at	14797_s_at	15422_at	16079_s_at
12447_at	13100_at	13850_i_at	14809_at	15433_at	16087_s_at
12452_at	13109_at	13904_s_at	14843_at	15451_at	16090_s_at
12477_at	13119_at	13908_s_at	14847_at	15452_at	16117_s_at
12503_at	13120_at	13927_at	14872_at	15453_s_at	16118_s_at
12516_s_at	13128_at	13971_s_at	14886_at	15472_at	16137_s_at
12532_at	13134_s_at	13985_s_at	14896_at	15489_at	16155_s_at
12544_at	13140_at	14013_at	14897_at	15490_at	16162_s_at
12561_at	13143_at	14019_at	14900_at	15503_at	16184_at
12602_at	13167_at	14021_r_at	14956_s_at	15510_r_at	16192_at
12610_at	13172_s_at	14028_at	14958_at	15517_s_at	16222_at
12631_at	13178_at	14048_at	14965_at	15518_at	16244_at
12647_s_at	13179_at	14058_at	14984_s_at	15544_at	16250_at
12650_at	13181_at	14059_at	15004_at	15588_s_at	16260_at
12656_at	13187_i_at	14064_at	15010_at	15600_s_at	16286_at
12674_at	13209_s_at	14073_at	15036_r_at	15605_s_at	16296_at
12675_s_at	13219_s_at	14105_at	15040_g_at	15613_s_at	16297_at
12676_s_at	13221_at	14106_at	15046_s_at	15614_s_at	16342_at
12681_s_at	13243_r_at	14126_s_at	15057_at	15616_s_at	16367_i_at
12686_s_at	13260_s_at	14140_at	15073_at	15633_s_at	16411_s_at

TABLE 4 (cont): 2X UP IN COLD, ONLY

16442_s_at	17077_s_at	17978_s_at	18885_at	19689_at	20412_s_at
16465_at	17102_s_at	17999_at	18887_at	19698_at	20413_at
16466_s_at	17109_s_at	18001_at	18888_at	19700_s_at	20432_at
16468_at	17113_s_at	18004_at	18889_at	19707_s_at	20433_at
16486_at	17123_s_at	18012_s_at	18901_at	19708_at	20456_at
16487_at	17128_s_at	18040_s_at	18907_s_at	19713_at	20462_at
16488_at	17129_s_at	18176_at	18917_i_at	19718_at	20471_at
16489_at	17132_at	18194_i_at	18939_at	19744_at	20511_at
16496_s_at	17166_at	18197_at	18947_i_at	19836_at	20515_s_at
16499_at	17206_at	18198_at	18949_at	19839_at	20517_at
16511_at	17237_at	18213_at	18954_at	19840_s_at	20518_at
16517_at	17300_at	18219_at	18959_at	19845_g_at	20529_at
16538_s_at	17319_at	18222_at	18974_at	19854_at	20536_s_at
16554_s_at	17322_at	18231_at	18976_at	19855_at	20538_s_at
16571_s_at	17332_s_at	18232_at	18980_at	19860_at	20539_s_at
16576_f_at	17381_at	18241_at	18989_s_at	19866_at	20576_at
16595_s_at	17388_at	18269_s_at	19019_i_at	19871_at	20582_s_at
16605_s_at	17392_s_at	18272_at	19049_at	19875_s_at	20586_i_at
16610_s_at	17408_at	18282_at	19083_at	19879_s_at	20608_s_at
16620_s_at	17424_at	18298_at	19130_at	19881_at	20649_at
16621_s_at	17429_s_at	18316_at	19156_s_at	19913_at	20651_at
16635_s_at	17457_at	18317_at	19178_at	19939_at	20684_at
16636_s_at	17458_at	18331_s_at	19190_g_at	19945_at	20685_at
16638_s_at	17466_s_at	18347_s_at	19199_at	19947_at	20699_at
16650_s_at	17477_s_at	18383_at	19202_at	19951_at	20705_at
16672_at	17482_s_at	18390_at	19209_s_at	19956_at	20715_at
16673_at	17538_s_at	18455_at	19211_at	19971_at	
16687_s_at	17546_s_at	18465_s_at	19218_at	19976_at	
16747_at	17562_at	18544_at	19229_at	19998_at	
16753_at	17581_g_at	18555_at	19322_at	20003_s_at	
16768_at	17627_at	18556_at	19326_at	20015_at	
16805_s_at	17631_at	18560_at	19359_s_at	20027_at	
16807_at	17632_at	18561_at	19367_at	20051_at	
16845_at	17645_s_at	18571_at	19384_at	20068_at	
16847_at	17672_at	18588_at	19389_at	20093_i_at	
16896_s_at	17675_at	18597_at	19397_at	20117_at	
16899_at	17677_at	18601_s_at	19406_at	20150_at	
16902_at	17693_at	18611_at	19426_s_at	20156_at	
16911_at	17732_at	18623_at	19441_s_at	20165_at	
16914_s_at	17743_at	18635_at	19442_at	20257_at	
16943_s_at	17748_at	18659_at	19470_at	20262_at	
16956_at	17775_at	18660_s_at	19489_s_at	20275_at	
16996_s_at	17782_at	18673_at	19562_at	20282_s_at	
17010_s_at	17841_at	18694_s_at	19577_at	20288_g_at	
17016_s_at	17852_g_at	18705_at	19589_s_at	20293_at	
17032_s_at	17900_s_at	18708_at	19597_s_at	20315_i_at	
17033_s_at	17901_at	18738_f_at	19611_s_at	20330_s_at	
17043_s_at	17911_at	18750_f_at	19624_at	20360_at	
17050_s_at	17921_s_at	18778_at	19657_s_at	20363_at	
17055_s_at	17922_at	18829_at	19667_at	20369_s_at	
17068_s_at	17933_at	18835_at	19671_at	20384_at	
17071_s_at	17967_at	18866_at	19677_at	20393_at	
17075_s_at	17970_i_at	18875_s_at	19686_at	20396_at	

TABLE 5: 2X UP COLD 3 HR, ONLY

12117_at	13671_s_at	15453_s_at	17237_at	19624_at
12145_s_at	13691_s_at	15489_at	17319_at	19657_s_at
12151_at	13785_at	15518_at	17392_s_at	19667_at
12163_at	13803_at	15588_s_at	17429_s_at	19845_g_at
12187_at	13825_s_at	15613_s_at	17477_s_at	19855_at
12256_at	13904_s_at	15614_s_at	17538_s_at	19866_at
12315_at	14013_at	15616_s_at	17581_g_at	19945_at
12349_s_at	14021_r_at	15639_s_at	17627_at	19951_at
12353_at	14028_at	15641_s_at	17672_at	19998_at
12359_s_at	14064_at	15660_s_at	17693_at	20003_s_at
12544_at	14126_s_at	15687_f_at	17782_at	20015_at
12602_at	14145_at	15694_s_at	17841_at	20051_at
12610_at	14170_at	15862_at	17900_s_at	20093_i_at
12676_s_at	14196_at	15868_at	17933_at	20117_at
12686_s_at	14250_r_at	15878_at	17978_s_at	20288_g_at
12701_i_at	14298_g_at	15901_at	18001_at	20360_at
12702_at	14303_s_at	16034_at	18012_s_at	20369_s_at
12719_f_at	14339_at	16039_s_at	18198_at	20384_at
12736_f_at	14527_at	16040_at	18219_at	20462_at
12754_g_at	14534_s_at	16042_s_at	18241_at	20471_at
12766_at	14554_at	16047_at	18269_s_at	20515_s_at
12767_at	14595_at	16062_s_at	18272_at	20538_s_at
12768_at	14635_s_at	16087_s_at	18282_at	20576_at
12773_at	14679_s_at	16117_s_at	18298_at	20608_s_at
12788_at	14691_at	16118_s_at	18383_at	20651_at
12879_s_at	14697_g_at	16162_s_at	18556_at	20685_at
12891_at	14709_at	16184_at	18588_at	20705_at
12947_at	14728_s_at	16222_at	18601_s_at	
12966_s_at	14809_at	16250_at	18611_at	
12974_at	14896_at	16411_s_at	18694_s_at	
12994_s_at	14965_at	16442_s_at	18708_at	
13002_at	14984_s_at	16465_at	18738_f_at	
13100_at	15046_s_at	16486_at	18778_at	
13140_at	15083_at	16488_at	18829_at	
13167_at	15096_at	16489_at	18835_at	
13172_s_at	15105_s_at	16517_at	18866_at	
13179_at	15115_f_at	16571_s_at	18875_s_at	
13187_i_at	15116_f_at	16605_s_at	18888_at	
13219_s_at	15122_s_at	16610_s_at	18907_s_at	
13260_s_at	15126_s_at	16620_s_at	18917_i_at	
13278_f_at	15131_s_at	16636_s_at	18939_at	
13279_s_at	15132_s_at	16650_s_at	18974_at	
13285_s_at	15137_s_at	16805_s_at	19190_g_at	
13288_s_at	15153_s_at	16845_at	19199_at	
13292_s_at	15159_s_at	16899_at	19202_at	
13297_s_at	15160_s_at	16914_s_at	19211_at	
13351_at	15197_s_at	16943_s_at	19384_at	
13352_at	15355_s_at	16996_s_at	19406_at	
13435_at	15379_at	17010_s_at	19426_s_at	
13467_at	15417_s_at	17043_s_at	19442_at	
13488_at	15422_at	17068_s_at	19470_at	
13495_s_at	15451_at	17109_s_at	19577_at	
13656_at	15452_at	17128_s_at	19597_s_at	

TABLE 6: 2X DOWN COLD, ONLY

11991_g_at	12450_s_at	12881_s_at	13151_g_at	13621_g_at	14056_at
11992_at	12474_at	12889_s_at	13160_at	13623_r_at	14057_at
12001_at	12491_at	12901_s_at	13161_at	13629_s_at	14061_at
12006_s_at	12497_at	12902_at	13162_at	13631_at	14067_at
12007_at	12500_s_at	12904_s_at	13165_at	13635_at	14068_s_at
12009_at	12515_at	12905_s_at	13166_at	13646_at	14072_at
12022_at	12521_at	12908_s_at	13185_at	13650_at	14074_at
12023_s_at	12523_at	12910_s_at	13193_s_at	13652_at	14075_at
12026_at	12526_at	12916_s_at	13211_s_at	13653_at	14083_at
12037_at	12527_at	12923_s_at	13213_s_at	13655_at	14084_at
12052_at	12534_g_at	12926_s_at	13219_s_at	13657_at	14089_at
12125_at	12549_s_at	12931_s_at	13233_at	13666_s_at	14095_s_at
12143_at	12550_s_at	12937_r_at	13236_s_at	13667_s_at	14096_at
12149_at	12552_at	12941_g_at	13239_s_at	13669_s_at	14100_at
12156_at	12555_s_at	12942_at	13241_s_at	13670_s_at	14101_at
12166_i_at	12556_at	12949_at	13254_s_at	13672_s_at	14103_at
12167_at	12575_s_at	12953_at	13266_s_at	13678_s_at	14121_at
12169_i_at	12576_s_at	12958_at	13273_s_at	13679_s_at	14129_s_at
12176_at	12581_s_at	12959_at	13275_f_at	13688_s_at	14133_s_at
12179_at	12587_at	12966_s_at	13276_s_at	13690_s_at	14143_at
12196_at	12597_at	12975_at	13278_f_at	13691_s_at	14148_at
12198_at	12606_at	12983_at	13280_s_at	13692_s_at	14162_at
12200_at	12609_at	12984_at	13285_s_at	13714_at	14194_at
12202_at	12646_at	13002_at	13296_s_at	13724_at	14208_at
12212_at	12649_at	13009_i_at	13347_at	13748_at	14217_at
12214_g_at	12653_at	13011_at	13355_at	13751_at	14223_at
12224_at	12661_at	13014_at	13361_at	13759_at	14235_at
12226_at	12666_at	13024_at	13404_at	13767_at	14236_at
12233_at	12678_i_at	13034_s_at	13406_at	13789_at	14251_f_at
12240_at	12705_f_at	13041_s_at	13459_at	13876_at	14252_f_at
12253_g_at	12736_f_at	13048_s_at	13460_at	13880_s_at	14285_at
12270_at	12737_f_at	13067_s_at	13464_at	13883_at	14301_s_at
12278_at	12758_at	13068_at	13523_s_at	13887_s_at	14316_at
12284_at	12760_g_at	13073_s_at	13529_at	13895_at	14366_at
12287_s_at	12764_f_at	13078_s_at	13541_at	13906_s_at	14369_at
12293_at	12765_at	13079_at	13545_s_at	13919_at	14392_g_at
12294_s_at	12772_at	13081_s_at	13550_at	13923_at	14421_at
12300_at	12776_at	13083_at	13552_at	13932_at	14431_at
12312_at	12784_at	13090_at	13556_i_at	13935_at	14436_at
12315_at	12793_at	13092_s_at	13561_at	13940_at	14448_at
12324_i_at	12794_at	13098_at	13563_s_at	13949_s_at	14450_at
12331_s_at	12795_at	13103_at	13567_at	13954_g_at	14454_at
12344_at	12809_g_at	13105_at	13568_at	13973_at	14459_at
12348_at	12812_at	13107_s_at	13571_at	13983_at	14478_at
12353_at	12815_at	13108_at	13576_at	13989_at	14482_at
12372_at	12816_at	13114_at	13583_at	14010_at	14485_at
12374_i_at	12818_at	13118_f_at	13598_at	14014_at	14492_s_at
12405_at	12824_s_at	13123_at	13601_at	14015_s_at	14505_at
12408_at	12828_s_at	13124_at	13604_at	14016_s_at	14510_at
12410_g_at	12842_s_at	13133_s_at	13613_at	14025_s_at	14517_at
12419_at	12846_s_at	13135_s_at	13616_s_at	14027_at	14519_at
12427_at	12858_at	13139_at	13618_s_at	14030_at	14534_s_at
12438_at	12869_s_at	13146_s_at	13619_at	14044_at	14538_r_at

TABLE 6 (cont): 2X DOWN COLD, ONLY

14558_at	15047_at	15512_at	15940_at	16357_at	16894_at
14559_s_at	15054_at	15514_at	15948_s_at	16380_at	16899_at
14572_at	15056_at	15515_r_at	15956_at	16382_at	16920_at
14584_at	15058_s_at	15529_at	15976_at	16385_s_at	16921_at
14587_at	15063_at	15534_f_at	15978_at	16393_s_at	16924_s_at
14595_at	15066_at	15538_at	15986_s_at	16402_s_at	16926_s_at
14602_at	15081_at	15541_at	16004_s_at	16417_s_at	16931_s_at
14603_at	15091_at	15543_at	16015_at	16442_s_at	16934_s_at
14605_at	15097_s_at	15551_at	16017_at	16446_at	16937_at
14620_s_at	15102_s_at	15574_s_at	16019_at	16448_g_at	16938_at
14626_s_at	15107_s_at	15576_s_at	16024_at	16453_s_at	16942_at
14630_s_at	15118_s_at	15577_s_at	16031_at	16457_s_at	16949_s_at
14637_s_at	15127_s_at	15578_s_at	16055_s_at	16470_s_at	16950_s_at
14640_s_at	15130_s_at	15581_s_at	16059_s_at	16481_s_at	16952_s_at
14642_f_at	15132_s_at	15583_s_at	16065_s_at	16510_at	16962_s_at
14650_s_at	15133_s_at	15591_s_at	16066_s_at	16512_s_at	16965_s_at
14654_s_at	15139_s_at	15595_s_at	16069_s_at	16514_at	16970_s_at
14667_s_at	15143_s_at	15602_f_at	16074_s_at	16516_at	16977_at
14668_s_at	15146_s_at	15606_s_at	16076_s_at	16523_s_at	16984_at
14669_s_at	15150_s_at	15608_s_at	16077_s_at	16526_at	16989_at
14672_s_at	15161_s_at	15616_s_at	16084_s_at	16528_at	16993_at
14673_s_at	15162_s_at	15618_s_at	16089_s_at	16531_s_at	16997_at
14675_s_at	15167_s_at	15620_s_at	16102_s_at	16535_s_at	17000_at
14679_s_at	15170_s_at	15627_s_at	16103_s_at	16537_s_at	17005_at
14681_g_at	15171_s_at	15634_s_at	16105_s_at	16543_s_at	17010_s_at
14682_i_at	15178_s_at	15637_s_at	16108_s_at	16544_s_at	17017_s_at
14689_at	15182_s_at	15642_s_at	16112_s_at	16550_s_at	17031_s_at
14701_s_at	15185_s_at	15643_s_at	16117_s_at	16559_s_at	17040_s_at
14703_at	15188_s_at	15646_s_at	16118_s_at	16567_s_at	17053_s_at
14712_s_at	15193_s_at	15651_f_at	16125_s_at	16577_s_at	17056_s_at
14713_s_at	15196_s_at	15652_s_at	16127_s_at	16579_s_at	17063_s_at
14715_s_at	15201_f_at	15667_s_at	16134_s_at	16580_s_at	17070_s_at
14734_s_at	15206_s_at	15668_s_at	16136_s_at	16583_s_at	17074_s_at
14781_at	15207_s_at	15670_s_at	16138_s_at	16584_s_at	17084_s_at
14800_at	15213_s_at	15671_s_at	16140_s_at	16593_s_at	17085_s_at
14856_s_at	15243_at	15675_s_at	16143_s_at	16598_s_at	17087_s_at
14882_at	15256_at	15679_s_at	16144_s_at	16603_s_at	17092_s_at
14908_at	15348_at	15685_s_at	16145_s_at	16604_s_at	17095_s_at
14912_at	15350_at	15688_s_at	16148_s_at	16611_s_at	17096_s_at
14914_at	15372_at	15689_s_at	16151_s_at	16614_s_at	17097_s_at
14924_at	15383_at	15692_s_at	16158_f_at	16617_s_at	17103_s_at
14942_at	15384_at	15775_at	16160_f_at	16618_s_at	17105_s_at
14945_at	15385_at	15776_at	16168_s_at	16620_s_at	17110_s_at
14955_at	15387_at	15845_at	16169_s_at	16631_s_at	17115_s_at
14957_s_at	15406_at	15848_at	16171_s_at	16634_s_at	17116_s_at
14974_at	15423_at	15858_at	16172_s_at	16639_s_at	17119_s_at
14980_at	15431_at	15866_s_at	16222_at	16640_s_at	17122_s_at
14981_at	15464_at	15894_at	16232_s_at	16652_s_at	17207_at
14995_at	15468_at	15900_at	16242_at	16654_at	17215_at
15009_at	15471_at	15901_at	16288_at	16777_at	17247_at
15018_at	15475_s_at	15902_at	16294_s_at	16784_at	17254_at
15024_at	15485_at	15913_at	16325_at	16811_at	17286_at
15026_at	15505_at	15928_at	16346_s_at	16893_at	17288_s_at

TABLE 6 (cont): 2X DOWN COLD, ONLY

17292_at	17910_at	18337_s_at	18823_s_at	19382_at	19897_s_at
17303_s_at	17916_at	18339_at	18844_at	19401_at	19903_at
17305_at	17917_s_at	18365_s_at	18859_at	19402_at	19905_at
17318_at	17918_at	18402_at	18864_at	19406_at	19906_at
17323_at	17926_s_at	18439_s_at	18880_at	19413_at	19907_at
17374_at	17935_at	18487_at	18883_g_at	19416_at	19910_at
17405_at	17956_i_at	18508_s_at	18886_at	19429_at	19920_s_at
17415_at	17961_at	18512_at	18892_s_at	19432_s_at	19932_at
17418_s_at	17966_at	18543_at	18909_s_at	19439_at	19951_at
17420_at	17978_s_at	18552_at	18911_at	19448_s_at	19962_at
17423_s_at	17986_s_at	18567_at	18913_s_at	19454_at	19963_at
17426_at	17993_at	18573_at	18916_s_at	19462_s_at	19969_at
17427_at	17998_s_at	18580_at	18921_g_at	19464_at	19970_s_at
17430_s_at	18003_at	18581_at	18950_at	19469_at	19972_at
17431_at	18005_at	18584_at	18951_s_at	19483_at	19981_at
17439_g_at	18010_s_at	18587_s_at	18956_at	19484_s_at	19990_at
17442_i_at	18013_r_at	18590_at	18966_at	19513_at	19996_at
17449_s_at	18023_s_at	18591_at	18972_at	19548_at	19999_s_at
17462_s_at	18029_g_at	18592_s_at	18994_at	19563_s_at	20009_s_at
17463_at	18030_i_at	18600_at	19030_at	19567_at	20013_at
17465_at	18045_at	18601_s_at	19039_at	19581_at	20017_at
17475_at	18046_s_at	18607_s_at	19068_i_at	19595_s_at	20018_at
17479_at	18059_i_at	18610_s_at	19108_at	19606_at	20024_s_at
17495_s_at	18064_r_at	18611_at	19115_at	19623_at	20045_at
17508_s_at	18065_r_at	18616_at	19117_s_at	19627_s_at	20047_at
17522_s_at	18074_at	18622_g_at	19122_at	19636_at	20048_at
17523_s_at	18076_s_at	18628_at	19125_s_at	19641_at	20050_at
17529_s_at	18077_at	18631_at	19127_at	19652_at	20051_at
17537_s_at	18078_at	18636_at	19135_at	19655_at	20058_at
17539_s_at	18081_at	18638_at	19144_at	19658_at	20067_at
17543_s_at	18083_r_at	18652_at	19157_s_at	19660_at	20069_at
17555_s_at	18085_r_at	18657_at	19158_at	19665_s_at	20099_at
17557_s_at	18091_at	18667_at	19177_at	19667_at	20100_at
17560_s_at	18154_s_at	18675_at	19192_at	19690_s_at	20113_s_at
17564_s_at	18165_at	18684_at	19198_at	19695_at	20123_at
17565_s_at	18174_at	18686_s_at	19222_at	19717_at	20127_s_at
17568_at	18221_at	18688_s_at	19226_g_at	19726_s_at	20129_at
17570_g_at	18226_s_at	18693_s_at	19227_at	19752_s_at	20133_i_at
17573_at	18230_at	18698_s_at	19230_at	19759_at	20152_at
17577_g_at	18237_at	18706_s_at	19232_s_at	19782_at	20154_at
17578_at	18255_at	18707_at	19263_at	19789_s_at	20173_at
17579_s_at	18257_at	18726_s_at	19285_at	19803_s_at	20178_s_at
17585_s_at	18258_s_at	18727_at	19332_at	19828_at	20183_at
17596_at	18274_s_at	18732_i_at	19346_at	19831_i_at	20188_at
17600_s_at	18275_at	18735_s_at	19347_at	19833_s_at	20189_at
17823_s_at	18278_at	18736_at	19361_s_at	19834_at	20197_at
17840_s_at	18283_at	18738_f_at	19362_at	19835_at	20200_at
17849_s_at	18290_at	18747_f_at	19363_at	19841_at	20210_g_at
17857_at	18291_at	18754_at	19364_at	19867_at	20213_at
17865_at	18299_s_at	18782_at	19365_s_at	19870_s_at	20229_at
17882_at	18300_at	18789_at	19373_at	19871_at	20232_s_at
17885_at	18306_at	18806_s_at	19379_at	19872_at	20255_at
17902_s_at	18327_s_at	18814_at	19381_at	19876_at	20278_s_at

TABLE 6 (cont): 2X DOWN COLD, ONLY

20284_at	20693_at
20288_g_at	20701_s_at
20294_at	20704_at
20312_s_at	20707_s_at
20331_at	20719_at
20335_s_at	
20350_s_at	
20354_s_at	
20355_at	
20369_s_at	
20378_g_at	
20383_at	
20385_s_at	
20387_at	
20399_at	
20409_g_at	
20420_at	
20429_s_at	
20439_at	
20440_at	
20444_at	
20445_at	
20449_at	
20474_at	
20480_s_at	
20495_s_at	
20499_at	
20501_at	
20516_at	
20520_s_at	
20530_s_at	
20538_s_at	
20547_at	
20558_at	
20561_at	
20567_at	
20571_at	
20590_at	
20592_at	
20594_at	
20608_s_at	
20612_s_at	
20616_at	
20620_g_at	
20635_s_at	
20637_at	
20643_at	
20654_s_at	
20670_at	
20674_s_at	
20684_at	
20685_at	
20689_s_at	

TABLE 7

SALINE STRESS RESPONSIVE SEQUENCES

SEQ ID NO:	AFFYMETRIX ID NO:
2227	12011_S_AT
2228	12153_AT
2229	12180_AT
2230	12186_AT
2231	12216_AT
2232	12265_AT
2233	12335_AT
2234	12449_S_AT
2235	12470_AT
2236	12479_AT
2237	12487_AT
2238	12493_G_AT
2239	12562_AT
2240	12685_AT
2241	12704_F_AT
2242	12709_F_AT
2243	12734_F_AT
2244	12739_S_AT
2245	12750_S_AT
2246	12761_S_AT
2247	12813_AT
2248	12845_S_AT
2249	12946_AT
2250	13003_S_AT
2251	13052_S_AT
2252	13094_AT
2253	13142_AT
2254	13172_S_AT
	17880_S_AT
2255	13198_I_AT
2256	13209_S_AT
	16165_S_AT
2257	13229_S_AT
2258	13253_F_AT
2259	13344_S_AT
2260	13370_AT
2261	13387_AT
2262	13408_S_AT
2263	13429_AT
2264	13472_AT
2265	13526_AT
2266	13569_AT
2267	13614_AT
2268	13686_S_AT
2269	13718_AT
2270	13719_AT
2271	13902_AT
2272	13918_AT
2273	13944_AT
2274	13964_AT
2275	13993_S_AT
2276	14000_AT
2277	14003_AT
2278	14032_AT
2279	14043_AT
2280	14070_AT
2281	14267_AT
2282	14269_AT
2283	14418_AT
2284	14427_AT
2285	14501_AT
2286	14544_AT
2287	14546_S_AT
2288	14570_AT
2289	14596_AT
2290	14729_S_AT
2291	14874_AT
2292	14888_AT
2293	14951_AT
2294	14952_AT
2295	14959_AT
2296	14979_AT
2297	15006_AT
2298	15042_AT
2299	15049_AT
2300	15062_AT
2301	15108_S_AT
2302	15147_S_AT
2303	15175_S_AT
2304	15176_S_AT
2305	15186_S_AT
	18696_S_AT
2306	15192_S_AT
2307	15208_S_AT
2308	15324_AT
2309	15371_AT
2310	15424_AT
2311	15463_AT
2312	15465_AT
2313	15497_S_AT
2314	15589_S_AT
2315	15636_S_AT
2316	15663_S_AT
2317	15770_AT
2318	15792_AT
2319	15855_AT
2320	15860_AT
2321	15891_AT
2322	15898_AT
2323	15909_AT
2324	15965_AT
2325	15969_S_AT
2326	15975_S_AT
2327	15995_S_AT
2328	15998_S_AT
	18090_S_AT
2329	16028_AT
2330	16050_AT
2331	16060_S_AT
2332	16067_S_AT
2333	16072_S_AT
2334	16088_F_AT
2335	16273_AT
2336	16314_AT
2337	16413_S_AT
2338	16414_AT
2339	16426_AT
2340	16436_AT
2341	16455_AT
2342	16502_AT
2343	16548_S_AT
2344	16568_S_AT
2345	16582_S_AT
2346	16589_S_AT
2347	16594_S_AT
2348	16613_S_AT
2349	16651_S_AT
2350	16668_AT
2351	16820_AT
2352	16987_S_AT
2353	16995_AT
2354	17039_S_AT
2355	17273_AT
2356	17278_AT
2357	17433_AT
2358	17467_AT
2359	17566_AT
2360	17595_S_AT
2361	17744_S_AT
2362	17758_AT
2363	17864_AT
2364	17868_AT
2365	17876_AT
2366	17894_AT
2367	17942_S_AT
2368	18008_R_AT
2369	18027_AT
2370	18053_S_AT
2371	18062_AT
2372	18082_AT

TABLE 7 (cont)

2373	18121_S_AT	2426	20648_S_AT
2374	18240_S_AT	2427	20668_AT
2375	18248_S_AT		
2376	18264_AT		
2377	18276_AT		
2378	18287_AT		
2379	18310_AT		
2380	18367_S_AT		
2381	18506_AT		
2382	18605_S_AT		
2383	18618_S_AT		
2384	18626_AT		
2385	18666_S_AT		
2386	18834_AT		
2387	18847_AT		
2388	18896_AT		
2389	18899_S_AT		
2390	18973_AT		
2391	18983_S_AT		
2392	18988_AT		
2393	18998_S_AT		
2394	19065_AT		
2395	19119_I_AT		
	19121_AT		
2396	19207_AT		
2397	19220_AT		
2398	19284_AT		
2399	19315_AT		
2400	19348_AT		
2401	19403_S_AT		
2402	19437_S_AT		
2403	19502_AT		
2404	19609_AT		
2405	19645_AT		
2406	19742_AT		
2407	19863_AT		
2408	19873_AT		
2409	19891_AT		
2410	20004_S_AT		
2411	20053_AT		
2412	20138_AT		
2413	20193_AT		
2414	20199_AT		
2415	20220_AT		
2416	20239_G_AT		
2417	20297_AT		
2418	20324_S_AT		
2419	20353_AT		
2420	20362_AT		
2421	20389_AT		
2422	20546_AT		
2423	20600_AT		
2424	20623_AT		
2425	20629_AT		

TABLE 8: 2X UP IN SALT, ONLY

12037_at	14570_at	16190_at	18506_at	20648_s_at
12137_at	14578_s_at	16196_at	18605_s_at	20678_at
12153_at	14596_at	16273_at	18626_at	20686_at
12186_at	14646_s_at	16314_at	18666_s_at	20707_s_at
12216_at	14662_f_at	16413_s_at	18747_f_at	
12268_at	14668_s_at	16414_at	18782_at	
12449_s_at	14729_s_at	16417_s_at	18834_at	
12470_at	14874_at	16455_at	18847_at	
12476_at	14888_at	16548_s_at	18913_s_at	
12487_at	14918_at	16582_s_at	18973_at	
12493_g_at	14952_at	16589_s_at	18988_at	
12609_at	14959_at	16594_s_at	18998_s_at	
12685_at	14986_at	16613_s_at	19065_at	
12704_f_at	15006_at	16651_s_at	19068_i_at	
12709_f_at	15042_at	16668_at	19123_at	
12734_f_at	15047_at	16690_g_at	19177_at	
12739_s_at	15062_at	16762_at	19220_at	
12750_s_at	15063_at	16820_at	19284_at	
12761_s_at	15108_s_at	16873_i_at	19288_at	
12819_at	15133_s_at	16987_s_at	19315_at	
12845_s_at	15147_s_at	16989_at	19437_s_at	
12946_at	15170_s_at	16995_at	19484_s_at	
13142_at	15175_s_at	17039_s_at	19502_at	
13198_i_at	15182_s_at	17040_s_at	19503_at	
13229_s_at	15190_s_at	17400_s_at	19592_at	
13275_f_at	15192_s_at	17425_s_at	19645_at	
13344_s_at	15324_at	17433_at	19742_at	
13370_at	15392_at	17467_at	19835_at	
13408_s_at	15424_at	17490_s_at	19873_at	
13464_at	15467_at	17529_s_at	19891_at	
13472_at	15497_s_at	17543_s_at	19992_at	
13526_at	15581_s_at	17566_at	20004_s_at	
13614_at	15623_f_at	17595_s_at	20053_at	
13652_at	15636_s_at	17744_s_at	20133_i_at	
13679_s_at	15646_s_at	17758_at	20138_at	
13751_at	15670_s_at	17855_at	20190_at	
13918_at	15770_at	17864_at	20199_at	
13919_at	15775_at	17876_at	20200_at	
13944_at	15778_at	18008_r_at	20297_at	
13964_at	15792_at	18013_r_at	20324_s_at	
13987_s_at	15855_at	18024_s_at	20335_s_at	
13993_s_at	15891_at	18027_at	20353_at	
14000_at	15909_at	18053_s_at	20362_at	
14032_at	15923_at	18078_at	20385_s_at	
14043_at	15969_s_at	18082_at	20389_at	
14052_at	15975_s_at	18090_s_at	20402_s_at	
14067_at	15995_s_at	18091_at	20450_at	
14070_at	15998_s_at	18121_s_at	20468_at	
14269_at	16017_at	18264_at	20489_at	
14285_at	16050_at	18276_at	20546_at	
14427_at	16067_s_at	18300_at	20569_s_at	
14501_at	16072_s_at	18367_s_at	20600_at	
14540_at	16165_s_at	18471_at	20623_at	

TABLE 9: 2X UP SALT, 3 HR ONLY

12037_at	15042_at	16987_s_at	20004_s_at
12137_at	15047_at	16989_at	20053_at
12153_at	15062_at	17039_s_at	20133_i_at
12186_at	15063_at	17040_s_at	20138_at
12216_at	15108_s_at	17425_s_at	20190_at
12268_at	15133_s_at	17433_at	20199_at
12470_at	15147_s_at	17490_s_at	20200_at
12476_at	15170_s_at	17543_s_at	20220_at
12487_at	15175_s_at	17744_s_at	20362_at
12493_g_at	15182_s_at	17864_at	20385_s_at
12609_at	15190_s_at	17876_at	20389_at
12685_at	15192_s_at	18008_r_at	20489_at
12704_f_at	15324_at	18013_r_at	20546_at
12709_f_at	15424_at	18024_s_at	20623_at
12734_f_at	15467_at	18027_at	20648_s_at
12739_s_at	15497_s_at	18053_s_at	20678_at
12750_s_at	15623_f_at	18078_at	20707_s_at
12819_at	15636_s_at	18082_at	
12946_at	15646_s_at	18090_s_at	
13142_at	15670_s_at	18091_at	
13229_s_at	15770_at	18121_s_at	
13275_f_at	15775_at	18264_at	
13370_at	15778_at	18276_at	
13408_s_at	15792_at	18367_s_at	
13464_at	15855_at	18471_at	
13472_at	15891_at	18506_at	
13614_at	15909_at	18605_s_at	
13652_at	15923_at	18626_at	
13679_s_at	15969_s_at	18666_s_at	
13918_at	15975_s_at	18747_f_at	
13919_at	15995_s_at	18782_at	
13944_at	15998_s_at	18834_at	
13987_s_at	16017_at	18847_at	
13993_s_at	16050_at	18913_s_at	
14000_at	16067_s_at	18973_at	
14032_at	16072_s_at	18988_at	
14043_at	16165_s_at	19065_at	
14052_at	16196_at	19068_i_at	
14067_at	16273_at	19123_at	
14269_at	16314_at	19177_at	
14285_at	16414_at	19220_at	
14501_at	16417_s_at	19288_at	
14540_at	16455_at	19315_at	
14570_at	16548_s_at	19437_s_at	
14596_at	16582_s_at	19484_s_at	
14668_s_at	16589_s_at	19502_at	
14729_s_at	16594_s_at	19503_at	
14888_at	16613_s_at	19592_at	
14918_at	16651_s_at	19645_at	
14952_at	16668_at	19742_at	
14959_at	16762_at	19835_at	
14986_at	16820_at	19873_at	
15006_at	16873_i_at	19891_at	

TABLE 10: 2X DOWN SALT, ONLY

12011_s_at	16046_s_at	20239_g_at
12180_at	16060_s_at	20433_at
12265_at	16088_f_at	20629_at
12335_at	16150_s_at	20668_at
12479_at	16166_s_at	
12562_at	16316_at	
12656_at	16340_at	
12813_at	16367_i_at	
13003_s_at	16426_at	
13052_s_at	16427_at	
13094_at	16436_at	
13178_at	16489_at	
13253_f_at	16502_at	
13387_at	16568_s_at	
13429_at	16638_s_at	
13472_at	16646_s_at	
13569_at	17273_at	
13686_s_at	17278_at	
13718_at	17567_at	
13719_at	17868_at	
13902_at	17880_s_at	
14003_at	17894_at	
14144_at	17901_at	
14267_at	17942_s_at	
14418_at	17960_at	
14544_at	17999_at	
14546_s_at	18062_at	
14636_s_at	18240_s_at	
14951_at	18248_s_at	
14956_s_at	18267_at	
14979_at	18279_s_at	
14990_at	18287_at	
15040_g_at	18310_at	
15049_at	18351_s_at	
15115_f_at	18455_at	
15137_s_at	18560_at	
15148_s_at	18571_at	
15176_s_at	18618_s_at	
15208_s_at	18896_at	
15371_at	18899_s_at	
15453_s_at	18967_s_at	
15463_at	18983_s_at	
15465_at	19119_i_at	
15589_s_at	19121_at	
15663_s_at	19207_at	
15860_at	19348_at	
15898_at	19403_s_at	
15931_at	19609_at	
15965_at	19742_at	
15970_s_at	19826_at	
15972_s_at	19863_at	
16005_s_at	19883_at	
16028_at	20193_at	

TABLE 11

OSMOTIC STRESS RESPONSIVE SEQUENCES

SEQ ID NO:	AFFYMETRIX ID NO:
2428	11994_AT
2429	12028_AT
2430	12033_AT
2431	12039_AT
2432	12068_AT
2433	12096_AT
2434	12110_AT
2435	12114_AT
2436	12135_AT
2437	12139_AT
2438	12189_AT
2439	12191_AT
2440	12211_AT
2441	12223_S_AT
2442	12366_S_AT
	12869_S_AT
2443	12381_AT
2444	12406_S_AT
2445	12412_AT
2446	12453_AT
2447	12571_S_AT
2448	12662_AT
2449	12746_I_AT
2450	12774_AT
2451	12787_AT
2452	12847_AT
2453	12848_AT
2454	12895_AT
2455	12911_S_AT
2456	12920_AT
	12921_S_AT
2457	13027_AT
2458	13059_AT
2459	13075_I_AT
2460	13180_S_AT
2461	13255_I_AT
2462	13270_AT
	18167_S_AT
2463	13283_S_AT
2464	13382_AT
2465	13386_S_AT
2466	13433_AT
2467	13482_AT
2468	13732_AT
2469	13733_I_AT
2470	13842_AT
2471	13860_S_AT
2472	13868_AT
2473	13901_AT
2474	13933_AT
2475	13995_AT
2476	14062_AT
2477	14118_I_AT
2478	14141_AT
2479	14310_AT
2480	14354_AT
2481	14476_AT
2482	14513_S_AT
2483	14568_S_AT
2484	14604_AT
2485	14634_S_AT
2486	14660_S_AT
2487	14666_S_AT
2488	14686_S_AT
	17464_AT
2489	14726_S_AT
2490	14848_S_AT
2491	14873_AT
2492	14883_AT
2493	15082_AT
2494	15121_S_AT
	16014_S_AT
2495	15168_S_AT
2496	15271_AT
2497	15338_AT
2498	15418_AT
2499	15429_AT
2500	15548_AT
2501	15666_S_AT
2502	15672_S_AT
2503	15680_S_AT
2504	15867_AT
2505	15918_AT
2506	15999_S_AT
2507	16303_AT
2508	16363_AT
2509	16440_S_AT
2510	16458_S_AT
2511	16475_AT
2512	16513_S_AT
2513	16529_AT
2514	16547_S_AT
2515	16553_F_AT
2516	16563_S_AT
2517	16629_S_AT
2518	16797_AT
2519	16814_AT
2520	16832_AT
2521	16976_S_AT
2522	17007_AT
2523	17037_S_AT
2524	17054_S_AT
2525	17257_S_AT
	18725_S_AT
2526	17270_AT
2527	17275_I_AT
2528	17376_AT
2529	17378_AT
2530	17468_AT
2531	17481_AT
2532	17511_S_AT
2533	17519_S_AT
2534	17815_S_AT
2535	17897_AT
2536	17923_S_AT
2537	17934_AT
2538	17937_S_AT
2539	17944_AT
2540	17958_AT
2541	18216_AT
2542	18227_AT
2543	18284_AT
2544	18301_S_AT
2545	18312_S_AT
2546	18326_S_AT
2547	18369_AT
2548	18411_AT
2549	18533_AT
2550	18576_S_AT
2551	18599_AT
2552	18640_AT
2553	18672_S_AT
2554	18720_S_AT
2555	18768_AT
2556	18877_AT
2557	18942_AT
2558	18945_AT
2559	18960_AT
2560	18965_AT
2561	19060_AT
2562	19164_G_AT
2563	19266_AT
2564	19366_S_AT
2565	19369_AT
2566	19371_AT
2567	19386_AT
2568	19412_AT
2569	19427_S_AT
2570	19622_G_AT
2571	19681_AT

TABLE 11 (cont)

2572	19819_S_AT
2573	19961_S_AT
2574	20002_AT
2575	20034_I_AT
2576	20062_AT
2577	20136_AT
2578	20223_AT
2579	20235_I_AT
2580	20401_AT
2581	20407_AT
2582	20470_AT
2583	20626_AT
2584	20631_S_AT
2585	20647_AT

TABLE 12: 2X UP IN MANNITOL, ONLY

12039_at	16832_at
12068_at	16993_at
12139_at	17037_s_at
12212_at	17054_s_at
12278_at	17083_s_at
12366_s_at	17097_s_at
12453_at	17119_s_at
12556_at	17270_at
12575_s_at	17305_at
12746_i_at	17376_at
12848_at	17378_at
12869_s_at	17449_s_at
12920_at	17481_at
12921_s_at	17533_s_at
13041_s_at	17832_s_at
13059_at	17923_s_at
13241_s_at	17944_at
13255_i_at	18059_i_at
13270_at	18216_at
13382_at	18230_at
13406_at	18255_at
13433_at	18284_at
13550_at	18301_s_at
13672_s_at	18312_s_at
13716_at	18326_s_at
13842_at	18599_at
13933_at	18672_s_at
13995_at	18720_s_at
14062_at	18768_at
14075_at	18814_at
14162_at	18877_at
14208_at	18921_g_at
14217_at	18960_at
14235_at	19060_at
14310_at	19182_at
14431_at	19192_at
14513_s_at	19266_at
14584_at	19369_at
14604_at	19386_at
14673_s_at	19402_at
14856_s_at	19412_at
15207_s_at	19432_s_at
15338_at	19469_at
15406_at	19622_g_at
15418_at	19819_s_at
15591_s_at	19826_at
15666_s_at	20152_at
15680_s_at	20223_at
15866_s_at	20235_i_at
15918_at	20365_s_at
16340_at	20470_at
16553_f_at	20537_at
16797_at	20547_at

TABLE 13: 2X UP IN MANNITOL, 3 HR ONLY

12039_at	17449_s_at
12068_at	17481_at
12139_at	17533_s_at
12212_at	17923_s_at
12278_at	17944_at
12366_s_at	18059_i_at
12453_at	18216_at
12556_at	18230_at
12575_s_at	18255_at
12746_i_at	18301_s_at
12848_at	18312_s_at
12869_s_at	18326_s_at
12920_at	18599_at
12921_s_at	18720_s_at
13041_s_at	18768_at
13059_at	18814_at
13241_s_at	18877_at
13382_at	18921_g_at
13406_at	18960_at
13433_at	19060_at
13550_at	19192_at
13672_s_at	19266_at
13933_at	19369_at
13995_at	19386_at
14062_at	19402_at
14075_at	19412_at
14162_at	19432_s_at
14217_at	19469_at
14310_at	19622_g_at
14431_at	19819_s_at
14513_s_at	20152_at
14584_at	20223_at
14604_at	20235_i_at
14673_s_at	20365_s_at
14856_s_at	20470_at
15207_s_at	20537_at
15338_at	
15418_at	
15591_s_at	
15866_s_at	
15918_at	
16340_at	
16553_f_at	
16797_at	
16832_at	
17037_s_at	
17054_s_at	
17083_s_at	
17097_s_at	
17270_at	
17305_at	
17376_at	
17378_at	

TABLE 14: 2X DOWN IN MANNITOL, ONLY

12028_at	14897_at	17958_at
12033_at	14918_at	18012_s_at
12110_at	15082_at	18227_at
12114_at	15084_at	18272_at
12189_at	15098_s_at	18331_s_at
12191_at	15105_s_at	18369_at
12211_at	15121_s_at	18411_at
12223_s_at	15126_s_at	18533_at
12268_at	15168_s_at	18576_s_at
12345_at	15271_at	18640_at
12381_at	15429_at	18696_s_at
12406_s_at	15548_at	18945_at
12412_at	15672_s_at	18949_at
12522_at	15753_at	18953_at
12571_s_at	15867_at	18965_at
12662_at	15999_s_at	19164_g_at
12787_at	16001_at	19322_at
12847_at	16021_s_at	19366_s_at
12895_at	16190_at	19371_at
12911_s_at	16260_at	19397_at
13027_at	16303_at	19427_s_at
13075_i_at	16363_at	19681_at
13221_at	16458_s_at	19707_s_at
13262_s_at	16468_at	19839_at
13283_s_at	16475_at	19961_s_at
13386_s_at	16513_s_at	19976_at
13447_s_at	16529_at	19998_at
13482_at	16563_s_at	20002_at
13634_s_at	16690_g_at	20034_i_at
13709_s_at	16814_at	20136_at
13732_at	16847_at	20382_s_at
13733_i_at	16927_s_at	20407_at
13812_s_at	16976_s_at	20529_at
13825_s_at	17007_at	20626_at
13860_s_at	17014_s_at	20631_s_at
13868_at	17016_s_at	20647_at
13901_at	17071_s_at	20699_at
14052_at	17090_s_at	
14224_at	17257_s_at	
14244_s_at	17275_i_at	
14254_s_at	17424_at	
14256_f_at	17464_at	
14354_at	17468_at	
14476_at	17511_s_at	
14568_s_at	17519_s_at	
14634_s_at	17525_s_at	
14646_s_at	17645_s_at	
14660_s_at	17741_at	
14686_s_at	17815_s_at	
14726_s_at	17897_at	
14848_s_at	17899_at	
14873_at	17934_at	
14883_at	17937_s_at	

TABLE 15

COLD & OSOMOTIC STRESS RESPONSIVE SEQUENCES

SEQ ID NO:	AFFYMETRIX ID NO:
1699	12040_AT
1700	12048_AT
1701	12054_S_AT
1702	12077_AT
1703	12107_I_AT
1704	12113_AT
1705	12154_AT
1706	12171_AT
1707	12212_AT
1708	12278_AT
1709	12317_AT
1710	12325_AT
1711	12333_AT
1712	12345_AT
1713	12349_S_AT
	14254_S_AT
	14256_F_AT
1714	12356_AT
1715	12380_AT
1716	12392_AT
1717	12460_S_AT
1718	12556_AT
1719	12575_S_AT
1720	12686_S_AT
1721	12701_I_AT
1722	12754_G_AT
1723	12782_R_AT
1724	12784_AT
1725	12879_S_AT
1726	12891_AT
	16817_S_AT
1727	12898_G_AT
1728	12974_AT
1729	12998_AT
1730	13041_S_AT
1731	13124_AT
1732	13134_S_AT
1733	13144_AT
1734	13147_AT
1735	13152_S_AT
1736	13187_I_AT
	16981_S_AT
1737	13192_S_AT
	17525_S_AT
1738	13212_S_AT
1739	13215_S_AT
	16649_S_AT
1740	13241_S_AT
1741	13246_AT
1742	13262_S_AT
1743	13286_S_AT
1744	13324_AT
1745	13340_S_AT
1746	13361_AT
1747	13406_AT
1748	13441_S_AT
1749	13513_AT
1750	13550_AT
1751	13573_AT
1752	13577_S_AT
1753	13606_AT
1754	13609_AT
1755	13625_S_AT
1756	13626_AT
1757	13634_S_AT
1758	13672_S_AT
	18916_S_AT
1759	13709_S_AT
1760	13736_AT
1761	13775_AT
1762	13810_AT
1763	13812_S_AT
1764	13825_S_AT
1765	14015_S_AT
	14016_S_AT
1766	14029_AT
1767	14036_AT
1768	14051_AT
1769	14060_AT
1770	14064_AT
1771	14066_AT
1772	14075_AT
1773	14094_S_AT
	19999_S_AT
1774	14096_AT
1775	14104_AT
1776	14123_S_AT
1777	14126_S_AT
1778	14131_AT
1779	14136_AT
1780	14139_AT
	14140_AT
1781	14162_AT
	14217_AT
1782	14178_AT
1783	14201_AT
1784	14208_AT
1785	14235_AT
1786	14242_S_AT
1787	14431_AT
1788	14480_AT
1789	14497_AT
1790	14553_AT
1791	14584_AT
1792	14600_AT
1793	14673_S_AT
	19432_S_AT
1794	14681_G_AT
1795	14699_AT
1796	14751_AT
1797	14762_AT
1798	14828_S_AT
1799	14856_S_AT
1800	14882_AT
1801	14897_AT
1802	14978_AT
1803	14985_S_AT
1804	15031_AT
1805	15084_AT
1806	15096_AT
1807	15105_S_AT
1808	15110_S_AT
1809	15111_S_AT
1810	15120_S_AT
1811	15126_S_AT
1812	15142_S_AT
1813	15144_S_AT
1814	15184_S_AT
1815	15198_S_AT
1816	15203_S_AT
1817	15207_S_AT
1818	15240_AT
1819	15366_AT
1820	15398_AT
1821	15406_AT
1822	15448_AT
1823	15466_AT
1824	15481_AT
1825	15484_AT
1826	15549_AT
1827	15591_S_AT
1828	15606_S_AT
1829	15614_S_AT
	16927_S_AT
1830	15629_S_AT
1831	15633_S_AT
1832	15641_S_AT
	18012_S_AT
1833	15720_AT

TABLE 15 (cont)

1834	15815_S_AT	1884	17452_G_AT	1936	19469_AT
1835	15817_AT	1885	17540_S_AT	1937	19473_AT
1836	15837_AT	1886	17552_S_AT	1938	19597_S_AT
1837	15841_AT	1887	17571_AT	1939	19710_S_AT
1838	15866_S_AT	1888	17589_AT	1940	19830_AT
	18255_AT	1889	17641_G_AT	1941	19839_AT
1839	15872_AT	1890	17741_AT	1942	19840_S_AT
	18331_S_AT		18098_AT	1943	19853_AT
1840	15892_AT	1891	17766_AT	1944	19860_AT
1841	15933_AT	1892	17873_S_AT	1945	19880_AT
1842	15947_AT	1893	17904_AT	1946	19889_AT
1843	15959_S_AT	1894	17920_S_AT	1947	19898_AT
1844	16001_AT	1895	17925_AT	1948	19914_AT
1845	16052_AT	1896	17943_AT	1949	19924_AT
1846	16161_S_AT	1897	18059_I_AT	1950	19949_AT
1847	16204_AT	1898	18230_AT	1951	19976_AT
1848	16232_S_AT	1899	18263_AT	1952	19998_AT
1849	16252_AT	1900	18272_AT	1953	20030_AT
1850	16260_AT	1901	18540_AT	1954	20151_AT
1851	16266_AT	1902	18608_AT	1955	20152_AT
1852	16299_AT	1903	18647_AT	1956	20187_AT
1853	16365_AT	1904	18662_S_AT	1957	20214_I_AT
1854	16468_AT	1905	18664_AT	1958	20269_AT
1855	16477_AT	1906	18695_S_AT	1959	20271_AT
1856	16491_AT	1907	18704_AT	1960	20273_AT
1857	16523_S_AT	1908	18814_AT	1961	20299_AT
1858	16566_S_AT	1909	18907_S_AT	1962	20323_AT
1859	16570_S_AT	1910	18921_G_AT	1963	20429_S_AT
1860	16688_AT	1911	18924_AT	1964	20457_AT
1861	16840_AT	1912	18949_AT	1965	20480_S_AT
1862	16847_AT		19707_S_AT	1966	20529_AT
1863	16893_AT	1913	18995_AT	1967	20547_AT
1864	16896_S_AT	1914	19017_AT	1968	20555_S_AT
1865	16898_S_AT	1915	19034_AT	1969	20699_AT
1866	16912_S_AT	1916	19063_AT		
1867	16980_AT	1917	19142_AT		
1868	16993_AT	1918	19158_AT		
1869	17008_AT	1919	19180_AT		
1870	17012_S_AT	1920	19187_AT		
1871	17014_S_AT	1921	19192_AT		
1872	17016_S_AT	1922	19195_AT		
1873	17032_S_AT	1923	19199_AT		
1874	17050_S_AT	1924	19231_AT		
	17051_S_AT	1925	19263_AT		
1875	17071_S_AT	1926	19308_AT		
1876	17090_S_AT	1927	19322_AT		
	18690_S_AT	1928	19365_S_AT		
1877	17097_S_AT	1929	19372_AT		
1878	17104_S_AT	1930	19389_AT		
1879	17119_S_AT	1931	19392_AT		
1880	17160_AT	1932	19397_AT		
1881	17305_AT	1933	19400_AT		
1882	17424_AT	1934	19402_AT		
1883	17449_S_AT	1935	19458_AT		

TABLE 16: 2X UP IN MANNITOL & COLD, ONLY

12345_at	17066_s_at
12784_at	17540_s_at
13153_r_at	17567_at
13212_s_at	17766_at
13215_s_at	17904_at
13246_at	17920_s_at
13262_s_at	17943_at
13361_at	18263_at
13625_s_at	18351_s_at
13764_at	18662_s_at
13810_at	18670_g_at
14015_s_at	18695_s_at
14016_s_at	18704_at
14060_at	18729_at
14096_at	18995_at
14123_s_at	19158_at
14139_at	19473_at
14219_at	19710_s_at
14248_at	19883_at
14254_s_at	19889_at
14256_f_at	20030_at
14609_at	20269_at
14636_s_at	20271_at
14681_g_at	20299_at
14699_at	20429_s_at
14704_s_at	20438_at
14828_s_at	20480_s_at
14882_at	
15110_s_at	
15184_s_at	
15448_at	
15629_s_at	
15720_at	
15846_at	
15947_at	
16161_s_at	
16365_at	
16427_at	
16566_s_at	
16570_s_at	
16649_s_at	
16688_at	
16712_at	
16817_s_at	
16840_at	
16893_at	
16912_s_at	
16916_s_at	
16927_s_at	
16981_s_at	
17012_s_at	
17014_s_at	
17051_s_at	

TABLE 17: 2X DOWN COLD & MANNITOL, ONLY

12040_at	14553_at	17873_s_at
12048_at	14612_at	17925_at
12054_s_at	14751_at	18098_at
12077_at	14762_at	18540_at
12107_i_at	14978_at	18608_at
12113_at	14985_s_at	18647_at
12154_at	15031_at	18664_at
12171_at	15096_at	18690_s_at
12317_at	15111_s_at	18725_s_at
12325_at	15120_s_at	18924_at
12333_at	15142_s_at	19017_at
12356_at	15198_s_at	19034_at
12380_at	15203_s_at	19063_at
12392_at	15240_at	19141_at
12460_s_at	15366_at	19142_at
12686_s_at	15392_at	19180_at
12701_i_at	15398_at	19187_at
12782_r_at	15466_at	19195_at
12879_s_at	15481_at	19199_at
12898_g_at	15484_at	19231_at
12974_at	15549_at	19308_at
12998_at	15623_f_at	19372_at
13144_at	15815_s_at	19392_at
13147_at	15817_at	19400_at
13152_s_at	15841_at	19458_at
13192_s_at	15892_at	19597_s_at
13286_s_at	15933_at	19762_at
13324_at	15959_s_at	19830_at
13340_s_at	16052_at	19853_at
13441_s_at	16204_at	19869_at
13513_at	16252_at	19880_at
13573_at	16266_at	19898_at
13606_at	16299_at	19914_at
13609_at	16477_at	19924_at
13626_at	16491_at	19949_at
13736_at	16561_s_at	20151_at
13775_at	16645_s_at	20187_at
14029_at	16898_s_at	20214_i_at
14036_at	16980_at	20273_at
14051_at	17008_at	20323_at
14064_at	17104_s_at	20457_at
14066_at	17160_at	20555_s_at
14094_s_at	17317_at	
14104_at	17400_s_at	
14126_s_at	17452_g_at	
14131_at	17477_s_at	
14136_at	17500_s_at	
14178_at	17552_s_at	
14192_at	17571_at	
14201_at	17572_s_at	
14242_s_at	17589_at	
14480_at	17641_g_at	
14497_at	17855_at	

TABLE 18

COLD & SALINE STRESS RESPONSIVE SEQUENCES

SEQ ID NO:	AFFYMETRIX ID NO:
1970	12021_AT
1971	12037_AT
1972	12094_AT
1973	12098_AT
1974	12128_AT
1975	12148_AT
1976	12151_AT
1977	12357_S_AT
1978	12394_AT
1979	12472_S_AT
1980	12475_AT
1981	12482_S_AT
1982	12490_AT
1983	12505_S_AT
1984	12531_AT
1985	12540_S_AT
1986	12541_AT
1987	12577_AT
1988	12594_AT
1989	12629_AT
1990	12642_AT
1991	12656_AT
1992	12660_AT
1993	12712_F_AT
1994	12725_R_AT
1995	12745_AT
1996	12777_I_AT
1997	12790_S_AT
1998	12798_AT
1999	12801_AT
2000	12855_F_AT
2001	12887_S_AT
2002	12933_R_AT
2003	12951_AT
2004	13005_AT
2005	13015_S_AT
2006	13115_AT
2007	13178_AT
2008	13228_AT
2009	13236_S_AT
	16646_S_AT
2010	13266_S_AT
	15211_S_AT
2011	13275_F_AT
2012	13335_AT
2013	13362_S_AT
2014	13428_AT
2015	13464_AT
2016	13480_AT
2017	13538_AT
2018	13544_AT
2019	13549_AT
2020	13565_AT
SEQ ID NO:	AFFYMETRIX ID NO:
2021	13580_AT
2022	13588_AT
2023	13649_AT
2024	13652_AT
2025	13679_S_AT
2026	13696_AT
2027	13702_S_AT
2028	13751_AT
2029	13919_AT
2030	13943_AT
2031	13950_S_AT
2032	14050_AT
2033	14055_S_AT
	16166_S_AT
2034	14067_AT
2035	14078_AT
2036	14110_I_AT
2037	14144_AT
2038	14232_AT
2039	14285_AT
2040	14346_AT
2041	14432_AT
2042	14468_AT
2043	14479_AT
2044	14524_S_AT
2045	14608_AT
2046	14621_AT
2047	14635_S_AT
	17128_S_AT
2048	14640_S_AT
2049	14643_S_AT
2050	14663_S_AT
2051	14668_S_AT
2052	14688_S_AT
	18279_S_AT
2053	14737_S_AT
2054	14768_AT
2055	14875_AT
2056	14911_S_AT
	17056_S_AT
2057	14924_AT
2058	14956_S_AT
	15148_S_AT
	18673_AT
2059	14964_AT
2060	15022_AT
2061	15040_G_AT
2062	15047_AT
2063	15063_AT
2064	15085_S_AT
2065	15123_S_AT
2066	15133_S_AT
2067	15137_S_AT
SEQ ID NO:	AFFYMETRIX ID NO:
2068	15153_S_AT
2069	15170_S_AT
2070	15172_S_AT
2071	15182_S_AT
2072	15190_S_AT
2073	15241_S_AT
2074	15389_AT
2075	15453_S_AT
2076	15495_AT
2077	15496_AT
2078	15519_S_AT
2079	15562_AT
2080	15580_S_AT
2081	15582_S_AT
2082	15638_S_AT
	18751_F_AT
2083	15646_S_AT
2084	15647_S_AT
2085	15654_S_AT
2086	15655_S_AT
2087	15658_S_AT
2088	15670_S_AT
2089	15775_AT
2090	15798_AT
2091	15930_AT
2092	15931_AT
2093	15949_S_AT
2094	16017_AT
2095	16053_I_AT
2096	16078_S_AT
2097	16086_S_AT
2098	16120_S_AT
2099	16126_S_AT
2100	16150_S_AT
2101	16159_S_AT
2102	16230_AT
2103	16306_AT
2104	16367_I_AT
2105	16417_S_AT
	18083_R_AT
2106	16418_S_AT
2107	16423_AT
2108	16449_S_AT
2109	16484_S_AT

TABLE 18 (cont)

2110	16489_AT	2163	18455_AT	2218	20565_AT
2111	16565_S_AT	2164	18459_AT	2219	20570_AT
2112	16596_S_AT	2165	18571_AT	2220	20576_AT
2113	16600_S_AT	2166	18604_AT	2221	20577_AT
2114	16603_S_AT		19181_S_AT	2222	20609_AT
2115	16638_S_AT	2167	18644_AT	2223	20646_AT
2116	16642_S_AT	2168	18745_F_AT	2224	20672_AT
2117	16763_AT		19611_S_AT	2225	20707_S_AT
2118	16914_S_AT	2169	18782_AT	2226	20720_AT
2119	16968_AT	2170	18881_AT		
2120	16983_AT	2171	18904_S_AT		
2121	16989_AT	2172	18914_S_AT		
2122	17002_AT	2173	18963_AT		
2123	17015_S_AT	2174	19068_I_AT		
2124	17040_S_AT	2175	19078_AT		
	18913_S_AT	2176	19171_AT		
2125	17232_AT	2177	19177_AT		
2126	17380_AT	2178	19394_AT		
2127	17394_S_AT	2179	19411_AT		
	20640_S_AT	2180	19415_AT		
2128	17398_AT	2181	19466_S_AT		
2129	17448_AT	2182	19484_S_AT		
2130	17485_S_AT	2183	19549_S_AT		
2131	17490_S_AT	2184	19592_AT		
2132	17499_S_AT	2185	19633_AT		
2133	17505_S_AT	2186	19641_AT		
2134	17516_S_AT	2187	19669_AT		
2135	17529_S_AT	2188	19672_AT		
2136	17543_S_AT	2189	19684_AT		
2137	17593_R_AT	2190	19692_AT		
	19858_S_AT	2191	19746_AT		
2138	17609_AT	2192	19835_AT		
2139	17698_AT	2193	19848_S_AT		
2140	17836_AT	2194	19892_AT		
2141	17886_AT	2195	19904_AT		
2142	17896_AT	2196	19936_AT		
2143	17901_AT	2197	19974_S_AT		
2144	17902_S_AT	2198	19994_AT		
2145	17913_S_AT	2199	20005_S_AT		
2146	17924_AT	2200	20022_AT		
2147	17954_S_AT	2201	20032_AT		
2148	17960_AT	2202	20044_AT		
2149	17991_G_AT	2203	20049_AT		
	18967_S_AT	2204	20081_AT		
2150	17999_AT	2205	20133_I_AT		
2151	18057_I_AT	2206	20155_S_AT		
2152	18078_AT	2207	20163_S_AT		
2153	18091_AT	2208	20200_AT		
2154	18168_S_AT	2209	20296_S_AT		
2155	18252_AT	2210	20336_AT		
2156	18267_AT	2211	20341_AT		
2157	18300_AT	2212	20372_AT		
2158	18308_I_AT	2213	20385_S_AT		
2159	18328_AT	2214	20433_AT		
2160	18354_AT	2215	20489_AT		
2161	18402_AT	2216	20525_AT		
2162	18416_AT	2217	20543_AT		

TABLE 19: 2X UP IN SALT & COLD, ONLY

12004_at	15495_at	18745_f_at
12098_at	15496_at	18904_s_at
12148_at	15519_s_at	18914_s_at
12251_at	15580_s_at	18929_s_at
12357_s_at	15582_s_at	18946_at
12394_at	15776_at	18963_at
12457_at	15798_at	19078_at
12505_s_at	15910_at	19137_at
12522_at	15931_at	19141_at
12541_at	15937_at	19411_at
12594_at	15949_s_at	19641_at
12606_at	15972_s_at	19672_at
12697_at	16048_at	19684_at
12745_at	16086_s_at	19692_at
12781_at	16120_s_at	19746_at
12798_at	16126_s_at	19762_at
12855_f_at	16150_s_at	19869_at
12945_at	16159_s_at	19894_at
12951_at	16230_at	19904_at
13005_at	16306_at	19936_at
13015_s_at	16418_s_at	19994_at
13115_at	16423_at	20005_s_at
13146_s_at	16449_s_at	20031_at
13335_at	16565_s_at	20044_at
13447_s_at	16603_s_at	20382_s_at
13480_at	16763_at	20406_g_at
13544_at	16968_at	20421_at
13549_at	16983_at	20525_at
13580_at	17002_at	20543_at
13649_at	17015_s_at	20565_at
13943_at	17019_s_at	20570_at
13950_s_at	17078_s_at	20640_s_at
14110_i_at	17232_at	20646_at
14144_at	17317_at	20720_at
14224_at	17394_s_at	
14432_at	17516_s_at	
14468_at	17585_s_at	
14479_at	17609_at	
14524_s_at	17698_at	
14640_s_at	17836_at	
14643_s_at	17896_at	
14735_s_at	17899_at	
14737_s_at	17902_s_at	
14768_at	17960_at	
14784_at	17963_at	
14924_at	18168_s_at	
15064_at	18252_at	
15127_s_at	18267_at	
15186_s_at	18308_i_at	
15189_s_at	18354_at	
15255_at	18402_at	
15389_at	18459_at	
15482_at	18484_at	

TABLE 20: 2X DOWN IN COLD & SALT, ONLY

12021_at	15123_s_at	19394_at
12094_at	15153_s_at	19415_at
12128_at	15172_s_at	19466_s_at
12151_at	15190_s_at	19549_s_at
12332_s_at	15211_s_at	19592_at
12472_s_at	15241_s_at	19633_at
12475_at	15437_at	19669_at
12482_s_at	15562_at	19848_s_at
12490_at	15638_s_at	19858_s_at
12531_at	15647_s_at	19878_at
12540_s_at	15654_s_at	19892_at
12577_at	15655_s_at	19974_s_at
12629_at	15658_s_at	20022_at
12642_at	15695_s_at	20032_at
12660_at	15846_at	20049_at
12676_s_at	15930_at	20081_at
12712_f_at	16053_i_at	20155_s_at
12725_r_at	16078_s_at	20163_s_at
12777_i_at	16229_at	20296_s_at
12790_s_at	16465_at	20336_at
12801_at	16484_s_at	20341_at
12887_s_at	16596_s_at	20365_s_at
12933_r_at	16600_s_at	20372_at
13153_r_at	16642_s_at	20489_at
13228_at	16914_s_at	20491_at
13362_s_at	17027_s_at	20576_at
13428_at	17066_s_at	20577_at
13538_at	17083_s_at	20609_at
13565_at	17128_s_at	20672_at
13588_at	17380_at	
13696_at	17398_at	
13702_s_at	17448_at	
13716_at	17485_s_at	
13764_at	17490_s_at	
14050_at	17499_s_at	
14055_s_at	17505_s_at	
14069_at	17514_s_at	
14078_at	17593_r_at	
14232_at	17886_at	
14346_at	17913_s_at	
14608_at	17924_at	
14609_at	17954_s_at	
14621_at	17991_g_at	
14635_s_at	18057_i_at	
14663_s_at	18069_at	
14688_s_at	18328_at	
14691_at	18416_at	
14704_s_at	18604_at	
14875_at	18644_at	
14911_s_at	18881_at	
14964_at	19171_at	
15022_at	19181_s_at	
15085_s_at	19182_at	

TABLE 21

OSMOTIC & SALINE STRESS RESPONSIVE SEQUENCES

SEQ ID NO:	AFFYMETRIX ID NO:
2586	12126_S_AT
2587	12137_AT
2588	12227_AT
2589	12239_AT
2590	12268_AT
2591	12369_AT
2592	12476_AT
2593	12484_G_AT
2594	12494_AT
2595	12644_AT
2596	12645_AT
2597	12796_S_AT
2598	12819_AT
2599	12841_AT
2600	12852_S_AT
	19455_S_AT
2601	13084_AT
2602	13171_AT
2603	13174_R_AT
2604	13596_AT
2605	13807_AT
2606	13977_AT
2607	13999_AT
2608	14052_AT
2609	14293_AT
2610	14335_AT
2611	14486_AT
2612	14506_AT
2613	14518_AT
2614	14540_AT
2615	14578_S_AT
2616	14646_S_AT
2617	14662_F_AT
	15962_S_AT
2618	14901_AT
2619	14918_AT
2620	14986_AT
2621	15053_S_AT
2622	15179_S_AT
2623	15252_G_AT
2624	15280_AT
2625	15467_AT
2626	15607_S_AT
2627	15625_S_AT
2628	15703_I_AT
2629	15827_AT
2630	15863_AT
2631	15923_AT
2632	15946_S_AT
2633	16005_S_AT
2634	16073_F_AT
2635	16114_S_AT
2636	16127_S_AT
	18744_F_AT
2637	16190_AT
2638	16196_AT
2639	16236_G_AT
	19531_AT
2640	16310_AT
2641	16316_AT
2642	16334_S_AT
2643	16335_AT
2644	16340_AT
2645	16450_S_AT
2646	16500_AT
2647	16524_AT
2648	16533_AT
2649	16690_G_AT
2650	16762_AT
2651	16819_AT
2652	16873_I_AT
2653	16972_AT
2654	16991_AT
2655	17099_S_AT
2656	17339_AT
2657	17397_S_AT
2658	17419_AT
2659	17460_AT
2660	17554_S_AT
2661	17939_AT
2662	18013_R_AT
	18178_S_AT
2663	18024_S_AT
2664	18032_I_AT
2665	18054_AT
2666	18151_AT
2667	18281_AT
2668	18445_AT
2669	18520_AT
2670	18583_AT
2671	18663_S_AT
2672	18753_S_AT
2673	18876_AT
2674	18938_G_AT
2675	18971_AT
2676	18977_AT
2677	18981_AT
2678	19099_AT
2679	19196_AT
2680	19376_AT
2681	19409_AT
2682	19503_AT
2683	19826_AT
2684	19847_S_AT
2685	19930_AT
2686	19992_AT
2687	20096_AT
2688	20108_AT
2689	20256_S_AT
2690	20290_S_AT
2691	20298_AT
2692	20305_AT
2693	20322_AT
2694	20333_AT
2695	20402_S_AT
2696	20424_AT
2697	20446_S_AT
2698	20450_AT
2699	20468_AT
2700	20569_S_AT
2701	20639_AT
2702	20678_AT
2703	20686_AT

TABLE 22: 2X UP IN SALT & MANNITOL, ONLY

12126_s_at	17548_s_at
12227_at	17554_s_at
12369_at	17961_at
12521_at	18032_i_at
12644_at	18054_at
12645_at	18151_at
12724_f_at	18167_s_at
12795_at	18281_at
12796_s_at	18520_at
12841_at	18663_s_at
12852_s_at	18744_f_at
12958_at	18753_s_at
13014_at	18789_at
13174_r_at	18876_at
13211_s_at	18909_s_at
13596_at	18938_g_at
13640_at	18977_at
13789_at	19099_at
13977_at	19108_at
13999_at	19135_at
14069_at	19227_at
14083_at	19376_at
14089_at	19429_at
14293_at	19455_s_at
14675_s_at	19531_at
15053_s_at	19789_s_at
15058_s_at	19878_at
15252_g_at	20017_at
15280_at	20096_at
15437_at	20256_s_at
15607_s_at	20290_s_at
15625_s_at	20305_at
15827_at	20322_at
15863_at	20333_at
15880_at	20420_at
16005_s_at	20424_at
16031_at	20689_s_at
16073_f_at	
16316_at	
16334_s_at	
16335_at	
16450_s_at	
16500_at	
16524_at	
16533_at	
16597_s_at	
16819_at	
17085_s_at	
17099_s_at	
17339_at	
17419_at	
17442_i_at	
17514_s_at	

TABLE 23: 2X DOWN IN MANNITOL & SALT, ONLY

12239_at	20108_at
12251_at	20298_at
12476_at	20421_at
12484_g_at	20432_at
12494_at	20446_s_at
12561_at	20639_at
12647_s_at	
12719_f_at	
12819_at	
12841_at	
13084_at	
13171_at	
13172_s_at	
13435_at	
13807_at	
14250_r_at	
14335_at	
14486_at	
14506_at	
14518_at	
14901_at	
15046_s_at	
15179_s_at	
15451_at	
15703_i_at	
15946_s_at	
16014_s_at	
16114_s_at	
16310_at	
16342_at	
16712_at	
16762_at	
16972_at	
16991_at	
17397_s_at	
17408_at	
17460_at	
17775_at	
17939_at	
18445_at	
18583_at	
18751_f_at	
18971_at	
18981_at	
19156_s_at	
19196_at	
19359_s_at	
19409_at	
19503_at	
19713_at	
19718_at	
19847_s_at	
19930_at	

TABLE 24

COLD, OSMOTIC & SALINE RESPONSIVE SEQUENCES

SEQ ID NO:	AFFYMETRIX ID NO:
1262	12004_AT
1263	12023_S_AT
1264	12078_AT
1265	12115_AT
1266	12118_AT
1267	12150_AT
1268	12251_AT
1269	12271_S_AT
1270	12276_AT
1271	12332_S_AT
	13211_S_AT
1272	12338_AT
1273	12400_AT
1274	12430_AT
1275	12457_AT
1276	12521_AT
1277	12522_AT
1278	12530_AT
1279	12536_S_AT
1280	12538_AT
1281	12561_AT
1282	12574_AT
	19019_I_AT
1283	12595_AT
1284	12606_AT
1285	12609_AT
1286	12622_AT
1287	12630_AT
1288	12647_S_AT
1289	12676_S_AT
1290	12697_AT
1291	12698_AT
1292	12719_F_AT
1293	12724_F_AT
	15871_S_AT
	16597_S_AT
1294	12749_AT
1295	12765_AT
1296	12769_AT
1297	12781_AT
1298	12785_AT
1299	12792_S_AT
1300	12795_AT
1301	12805_S_AT
1302	12857_AT
1303	12883_S_AT
1304	12909_S_AT
	16539_S_AT
1305	12932_S_AT
	15605_S_AT
1306	12945_AT
1307	12958_AT
1308	12964_AT
1309	12968_AT
1310	12972_AT
1311	12989_S_AT
1312	13004_AT
1313	13014_AT
1314	13025_AT
1315	13036_AT
1316	13099_S_AT
1317	13136_AT
1318	13146_S_AT
	13239_S_AT
1319	13153_R_AT
1320	13159_AT
1321	13176_AT
1322	13217_S_AT
	17500_S_AT
1323	13225_S_AT
	15997_S_AT
1324	13230_S_AT
	15972_S_AT
1325	13279_S_AT
	17477_S_AT
1326	13280_S_AT
	20301_S_AT
1327	13282_S_AT
	17027_S_AT
1328	13426_AT
1329	13432_AT
1330	13435_AT
1331	13447_S_AT
1332	13474_AT
1333	13511_AT
1334	13546_AT
1335	13547_S_AT
1336	13548_AT
1337	13555_AT
1338	13587_AT
1339	13595_AT
1340	13610_S_AT
1341	13627_AT
1342	13640_AT
1343	13645_AT
1344	13647_AT
1345	13706_S_AT
	19701_S_AT
1346	13716_AT
	18228_AT
1347	13725_AT
1348	13764_AT
1349	13771_AT
1350	13789_AT
1351	13916_AT
1352	13965_S_AT
1353	13967_AT
1354	14028_AT
1355	14039_AT
1356	14046_AT
1357	14049_AT
1358	14069_AT
1359	14077_AT
1360	14080_AT
1361	14083_AT
1362	14089_AT
1363	14090_I_AT
1364	14097_AT
1365	14116_AT
1366	14151_AT
	14219_AT
1367	14170_AT
1368	14172_AT
1369	14192_AT
1370	14224_AT
1371	14227_AT
1372	14244_S_AT
	14245_AT
	14645_S_AT
	15974_G_AT
1373	14248_AT
1374	14250_R_AT
1375	14367_AT
1376	14381_AT
1377	14384_AT
1378	14398_S_AT
1379	14487_AT
1380	14582_AT
1381	14597_AT
1382	14609_AT
1383	14612_AT
	19267_S_AT
1384	14614_AT
1385	14636_S_AT
1386	14644_S_AT
	14658_S_AT
	14659_S_AT
	15964_S_AT
1387	14675_S_AT

TABLE 24 (cont)

1388	14691_AT
	14709_AT
1389	14704_S_AT
	15846_AT
1390	14705_I_AT
1391	14733_S_AT
1392	14735_S_AT
1393	14779_AT
1394	14784_AT
1395	14923_AT
1396	14947_AT
1397	14950_AT
1398	14990_AT
1399	14998_AT
1400	15005_S_AT
1401	15018_AT
1402	15045_AT
1403	15046_S_AT
1404	15052_AT
1405	15058_S_AT
1406	15064_AT
1407	15088_S_AT
1408	15098_S_AT
1409	15103_S_AT
1410	15109_S_AT
1411	15124_S_AT
1412	15127_S_AT
1413	15145_S_AT
1414	15154_S_AT
1415	15161_S_AT
1416	15189_S_AT
1417	15214_S_AT
1418	15255_AT
1419	15356_AT
1420	15357_AT
1421	15364_AT
1422	15392_AT
1423	15403_S_AT
1424	15437_AT
1425	15451_AT
1426	15476_AT
1427	15482_AT
1428	15483_S_AT
1429	15521_S_AT
1430	15522_I_AT
1431	15531_I_AT
1432	15573_AT
1433	15581_S_AT
1434	15586_S_AT
1435	15594_S_AT
1436	15609_S_AT
1437	15611_S_AT
1438	15621_F_AT
1439	15623_F_AT
1440	15669_S_AT
1441	15695_S_AT
1442	15702_S_AT
1443	15753_AT
1444	15761_AT
1445	15776_AT
1446	15778_AT
1447	15839_AT
1448	15842_AT
1449	15857_S_AT
1450	15859_AT
1451	15880_AT
1452	15886_AT
1453	15906_S_AT
1454	15910_AT
1455	15937_AT
1456	15957_AT
1457	15970_S_AT
1458	15985_AT
1459	16010_S_AT
	16011_S_AT
	17078_S_AT
1460	16021_S_AT
1461	16031_AT
1462	16038_S_AT
1463	16045_S_AT
1464	16046_S_AT
1465	16048_AT
1466	16061_S_AT
1467	16082_S_AT
1468	16111_F_AT
1469	16115_S_AT
1470	16141_S_AT
1471	16144_S_AT
1472	16163_S_AT
1473	16173_S_AT
1474	16229_AT
1475	16298_AT
1476	16301_S_AT
1477	16322_AT
1478	16342_AT
1479	16351_AT
1480	16412_S_AT
1481	16422_AT
1482	16427_AT
1483	16438_AT
1484	16474_S_AT
1485	16482_S_AT
1486	16485_S_AT
	18052_S_AT
1487	16493_AT
1488	16534_S_AT
1489	16555_S_AT
1490	16561_S_AT
	17572_S_AT
1491	16592_S_AT
1492	16615_S_AT
1493	16637_S_AT
1494	16692_AT
1495	16712_AT
1496	16789_AT
1497	16818_S_AT
1498	16971_S_AT
1499	17018_S_AT
1500	17019_S_AT
1501	17029_S_AT
1502	17041_S_AT
1503	17047_S_AT
1504	17066_S_AT
1505	17085_S_AT
1506	17089_S_AT
1507	17179_AT
1508	17180_AT
1509	17228_AT
1510	17252_AT
1511	17317_AT
1512	17338_AT
1513	17384_AT
1514	17387_S_AT
1515	17400_S_AT
1516	17407_S_AT
1517	17408_AT
1518	17413_S_AT
1519	17416_AT
1520	17425_S_AT
1521	17440_I_AT
1522	17442_I_AT
1523	17473_AT
1524	17484_AT
1525	17514_S_AT
1526	17520_S_AT
1527	17533_S_AT
1528	17548_S_AT
	19614_AT
1529	17549_S_AT
1530	17555_S_AT
1531	17567_AT
1532	17654_AT
1533	17693_AT
1534	17697_AT
1535	17722_AT
1536	17752_AT
1537	17755_AT
1538	17775_AT
1539	17832_S_AT
1540	17840_S_AT
1541	17843_S_AT
1542	17855_AT
1543	17860_AT
1544	17869_AT
1545	17888_AT
1546	17899_AT
1547	17929_S_AT
1548	17930_S_AT
1549	17932_S_AT
1550	17936_S_AT
	18670_G_AT

TABLE 24 (cont)

1551	17957_AT
1552	17961_AT
1553	17962_AT
1554	17963_AT
1555	17971_S_AT
1556	17975_AT
	18742_F_AT
1557	18016_R_AT
1558	18069_AT
1559	18122_AT
1560	18140_AT
1561	18199_AT
1562	18224_S_AT
1563	18225_AT
1564	18235_AT
1565	18259_S_AT
1566	18265_AT
1567	18270_AT1568
	18280_AT
1569	18289_AT
1570	18296_AT
1571	18298_AT
1572	18314_I_AT
1573	18318_AT
1574	18325_AT
1575	18351_S_AT
1576	18471_AT
1577	18482_S_AT
1578	18484_AT
1579	18560_AT
1580	18564_AT
1581	18590_AT
1582	18594_AT
1583	18595_AT
1584	18596_AT
1585	18629_S_AT
1586	18637_AT
1587	18661_AT
1588	18668_AT
1589	18699_I_AT
1590	18747_F_AT
	18789_AT
1591	18761_AT
1592	18833_AT
1593	18875_S_AT
1594	18894_AT
1595	18936_AT
1596	18946_AT
1597	18953_AT
1598	18955_AT
1599	18972_AT
1600	19008_S_AT
1601	19108_AT
1602	19123_AT
1603	19135_AT
1604	19137_AT
1605	19141_AT
1606	19152_AT
1607	19156_S_AT
1608	19182_AT
1609	19186_S_AT
1610	19214_AT
1611	19216_AT
1612	19227_AT
1613	19243_AT
1614	19288_AT
1615	19359_S_AT
1616	19368_AT
1617	19379_AT
1618	19380_S_AT
1619	19398_AT
1620	19421_AT
1621	19424_AT
1622	19429_AT
1623	19430_AT
1624	19450_AT
1625	19457_AT
1626	19467_AT
1627	19516_AT
1628	19545_AT
1629	19564_AT
1630	19577_AT
1631	19593_AT
1632	19602_AT
1633	19618_AT
1634	19638_AT
1635	19640_AT
1636	19646_S_AT
1637	19656_S_AT
1638	19670_AT
1639	19696_AT
1640	19713_AT
1641	19718_AT
1642	19722_S_AT
1643	19749_AT
1644	19755_AT
1645	19762_AT
1646	19789_S_AT
1647	19815_AT
1648	19843_AT
1649	19869_AT
1650	19878_AT
1651	19883_AT
1652	19894_AT
1653	19926_AT
1654	19944_AT
1655	19968_AT
1656	19977_AT
1657	19982_AT
1658	19987_AT
1659	19991_AT
1660	20015_AT
1661	20017_AT
1662	20031_AT
1663	20040_AT
1664	20042_S_AT
1665	20060_AT
	20438_AT
1666	20089_AT
1667	20118_AT
1668	20144_AT
1669	20149_AT
1670	20179_AT
1671	20190_AT
1672	20194_AT
1673	20219_AT
1674	20245_S_AT
1675	20263_AT
1676	20308_S_AT
1677	20335_S_AT
1678	20338_AT
1679	20345_AT
1680	20365_S_AT
1681	20382_S_AT
1682	20390_S_AT
1683	20395_AT
1684	20420_AT
1685	20421_AT
1686	20432_AT
1687	20437_AT
1688	20442_I_AT
1689	20463_S_AT
1690	20491_AT
1691	20537_AT
1692	20573_AT
1693	20636_AT
1694	20638_AT
1695	20641_AT
1696	20658_S_AT
1697	20689_S_AT
1698	20698_S_AT

TABLE 25: 2X UP IN COLD, SALT & MANNITOL

12023_s_at	14733_s_at	17047_s_at	19640_at
12332_s_at	14923_at	17179_at	19646_s_at
12530_at	14990_at	17180_at	19656_s_at
12536_s_at	15005_s_at	17252_at	19701_s_at
12574_at	15018_at	17384_at	19843_at
12595_at	15052_at	17407_s_at	19944_at
12698_at	15088_s_at	17484_at	19982_at
12749_at	15098_s_at	17520_s_at	19987_at
12765_at	15103_s_at	17555_s_at	19991_at
12769_at	15145_s_at	17572_s_at	20042_s_at
12785_at	15154_s_at	17722_at	20060_at
12857_at	15161_s_at	17752_at	20118_at
12964_at	15214_s_at	17840_s_at	20144_at
12972_at	15356_at	17843_s_at	20149_at
12989_s_at	15521_s_at	17860_at	20179_at
13004_at	15573_at	17929_s_at	20194_at
13025_at	15586_s_at	17936_s_at	20245_s_at
13036_at	15609_s_at	17962_at	20390_s_at
13099_s_at	15611_s_at	18052_s_at	20437_at
13136_at	15621_f_at	18069_at	20463_s_at
13176_at	15669_s_at	18122_at	20491_at
13220_s_at	15695_s_at	18199_at	20641_at
13225_s_at	15753_at	18259_s_at	20658_s_at
13230_s_at	15761_at	18280_at	
13239_s_at	15857_s_at	18289_at	
13426_at	15871_s_at	18314_i_at	
13474_at	15964_s_at	18318_at	
13548_at	15970_s_at	18325_at	
13555_at	15974_g_at	18482_s_at	
13595_at	15997_s_at	18590_at	
13627_at	16011_s_at	18594_at	
13645_at	16021_s_at	18595_at	
13647_at	16038_s_at	18596_at	
13706_s_at	16046_s_at	18629_s_at	
13965_s_at	16082_s_at	18661_at	
13967_at	16111_f_at	18668_at	
14080_at	16115_s_at	18699_i_at	
14090_i_at	16127_s_at	18722_s_at	
14097_at	16141_s_at	18936_at	
14116_at	16144_s_at	18953_at	
14151_at	16163_s_at	18955_at	
14172_at	16236_g_at	18972_at	
14192_at	16301_s_at	19008_s_at	
14244_s_at	16322_at	19152_at	
14245_at	16422_at	19186_s_at	
14367_at	16474_s_at	19214_at	
14398_s_at	16482_s_at	19368_at	
14582_at	16485_s_at	19379_at	
14614_at	16555_s_at	19380_s_at	
14644_s_at	16561_s_at	19421_at	
14645_s_at	16592_s_at	19545_at	
14658_s_at	16637_s_at	19614_at	
14659_s_at	17041_s_at	19638_at	

TABLE 26: 2X DOWN IN COLD, MANNITOL & SALT, ONLY

12078_at	15189_s_at	17869_at	20015_at
12115_at	15357_at	17888_at	20040_at
12118_at	15364_at	17930_s_at	20089_at
12150_at	15403_s_at	17932_s_at	20190_at
12271_s_at	15476_at	17957_at	20219_at
12276_at	15483_s_at	17963_at	20263_at
12338_at	15522_i_at	17971_s_at	20301_s_at
12400_at	15531_i_at	17975_at	20308_s_at
12430_at	15594_s_at	18016_r_at	20338_at
12538_at	15702_s_at	18140_at	20345_at
12622_at	15778_at	18224_s_at	20395_at
12630_at	15839_at	18225_at	20442_i_at
12792_s_at	15842_at	18228_at	20537_at
12805_s_at	15859_at	18235_at	20573_at
12883_s_at	15872_at	18265_at	20636_at
12909_s_at	15880_at	18270_at	20638_at
12932_s_at	15886_at	18296_at	20698_s_at
12968_at	15906_s_at	18298_at	
13159_at	15957_at	18471_at	
13217_s_at	15985_at	18564_at	
13279_s_at	16045_s_at	18637_at	
13282_s_at	16061_s_at	18742_f_at	
13432_at	16173_s_at	18761_at	
13511_at	16298_at	18833_at	
13546_at	16351_at	18875_s_at	
13547_s_at	16412_s_at	18894_at	
13587_at	16438_at	18946_at	
13610_s_at	16493_at	19123_at	
13640_at	16534_s_at	19216_at	
13725_at	16539_s_at	19243_at	
13771_at	16615_s_at	19267_s_at	
13916_at	16692_at	19288_at	
14028_at	16789_at	19398_at	
14039_at	16818_s_at	19424_at	
14046_at	16971_s_at	19430_at	
14049_at	17018_s_at	19450_at	
14077_at	17029_s_at	19457_at	
14170_at	17089_s_at	19467_at	
14227_at	17228_at	19516_at	
14248_at	17338_at	19564_at	
14381_at	17387_s_at	19577_at	
14384_at	17413_s_at	19593_at	
14487_at	17416_at	19602_at	
14597_at	17425_s_at	19618_at	
14705_i_at	17440_i_at	19670_at	
14709_at	17473_at	19696_at	
14779_at	17533_s_at	19722_s_at	
14947_at	17549_s_at	19749_at	
14950_at	17654_at	19755_at	
14998_at	17693_at	19815_at	
15045_at	17697_at	19926_at	
15109_s_at	17755_at	19968_at	
15124_s_at	17832_s_at	19977_at	

TABLE 27: 2X ROOT SPECIFIC (COLD, SALINE & OSMOTIC STRESSES)

11997_at	14069_at	16052_at	18327_s_at
12004_at	14072_at	16053_i_at	18597_at
12051_at	14073_at	16105_s_at	18607_s_at
12072_at	14097_at	16161_s_at	18636_at
12150_at	14139_at	16165_s_at	18663_s_at
12151_at	14235_at	16298_at	18782_at
12166_i_at	14250_r_at	16334_s_at	18885_at
12219_at	14578_s_at	16422_at	18888_at
12315_at	14582_at	16427_at	18942_at
12332_s_at	14640_s_at	16440_s_at	18955_at
12374_i_at	14643_s_at	16442_s_at	19060_at
12482_s_at	14644_s_at	16468_at	19108_at
12515_at	14658_s_at	16488_at	19135_at
12522_at	14659_s_at	16511_at	19137_at
12538_at	14711_s_at	16529_at	19195_at
12571_s_at	14900_at	16553_f_at	19263_at
12574_at	14924_at	16568_s_at	19376_at
12609_at	14990_at	16914_s_at	19406_at
12678_i_at	15018_at	16965_s_at	19432_s_at
12698_at	15022_at	16981_s_at	19835_at
12749_at	15107_s_at	16989_at	19836_at
12760_g_at	15116_f_at	17033_s_at	19840_s_at
12765_at	15120_s_at	17066_s_at	19841_at
12768_at	15124_s_at	17085_s_at	19843_at
12769_at	15131_s_at	17252_at	19926_at
12772_at	15132_s_at	17376_at	19972_at
12777_i_at	15137_s_at	17378_at	19977_at
12958_at	15184_s_at	17388_at	19991_at
12989_s_at	15188_s_at	17415_at	20034_i_at
13015_s_at	15208_s_at	17429_s_at	20042_s_at
13134_s_at	15252_g_at	17463_at	20189_at
13146_s_at	15343_at	17485_s_at	20194_at
13172_s_at	15389_at	17490_s_at	20200_at
13178_at	15392_at	17567_at	20214_i_at
13179_at	15448_at	17585_s_at	20239_g_at
13187_i_at	15503_at	17595_s_at	20262_at
13211_s_at	15531_i_at	17840_s_at	20269_at
13239_s_at	15594_s_at	17860_at	20294_at
13273_s_at	15609_s_at	17880_s_at	20312_s_at
13297_s_at	15623_f_at	17894_at	20382_s_at
13549_at	15639_s_at	17896_at	20396_at
13604_at	15670_s_at	17899_at	20432_at
13629_s_at	15680_s_at	17911_at	20444_at
13706_s_at	15859_at	17935_at	20446_s_at
13714_at	15900_at	17961_at	20480_s_at
13751_at	15923_at	18024_s_at	20586_i_at
13895_at	15962_s_at	18122_at	20612_s_at
13933_at	15964_s_at	18222_at	20672_at
13967_at	15965_at	18224_s_at	20686_at
13985_s_at	15975_s_at	18252_at	20689_s_at
14028_at	15985_at	18255_at	
14030_at	16001_at	18269_s_at	
14058_at	16048_at	18270_at	

TABLE 28: 2X LEAF SPECIFIC (COLD, SALINE & OSMOTIC STRESSES)

12169_i_at	16136_s_at
12186_at	16172_s_at
12187_at	16316_at
12211_at	16385_s_at
12212_at	16455_at
12214_g_at	16485_s_at
12270_at	16512_s_at
12645_at	16547_s_at
12754_g_at	16548_s_at
12774_at	16629_s_at
12793_at	16673_at
12796_s_at	16899_at
12910_s_at	17010_s_at
12916_s_at	17018_s_at
12953_at	17054_s_at
13090_at	17095_s_at
13124_at	17097_s_at
13335_at	17273_at
13550_at	17394_s_at
13567_at	17420_at
13568_at	17449_s_at
13596_at	17600_s_at
13614_at	17843_s_at
13678_s_at	17913_s_at
13719_at	17966_at
14014_at	18003_at
14096_at	18081_at
14118_i_at	18560_at
14369_at	18588_at
14478_at	18626_at
14513_s_at	18644_at
14540_at	18666_s_at
14596_at	18742_f_at
14733_s_at	18977_at
14986_at	18994_at
15045_at	19227_at
15097_s_at	19373_at
15098_s_at	19834_at
15145_s_at	19867_at
15153_s_at	19998_at
15154_s_at	20062_at
15182_s_at	20199_at
15203_s_at	20256_s_at
15372_at	20284_at
15521_s_at	20437_at
15581_s_at	20442_i_at
15621_f_at	20450_at
15642_s_at	20468_at
15776_at	20547_at
15910_at	20635_s_at
16017_at	
16046_s_at	
16115_s_at	

TABLE 29: 2X TRANSCRIPTION (COLD, SALINE & OSMOTIC STRESSES)

12068_at	15665_s_at	19836_at
12166_i_at	15679_s_at	19860_at
12374_i_at	15720_at	19866_at
12392_at	15871_s_at	19898_at
12431_at	16072_s_at	20262_at
12450_s_at	16073_f_at	20335_s_at
12503_at	16105_s_at	20362_at
12536_s_at	16111_f_at	20424_at
12540_s_at	16127_s_at	20437_at
12541_at	16534_s_at	20456_at
12587_at	16582_s_at	20515_s_at
12594_at	16589_s_at	20635_s_at
12595_at	16747_at	
12704_f_at	17019_s_at	
12705_f_at	17129_s_at	
12709_f_at	17160_at	
12712_f_at	17520_s_at	
12719_f_at	17538_s_at	
12724_f_at	17555_s_at	
12725_r_at	17609_at	
12726_f_at	17896_at	
12734_f_at	17971_s_at	
12736_f_at	17975_at	
12737_f_at	17978_s_at	
12812_at	18121_s_at	
12949_at	18167_s_at	
12951_at	18197_at	
12966_s_at	18222_at	
13023_at	18318_at	
13034_s_at	18576_s_at	
13087_at	18629_s_at	
13270_at	18738_f_at	
13273_s_at	18742_f_at	
13432_at	18744_f_at	
13555_at	18745_f_at	
13688_s_at	18747_f_at	
13714_at	18750_f_at	
13965_s_at	18751_f_at	
13987_s_at	18789_at	
14003_at	18834_at	
14144_at	18942_at	
14178_at	19083_at	
14223_at	19202_at	
14235_at	19209_s_at	
14303_s_at	19232_s_at	
14393_at	19315_at	
14553_at	19489_s_at	
14781_at	19611_s_at	
15046_s_at	19646_s_at	
15053_s_at	19707_s_at	
15214_s_at	19722_s_at	
15510_r_at	19744_at	
15638_s_at	19755_at	

TABLE 30: 2X PHOSPHATES (COLD, SALINE & OSMOTIC STRESSES)

12470_at
12556_at
13128_at
13135_s_at
13180_s_at
13192_s_at
13193_s_at
13587_at
13995_at
14335_at
15073_at
15171_s_at
15240_at
15586_s_at
15641_s_at
15651_f_at
15990_at
16232_s_at
16576_f_at
16753_at
17423_s_at
17525_s_at
17537_s_at
17929_s_at
17954_s_at
18012_s_at
18308_i_at
18616_at
18847_at
18936_at
18980_at
19243_at
19263_at
19638_at
19883_at
19932_at
20333_at
20393_at
20570_at

TABLE 31: 2X KINASES (COLD, SALINE & OSMOTIC STRESSES)

12253_g_at	16059_s_at	20144_at
12270_at	16087_s_at	20219_at
12271_s_at	16088_f_at	20223_at
12276_at	16125_s_at	20232_s_at
12278_at	16137_s_at	20235_i_at
12284_at	16140_s_at	20282_s_at
12300_at	16143_s_at	20298_at
12307_at	16144_s_at	20396_at
12353_at	16160_f_at	20439_at
12357_s_at	16171_s_at	20462_at
12390_at	16357_at	
12394_at	16412_s_at	
12395_s_at	16568_s_at	
12408_at	16570_s_at	
12452_at	16571_s_at	
12477_at	16584_s_at	
12490_at	16651_s_at	
12497_at	16652_s_at	
12532_at	16672_at	
12697_at	16818_s_at	
12901_s_at	16840_at	
12902_at	17068_s_at	
12958_at	17122_s_at	
12959_at	17252_at	
13068_at	17323_at	
13246_at	17475_at	
13324_at	17752_at	
13332_at	17921_s_at	
13362_s_at	17933_at	
13370_at	17935_at	
13550_at	18013_r_at	
14030_at	18046_s_at	
14048_at	18122_at	
14194_at	18176_at	
14196_at	18316_at	
14217_at	18455_at	
14459_at	18459_at	
14603_at	18482_s_at	
14637_s_at	18543_at	
14686_s_at	18706_s_at	
15005_s_at	18782_at	
15175_s_at	18924_at	
15270_at	19117_s_at	
15475_s_at	19437_s_at	
15497_s_at	19442_at	
15577_s_at	19458_at	
15616_s_at	19464_at	
15633_s_at	19469_at	
15634_s_at	19562_at	
15668_s_at	19655_at	
15680_s_at	19749_at	
15798_at	19854_at	
16034_at	19904_at	

TABLE 32

GenBank accession numbers and source organisms for nucleotide and amino acid sequence homologs of the listed SEQ ID NO:

SEQ ID NO. 4		
AAG14455.1	AF283707	Tulipa gesneriana
AAG14456.1	AF283708	Tulipa gesneriana
AAG14454.1	AF283706	Tulipa gesneriana
SEQ ID NO. 12		
BAB20886.1	AB053294	Oryza sativa
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA33082.1	X14959	Spinacia oleracea
AAC04671.1	AF018174	Brassica napus
AAF88067.1	AF286593	Triticum aestivum
BAA25681.1	AB010434	Brassica rapa
AAC32111.1	AF051206	Picea mariana
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAB53694.1	U59379	Brassica napus
BAA05546.1	D26547	Oryza sativa
BAA04864.1	D21836	Oryza sativa
AAB51522.1	U92541	Oryza sativa
CAA94534.1	Z70677	Ricinus communis
CAA35827.1	X51463	Spinacia oleracea
CAA35826.1	X51462	Spinacia oleracea
SEQ ID NO. 13		
BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95704.1	AB042643	Oryza sativa
BAA95705.1	AB042644	Oryza sativa
SEQ ID NO. 17		
BAA13181.1	D86925	Oryza sativa
SEQ ID NO. 40		
BAB20583.1	AB042270	Zea mays
AAK13126.1	AC083945	Oryza sativa
CAC09578.1	AJ298990	Fagus sylvatica
SEQ ID NO. 41		
BAB39155.1	AB048713	Pisum sativum
AAG13663.1	AF263457	Zea mays
BAA90816.1	AP001168	Oryza sativa
AAC98090.1	AF067400	Zea mays
AAC98091.1	AF067401	Oryza sativa
SEQ ID NO. 48		
CAA61510.1	X89226	Oryza sativa
AAF59906.1	AF197947	Glycine max
AAF91322.1	AF244888	Glycine max
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
AAF59905.1	AF197946	Glycine max
AAC36318.1	AF053127	Malus x domestica
CAC20842.1	AJ250467	Pinus sylvestris
AAB36558.1	U77888	Ipomoea nil
BAA83373.1	AP000391	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
AAF34426.1	AF172282	Oryza sativa
AAC49123.1	U37133	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata
AAB82755.1	U72725	Oryza longistaminata
AAB82756.1	U72724	Oryza sativa
BAA88636.1	AB029327	Nicotiana tabacum
AAG52992.1	U77888	Ipomoea nil
AAB82753.1	U72726	Oryza longistaminata
SEQ ID NO. 49		
AAB82755.1	U72725	Oryza longistaminata

AAC49123.1	U37133	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata
AAF34426.1	AF172282	Oryza sativa
CAC20842.1	AJ250467	Pinus sylvestris
BAA83373.1	AP000391	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
AAB82756.1	U72724	Oryza sativa
AAF91323.1	AF244889	Glycine max
AAC36318.1	AF053127	Malus x domestica
AAF91324.1	AF244890	Glycine max
AAF91322.1	AF244888	Glycine max
AAF59905.1	AF197946	Glycine max
AAF59906.1	AF197947	Glycine max
AAB36558.1	U77888	Ipomoea nil
CAA61510.1	X89226	Oryza sativa
AAB82753.1	U72726	Oryza longistaminata
BAA88636.1	AB029327	Nicotiana tabacum
AAG52992.1	U77888	Ipomoea nil
AAB61708.1	U93048	Daucus carota

SEQ ID NO. 50

BAA22559.1	AB007503	Glycine max
BAA24289.1	AB010148	Panax ginseng
BAA13084.1	D86410	Glycyrrhiza glabra
BAA13083.1	D86409	Glycyrrhiza glabra
AAB08578.1	U60057	Nicotiana tabacum
AAD20626.1	AF124842	Capsicum annuum
BAA82093.1	AB022599	Solanum tuberosum
AAA87048.1	U46000	Nicotiana benthamiana
AAG14896.1	AF302464	Artemisia annua
BAA22558.1	AB007502	Zea mays
BAA22557.1	AB007501	Oryza sativa
AAB02945.1	U59683	Nicotiana tabacum
AAF20201.1	AF205791	Botryococcus braunii
AAF71269.1	AF249900	Citrus sinensis
AAD56387.1	AF181557	Artemisia annua
AAF63255.1	AF205790	Botryococcus braunii

SEQ ID NO. 51

CAA73133.1	Y12530	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea

AAC23542.1	U20948	Ipomoea trifida
CAA73134.1	Y12531	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
BAA92836.1	AB032473	Brassica oleracea
CAB89179.1	AJ245479	Brassica napus subsp. nap
AAA33008.1	M97667	Brassica napus
BAA92837.1	AB032474	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
BAA21132.1	D88193	Brassica rapa
BAA06285.1	D30049	Brassica rapa
AAA62232.1	U00443	Brassica napus
CAA74662.1	Y14286	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
BAA07577.2	D38564	Brassica rapa
BAA07576.1	D38563	Brassica rapa
BAB21001.1	AB054061	Brassica rapa
AAB93834.1	U82481	Zea mays
AAD21872.1	AF078082	Phaseolus vulgaris
AAD52097.1	AF088885	Nicotiana tabacum
AAF34428.1	AF172282	Oryza sativa

SEQ ID NO. 52

AAB61708.1	U93048	Daucus carota
BAA83373.1	AP000391	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
AAG52992.1	U77888	Ipomoea nil
AAF91322.1	AF244888	Glycine max
AAF91323.1	AF244889	Glycine max
AAK21965.1	AY028699	Brassica napus
AAF59906.1	AF197947	Glycine max
CAA61510.1	X89226	Oryza sativa
AAB36558.1	U77888	Ipomoea nil
AAF59905.1	AF197946	Glycine max
AAG03090.1	AC073405	Oryza sativa
AAF34426.1	AF172282	Oryza sativa
AAA33915.1	L27821	Oryza sativa
AAD21872.1	AF078082	Phaseolus vulgaris
AAG16628.1	AY007545	Brassica napus

BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAG52994.1	U77888	Ipomoea nil
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
BAA92954.1	AP001551	Oryza sativa
BAA78764.1	AB023482	Oryza sativa

SEQ ID NO. 54

CAA57913.1	X82577	Brassica napus
AAF03675.1	AF149311	Rauvolfia serpentina
AAB38784.1	U72154	Brassica nigra
AAF34650.1	AF221526	Prunus serotina
BAA11831.1	D83177	Costus speciosus
AAA91166.1	U39228	Prunus avium
AAB22162.1	S35175	Manihot esculenta
AAF04007.1	AF163097	Dalbergia cochinchinensis
AAD09850.1	U44087	Zea mays
AAF28800.1	AF112888	Catharanthus roseus
CAA64442.1	X94986	Manihot esculenta
BAA78708.1	AB003089	Polygonum tinctorium
AAD02839.1	AF082991	Avena sativa
AAG00614.1	AF293849	Secale cereale
AAC49177.1	U33817	Sorghum bicolor
AAG25897.1	AF170087	Cucurbita pepo
CAA55196.1	X78433	Avena sativa
AAD10503.1	U33816	Zea mays
AAA65946.1	U25157	Zea mays
AAB03266.1	U44773	Zea mays
CAA52293.1	X74217	Zea mays
AAC69619.1	AF072736	Pinus contorta
CAA40058.1	X56734	Trifolium repens
AAB71381.1	U95298	Manihot esculenta
CAA40057.1	X56733	Trifolium repens
AAA87339.1	L41869	Hordeum vulgare
AAK07429.1	AF321287	Musa acuminata
CAA79989.2	Z21977	Brassica napus
AAA84906.1	U28047	Oryza sativa
CAC08209.1	AJ005950	Cicer arietinum

SEQ ID NO. 55

AAF23176.1	AF216497	Gossypium hirsutum
BAA76420.1	AB024992	Cicer arietinum
CAA94437.1	Z70524	Spirodela polyrrhiza

SEQ ID NO. 56

AAF66615.1	AF142596	Nicotiana tabacum
AAF91324.1	AF244890	Glycine max
CAB51834.1	00069	Oryza sativa
AAK21965.1	AY028699	Brassica napus
BAA78764.1	AB023482	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
AAG03090.1	AC073405	Oryza sativa
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
CAA73134.1	Y12531	Brassica oleracea
BAA94510.1	AB041504	Populus nigra
AAA33915.1	L27821	Oryza sativa
AAB09771.1	U67422	Zea mays
AAC61805.1	U28007	Lycopersicon esculentum
AAF91337.1	AF249318	Glycine max
AAB93834.1	U82481	Zea mays
AAG25966.1	AF302082	Nicotiana tabacum
AAF91336.1	AF249317	Glycine max
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
CAA74662.1	Y14286	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
AAD21872.1	AF078082	Phaseolus vulgaris
BAA92954.1	AP001551	Oryza sativa
BAA06538.1	D31737	Nicotiana tabacum
AAK11566.1	AF318490	Lycopersicon hirsutum
AAK11569.1	AF318493	Lycopersicon hirsutum
CAA73133.1	Y12530	Brassica oleracea

SEQ ID NO. 57

AAG00510.1	AF285172	Phaseolus vulgaris
AAF59905.1	AF197946	Glycine max
AAF59906.1	AF197947	Glycine max
AAB61708.1	U93048	Daucus carota

AAC36318.1	AF053127	Malus x domestica
AAK21965.1	AY028699	Brassica napus
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
CAA97692.1	Z73295	Catharanthus roseus
CAA61510.1	X89226	Oryza sativa
AAF91322.1	AF244888	Glycine max
AAK11569.1	AF318493	Lycopersicon hirsutum
CAB51834.1	00069	Oryza sativa
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAK11566.1	AF318490	Lycopersicon hirsutum
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
AAG03090.1	AC073405	Oryza sativa
AAA33915.1	L27821	Oryza sativa
AAF76314.1	AF220603	Lycopersicon esculentum
AAK11568.1	AF318492	Lycopersicon hirsutum
AAB47422.1	U59318	Lycopersicon esculentum
BAA06538.1	D31737	Nicotiana tabacum
AAK11567.1	AF318491	Lycopersicon hirsutum
AAF34426.1	AF172282	Oryza sativa
AAG25966.1	AF302082	Nicotiana tabacum

SEQ ID NO. 59

CAA96385.1	Z71703	Beta vulgaris
BAA33152.1	AB008187	Pisum sativum
CAA66233.1	X97637	Antirrhinum majus
AAA92823.1	U18365	Brassica napus
CAA76701.1	Y17226	Lycopersicon esculentum
AAG01534.1	AF289467	Nicotiana tabacum
AAC41680.1	L34206	Petroselinum crispum
CAA61581.1	X89400	Vigna unguiculata
CAA50038.1	X70707	Medicago sativa
CAA71242.1	Y10160	Chenopodium rubrum
AAA34241.1	M99497	Vigna aconitifolia
CAA76700.1	Y17225	Lycopersicon esculentum
CAA99991.1	Z75661	Sesbania rostrata
BAA21673.1	AB006033	Allium cepa
AAB41817.1	M58365	Medicago sativa
AAA33479.1	M60526	Zea mays
CAA73997.1	Y13646	Petunia x hybrida
BAA19553.1	D64036	Oryza sativa
CAA66234.1	X97638	Antirrhinum majus
AAD30506.1	AF129886	Vigna radiata
CAA41172.1	X58194	Oryza sativa
AAD08721.1	AF038570	Dunaliella tertiolecta
CAC15504.1	AJ297917	Lycopersicon esculentum
AAG01533.1	AF289466	Nicotiana tabacum
AAG01532.1	AF289465	Nicotiana tabacum
CAC15503.1	AJ297916	Lycopersicon esculentum
CAA66236.1	X97640	Antirrhinum majus
CAC17703.1	AJ278885	Chenopodium rubrum
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAB37188.1	AJ224336	Medicago sativa
CAA47099.1	X66469	Medicago sativa
AAB41548.1	L07042	Medicago sativa

SEQ ID NO. 60

BAA94962.1	AB042103	Asparagus officinalis
AAF63027.1	AF244924	Spinacia oleracea
BAA92500.1	AP001383	Oryza sativa
AAF63026.1	AF244923	Spinacia oleracea
AAF63025.1	AF244922	Spinacia oleracea
CAA62615.1	X91232	Mercurialis annua
BAA92422.1	AP001366	Oryza sativa
BAA92497.1	AP001383	Oryza sativa
AAD43561.1	AF155124	Gossypium hirsutum
BAA82306.1	AB027752	Nicotiana tabacum
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAD37430.1	AF149280	Phaseolus vulgaris
CAB65334.1	AJ250121	Picea abies
BAA77389.1	AB024439	Scutellaria baicalensis
BAA06334.1	D30652	Populus kitakamiensis
CAA71492.1	Y10466	Spinacia oleracea
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
BAA06335.1	D30653	Populus kitakamiensis

CAB94692.1	AJ242742	Ipomoea batatas
CAA62226.1	X90693	Medicago sativa
BAA14143.1	D90115	Armoracia rusticana
AAB02554.1	L37790	Stylosanthes humilis
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
BAA11852.1	D83224	Populus nigra
BAA11853.1	D83225	Populus nigra
BAA07241.1	D38051	Populus kitakamiensis
AAC05277.1	AF049881	Linum usitatissimum
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
AAD37427.1	AF149277	Phaseolus vulgaris
AAB06183.1	M37636	Arachis hypogaea
AAA34108.1	J02979	Nicotiana tabacum
CAA62227.1	X90694	Medicago sativa
BAA01992.1	D11396	Nicotiana tabacum
BAA92967.1	AP001551	Oryza sativa
CAA40796.1	X57564	Armoracia rusticana
AAC98519.1	AF007211	Glycine max
CAA71493.1	Y10467	Spinacia oleracea
CAA62225.1	X90692	Medicago sativa
CAA50597.1	X71593	Lycopersicon esculentum
CAB67121.1	Y19023	Lycopersicon esculentum
AAC49819.1	AF014468	Oryza sativa
BAA08499.1	D49551	Oryza sativa
BAA01877.1	D11102	Populus kitakamiensis
CAA59487.1	X85230	Triticum aestivum
AAB97734.1	AF014502	Glycine max
BAA77388.1	AB024438	Scutellaria baicalensis

SEQ ID NO. 61

CAB43505.1	AJ239051	Cicer arietinum
BAA93634.1	AB025016	Lotus japonicus
BAA74465.1	AB022732	Glycyrrhiza echinata
BAA22422.1	AB001379	Glycyrrhiza echinata
CAA10067.1	AJ012581	Cicer arietinum
CAB41490.1	AJ238439	Cicer arietinum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAB94590.1	AF022461	Glycine max
CAB56742.1	AJ249800	Cicer arietinum
AAG09208.1	AF175278	Pisum sativum
AAC49188.2	U29333	Pisum sativum
AAA32913.1	M32885	Persea americana
AAD56282.1	AF155332	Petunia x hybrida
AAC39454.1	AF014802	Eschscholzia californica
BAA92894.1	AB006790	Petunia x hybrida
BAA12159.1	D83968	Glycine max
CAA65580.1	X96784	Nicotiana tabacum
AAB94587.1	AF022458	Glycine max
BAA22423.1	AB001380	Glycyrrhiza echinata
BAA74466.1	AB022733	Glycyrrhiza echinata
AAG44132.1	AF218296	Pisum sativum
BAA13076.1	D86351	Glycine max
BAA84072.1	AB028152	Torenia hybrida
AAD38930.1	AF135485	Glycine max
CAA64635.1	X95342	Nicotiana tabacum
CAB56743.1	AJ249801	Cicer arietinum
BAB40324.1	AB037245	Asparagus officinalis

SEQ ID NO. 62

CAA12395.1	AJ225087	Vigna unguiculata
CAA36556.1	X52321	Hordeum vulgare
AAG25637.1	AF300799	Hordeum vulgare
AAC67245.1	AF061203	Hordeum vulgare
AAG25638.1	AF300800	Hordeum vulgare
BAB39391.1	AB048949	Hordeum vulgare
AAK30294.1	AF353207	Castanea crenata
BAA04815.1	D21349	Hordeum vulgare
BAA08741.1	D49999	Hordeum vulgare
AAC67246.1	AF061204	Hordeum vulgare subsp. spontaneum
CAC16789.1	AJ301645	Hordeum vulgare
AAD04259.1	AF049098	Trifolium repens
BAA02286.1	D12882	Ipomoea batatas
AAD04188.1	AF026217	Medicago sativa
BAA09462.1	D50866	Glycine max
BAA20453.1	AB004271	Glycine max
AAG44882.1	AF284857	Calystegia sepium
CAA67128.1	X98504	Triticum aestivum
AAA33898.1	L10345	Oryza sativa

AAA33899.1	L10346	Oryza sativa
BAA00828.1	D01022	Ipomoea batatas
AAD15902.1	AF068119	Zea mays
CAA81091.1	Z25871	Zea mays
CAA76131.1	Y16242	Triticum aestivum
CAA77817.1	Z11772	Secale cereale
BAA92921.1	AP001539	Oryza sativa
AAD38148.1	AF139501	Prunus armeniaca
AAB64177.1	AF012345	Hordeum vulgare
BAA09793.1	D63574	Hordeum vulgare
CAA40105.1	X56785	Secale cereale

SEQ ID NO. 63

BAB19864.1	AB052885	Oryza sativa
CAA47324.1	X66856	Nicotiana tabacum
CAA04511.1	AJ001061	Vitis vinifera
AAB06594.1	U38651	Medicago truncatula
CAA70777.1	Y09590	Vitis vinifera
BAB19863.1	AB052884	Oryza sativa
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA09419.1	AJ010942	Lycopersicon esculentum
CAB06079.1	Z83829	Picea abies
BAB19862.1	AB052883	Oryza sativa
CAA39036.1	X55349	Chlorella kessleri
CAA68813.1	Y07520	Chlorella kessleri
CAA53192.1	X75440	Chlorella kessleri
CAB52688.1	AJ132223	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris
CAB52690.1	AJ132225	Lycopersicon esculentum
AAF74567.1	AF215853	Solanum tuberosum
AAF74566.1	AF215852	Nicotiana tabacum
AAF74565.1	AF215851	Spinacia oleracea
AAF74568.1	AF215854	Zea mays
AAG43998.1	AF215837	Apium graveolens var. dulce

SEQ ID NO. 64

AAF13299.1	AF181496	Lycopersicon esculentum
AAB38743.1	U80583	Lycopersicon esculentum

SEQ ID NO. 65

BAA82556.1	AB030083	Populus nigra

AAF43408.1	AF230515	Oryza sativa subsp. jap
AAK21965.1	AY028699	Brassica napus
AAB93834.1	U82481	Zea mays
CAA73134.1	Y12531	Brassica oleracea
AAB61708.1	U93048	Daucus carota
AAC23542.1	U20948	Ipomoea trifida
AAD21872.1	AF078082	Phaseolus vulgaris
CAB41878.1	Y18259	Brassica oleracea
BAA21132.1	D88193	Brassica rapa
BAA06285.1	D30049	Brassica rapa
CAA79355.1	Z18921	Brassica oleracea
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
CAB51834.1	00069	Oryza sativa
BAA94529.2	AP001800	Oryza sativa
CAB41879.1	Y18260	Brassica oleracea
BAA94516.1	AP001800	Oryza sativa
AAA33008.1	M97667	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
BAA23676.1	AB000970	Brassica rapa
BAA78764.1	AB023482	Oryza sativa
AAG03090.1	AC073405	Oryza sativa
AAF21775.1	AF068135	Glycine max
CAA74662.1	Y14286	Brassica oleracea
BAA92837.1	AB032474	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
BAA07577.2	D38564	Brassica rapa
AAG16628.1	AY007545	Brassica napus
BAA07576.1	D38563	Brassica rapa
BAA92954.1	AP001551	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum
BAA94509.1	AB041503	Populus nigra

SEQ ID NO. 66

CAA58774.1	X83922	Brassica napus
CAA58773.1	X83921	Brassica napus
AAK14790.1	AY027510	Catharanthus roseus
CAA52896.1	X74942	Lycopersicon esculentum
AAC49556.1	U04295	Oryza sativa
AAA34293.1	M28704	Triticum aestivum

CAA52895.1	X74941	Lycopersicon esculentum
AAD42938.1	AF084972	Catharanthus roseus
CAA71768.1	Y10809	Petroselinum crispum
AAA80169.1	U10270	Zea mays
CAA71770.1	Y10810	Petroselinum crispum
AAB40291.1	U42208	Oryza sativa
CAA58772.1	X83920	Brassica napus
CAA88492.1	Z48602	Nicotiana tabacum
CAB62402.1	Y15165	Zea mays
BAA10928.1	D64051	Triticum aestivum
AAC49398.1	U46217	Petroselinum crispum
CAA76555.1	Y16953	Sinapis alba
AAD42937.1	AF084971	Catharanthus roseus
CAA88493.1	Z48603	Nicotiana tabacum
CAA63073.1	X92102	Raphanus sativus
AAA17488.1	U07933	Triticum aestivum
CAA52897.1	X74943	Lycopersicon esculentum
AAB00098.1	L01449	Glycine max
AAA68429.1	M63999	Triticum aestivum
AAA19103.1	U10466	Triticum aestivum
AAA19104.1	U10467	Triticum aestivum
AAC49558.1	U04297	Oryza sativa

SEQ ID NO. 67

CAA10608.1	AJ132228	Ricinus communis
CAA70778.1	Y09591	Vicia faba
CAA07563.1	AJ007574	Ricinus communis
AAD16014.1	AF080543	Nepenthes alata
CAA70969.1	Y09826	Solanum tuberosum
AAD16015.1	AF080544	Nepenthes alata
CAA70968.1	Y09825	Solanum tuberosum
CAA92992.1	Z68759	Ricinus communis
AAD16013.1	AF080542	Nepenthes alata
AAF15945.1	AF061435	Vicia faba
CAA72006.1	Y11121	Ricinus communis
AAF15944.1	AF061434	Vicia faba
AAF15946.1	AF061436	Vicia faba
AAB96830.1	U64823	Nicotiana sylvestris
AAB48944.1	U31932	Nicotiana sylvestris
BAA93437.1	AB022783	Oryza sativa
CAB42599.1	AJ238635	Chlorella protothecoides

SEQ ID NO. 68

AAG08959.1	AF122051	Solanum tuberosum
AAG08960.1	AF122052	Solanum tuberosum
AAG08961.1	AF122053	Solanum tuberosum
AAF67052.1	AF190303	Adiantum raddianum
AAF67053.1	AF190304	Adiantum raddianum
AAF34434.1	AF172282	Oryza sativa
AAF67051.1	AF190302	Secale cereale
AAF67050.1	AF190301	Secale cereale
CAA72217.1	Y11414	Oryza sativa
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
CAA66952.1	X98308	Lycopersicon esculentum
AAD31395.1	AF114162	Lolium temulentum
BAA23341.1	D88621	Oryza sativa
CAB40189.1	AJ133638	Avena sativa
CAA61021.1	X87690	Hordeum vulgare
AAG22863.1	AY008692	Hordeum vulgare
BAA96421.1	AB044084	Triticum aestivum
CAA78388.1	Z13998	Petunia x hybrida
BAA81732.1	AB029161	Glycine max
BAA81733.2	AB029162	Glycine max
CAA72218.1	Y11415	Oryza sativa
BAA81736.1	AB029165	Glycine max
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
CAA67000.1	X98355	Oryza sativa
AAG28526.1	AF198499	Nicotiana tabacum
BAA88222.1	AB028650	Nicotiana tabacum
AAG28525.1	AF198498	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
CAA67575.1	X99134	Lycopersicon esculentum
CAB43399.1	AJ006292	Antirrhinum majus
AAK19616.1	AF336283	Gossypium hirsutum

SEQ ID NO. 70

CAA73067.1	Y12464	Sorghum bicolor
CAA73068.1	Y12465	Sorghum bicolor

BAA83688.1	AB011967	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
AAB62693.1	AF004947	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA83689.1	AB011968	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
AAF66639.1	AF143743	Lycopersicon esculentum
AAD23582.1	AF128443	Glycine max
CAA71142.1	Y10036	Cucumis sativus
BAA05649.1	D26602	Nicotiana tabacum
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
CAA65244.1	X95997	Solanum tuberosum
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
AAB52224.1	U83797	Solanum tuberosum
CAA46554.1	X65604	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
AAD00239.1	U73938	Nicotiana tabacum
CAA06503.1	AJ005373	Craterostigma plantagineum
AAB68962.1	L38855	Glycine max
BAA13608.1	D88399	Oryza sativa
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
AAD00240.1	U73939	Nicotiana tabacum
CAA81443.1	Z26846	Mesembryanthemum crystallinum
AAB58348.1	U29095	Triticum aestivum
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF27340.1	AF186020	Vicia faba
AAA96325.1	M94726	Triticum aestivum
AAC98509.1	AF100162	Chlamydomonas reinhardtii

SEQ ID NO. 71

AAC04614.1	AF034832	Mesembryanthemum crystallinum
CAA41454.1	X58578	Pinus sylvestris
AAC14465.1	L19434	Oryza sativa
BAA00800.1	D01000	Oryza sativa
AAA33510.1	M54936	Zea mays
AAB87572.1	AF034630	Panax ginseng
CAC34448.1	AJ307586	Pinus sylvestris
CAB57992.1	X17565	Zea mays
AAA33917.1	L36320	Oryza sativa
AAC14464.1	L19435	Oryza sativa
BAA00799.1	D00999	Oryza sativa
AAA33659.1	M63003	Pisum sativum
AAD48484.1	AF170297	Manihot esculenta
CAB60191.1	AJ250667	Ananas comosus
CAA51654.1	X73139	Ipomoea batatas
CAA39444.1	X55974	Nicotiana plumbaginifolia
AAB40394.1	U80069	Mesembryanthemum crystalli
AAK06837.1	AF328859	Avicennia marina
CAA60826.1	X87372	Lycopersicon esculentum
AAB49913.1	U34727	Zea mays
CAB57993.1	X17564	Zea mays
CAA05633.1	AJ002604	Pinus sylvestris
AAD01605.1	AF016893	Populus tremuloides
AAK26435.1	AF354748	Solanum tuberosum
AAB92612.1	AF037359	Paulownia kawakamii
AAB66812.1	AF009734	Capsicum annuum
AAD01604.1	AF016892	Populus tremuloides
CAA10160.1	AJ012739	Cicer arietinum
CAA10132.1	AJ012691	Cicer arietinum
AAA34194.1	M37150	Lycopersicon esculentum
CAA32199.1	X14040	Lycopersicon esculentum
BAA19674.1	D49485	Solidago canadensis
AAD05576.1	AF009735	Raphanus sativus
CAA73929.1	Y13610	Carica papaya
CAA37866.1	X53872	Spinacia oleracea
AAC08581.1	AF054150	Zantedeschia aethiopica
CAA65043.1	X95728	Brassica juncea
AAC25568.1	AF071112	Brassica rapa subsp. pekinensis
BAB21760.1	AB026724	Oryza sativa
BAA12745.1	D85239	Oryza sativa
CAA65041.1	X95726	Brassica juncea
BAA01088.1	D10244	Spinacia oleracea
BAA24919.1	AB004870	Marchantia paleacea
AAA33728.1	M20792	Petunia x hybrida

SEQ ID NO. 72

CAA73067.1	Y12464	Sorghum bicolor
CAA73068.1	Y12465	Sorghum bicolor
BAA96628.1	AP002482	Oryza sativa

BAA83689.1	AB011968	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA34675.1	AB011670	Triticum aestivum
AAB62693.1	AF004947	Oryza sativa
BAA05649.1	D26602	Nicotiana tabacum
CAA71142.1	Y10036	Cucumis sativus
AAD23582.1	AF128443	Glycine max
CAA65244.1	X95997	Solanum tuberosum
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
CAA07813.1	AJ007990	Hordeum vulgare
CAA46554.1	X65604	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
CAA46556.1	X65606	Hordeum vulgare
AAB58348.1	U29095	Triticum aestivum
CAA06503.1	AJ005373	Craterostigma plantagineum
AAA96325.1	M94726	Triticum aestivum
CAA81443.1	Z26846	Mesembryanthemum crystallinum
AAD00239.1	U73938	Nicotiana tabacum
BAA13608.1	D88399	Oryza sativa
AAB68962.1	L38855	Glycine max
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
CAA89202.1	Z49233	Chlamydomonas eugametos
AAD00240.1	U73939	Nicotiana tabacum
AAF27340.1	AF186020	Vicia faba
AAC98509.1	AF100162	Chlamydomonas reinhardtii

SEQ ID NO. 73

CAA90282.1	Z49990	Solanum tuberosum

SEQ ID NO. 74

AAK15703.1	AF327517	Oryza sativa
BAA02904.1	D13758	Oryza sativa
BAA02113.1	D12545	Pisum sativum
BAA02114.1	D12546	Pisum sativum
CAA98180.1	Z73952	Lotus japonicus
BAA02112.1	D12544	Pisum sativum
CAA98181.1	Z73953	Lotus japonicus
CAA98184.1	Z73956	Lotus japonicus
CAA95859.1	Z71276	Mangifera indica
CAA55865.1	X79278	Medicago sativa
BAA02111.1	D12543	Pisum sativum
CAA89049.1	Z49190	Beta vulgaris
CAA98179.1	Z73951	Lotus japonicus
BAA02437.1	D13152	Oryza sativa
CAA98177.1	Z73949	Lotus japonicus
BAA06701.1	D31905	Zea mays
AAB97114.1	U58853	Glycine max
BAA06702.1	D31906	Zea mays
CAA67153.1	X98540	Fagus sylvatica
BAA02110.1	D12542	Pisum sativum
CAA41966.1	X59276	Oryza sativa
BAA02109.1	D12541	Pisum sativum
BAA84640.1	AB007911	Pisum sativum
CAA98185.1	Z73957	Lotus japonicus
CAA98186.1	Z73958	Lotus japonicus
CAA98182.1	Z73954	Lotus japonicus
AAD48018.1	AF165095	Gossypium hirsutum
CAA98183.1	Z73955	Lotus japonicus
AAD48019.1	AF165096	Gossypium hirsutum
CAA54506.1	X77301	Glycine max
CAA98178.1	Z73950	Lotus japonicus
BAA02108.1	D12540	Pisum sativum
AAA34253.1	L08130	Volvox carteri
CAA98165.1	Z73937	Lotus japonicus
AAA90955.1	U32185	Glycine max
AAA63902.1	U22433	Zea mays

SEQ ID NO. 75

CAA52069.1	X73849	Brassica napus
CAA52070.1	X73850	Brassica napus
CAA61111.1	X87842	Brassica napus
AAC49002.1	U17098	Brassica rapa
AAA33020.1	M96569	Carthamus tinctorius
AAB51523.1	U92876	Garcinia mangostana
AAG35064.1	AF318288	Capsicum chinense
AAA33019.1	M96568	Carthamus tinctorius
AAB51524.1	U92877	Garcinia mangostana
AAG43859.1	AF213478	Iris germanica
AAD28187.1	AF110462	Elaeis guineensis

CAC14164.1	AJ278479	Brassica juncea
AAD33870.1	AF141382	Elaeis oleifera
AAD33895.1	AF143095	Elaeis guineensis
AAB51525.1	U92878	Garcinia mangostana
CAA54060.1	X76561	Cuphea lanceolata
AAB71729.1	U65642	Myristica fragrans
AAF02215.1	AF076535	Gossypium hirsutum
AAD01982.1	AF034266	Gossypium hirsutum
AAG43858.1	AF213477	Iris germanica
BAA83582.1	AP000399	Oryza sativa
AAG43860.1	AF213479	Iris tectorum
AAG43857.1	AF213476	Iris germanica
AAC49783.1	U56103	Cuphea wrightii
AAG43861.1	AF213480	Iris tectorum
CAC19934.1	AJ131741	Cuphea lanceolata
CAB60830.1	AJ131740	Cuphea lanceolata
AAC49784.1	U56104	Cuphea wrightii
AAD42220.1	AF147879	Elaeis guineensis
AAC49151.1	U31813	Cinnamomum camphora
AAC49001.1	U17097	Umbellularia californica
CAA06001.1	AJ003221	Solanum tuberosum

SEQ ID NO. 76

CAA47870.1	X67601	Lycopersicon peruvianum
CAA87076.1	Z46952	Glycine max
CAA47868.1	X67599	Lycopersicon esculentum
CAA47869.1	X67600	Lycopersicon peruvianum
CAA09300.1	AJ010643	Pisum sativum
AAF74563.1	AF208544	Lycopersicon peruvianum
CAA09301.1	AJ010644	Pisum sativum
BAA83711.1	AB014484	Nicotiana tabacum
CAA58117.1	X82943	Zea mays
AAF37579.1	AF235958	Medicago sativa
CAA87077.1	Z46953	Glycine max
CAA39034.1	X55347	Lycopersicon peruvianum
BAA83710.1	AB014483	Nicotiana tabacum
CAA87080.1	Z46956	Glycine max
CAA87079.1	Z46955	Glycine max
CAA87075.1	Z46951	Glycine max

SEQ ID NO. 78

BAA02112.1	D12544	Pisum sativum
CAA98184.1	Z73956	Lotus japonicus
AAK15703.1	AF327517	Oryza sativa
BAA02904.1	D13758	Oryza sativa
BAA02111.1	D12543	Pisum sativum
BAA02113.1	D12545	Pisum sativum
CAA98180.1	Z73952	Lotus japonicus
BAA02114.1	D12546	Pisum sativum
CAA98181.1	Z73953	Lotus japonicus
CAA95859.1	Z71276	Mangifera indica
CAA55865.1	X79278	Medicago sativa
CAA89049.1	Z49190	Beta vulgaris
CAA98179.1	Z73951	Lotus japonicus
BAA02437.1	D13152	Oryza sativa
BAA06701.1	D31905	Zea mays
BAA06702.1	D31906	Zea mays
BAA02110.1	D12542	Pisum sativum
CAA98177.1	Z73949	Lotus japonicus
CAA41966.1	X59276	Oryza sativa
AAB97114.1	U58853	Glycine max
CAA98185.1	Z73957	Lotus japonicus
CAA67153.1	X98540	Fagus sylvatica
CAA98183.1	Z73955	Lotus japonicus
CAA98182.1	Z73954	Lotus japonicus
CAA54506.1	X77301	Glycine max
BAA02108.1	D12540	Pisum sativum
AAD48018.1	AF165095	Gossypium hirsutum
BAA02109.1	D12541	Pisum sativum
CAA98186.1	Z73958	Lotus japonicus
BAA84640.1	AB007911	Pisum sativum
AAD48019.1	AF165096	Gossypium hirsutum
CAA98178.1	Z73950	Lotus japonicus
AAA63901.1	U22432	Zea mays
CAA98165.1	Z73937	Lotus japonicus
AAA34253.1	L08130	Volvox carteri
AAA90955.1	U32185	Glycine max
AAA63902.1	U22433	Zea mays

SEQ ID NO. 80

AAF98390.1	AF287143	Brassica napus
BAA93039.1	AB033758	Citrus unshiu

BAA89009.1	AB027455	Petunia x hybrida
AAF61647.1	AF190634	Nicotiana tabacum
BAA36423.1	AB013598	Verbena x hybrida
BAA36421.1	AB013596	Perilla frutescens
BAA36422.1	AB013597	Perilla frutescens
AAA59054.1	L34847	Zea mays
AAF17077.1	AF199453	Sorghum bicolor
AAB36653.1	U32644	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
BAA83484.1	AB031274	Scutellaria baicalensis
CAA59450.1	X85138	Lycopersicon esculentum
BAA12737.1	D85186	Gentiana triflora
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAD21086.1	AF127218	Forsythia x intermedia
AAB48444.1	U82367	Solanum tuberosum
BAA19659.1	AB002818	Perilla frutescens
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
CAA31855.1	X13500	Zea mays
CAA54611.1	X77461	Manihot esculenta
AAD04166.1	AF101972	Phaseolus lunatus
BAA89008.1	AB027454	Petunia x hybrida
AAB86473.1	AF028237	Ipomoea purpurea
BAA90787.1	AB038248	Ipomoea batatas

SEQ ID NO. 81

AAG43283.1	AF139210	Oryza sativa
AAD37698.1	AF145729	Oryza sativa
AAF01765.1	AF184278	Glycine max
BAA93463.1	AB028075	Physcomitrella patens
CAA62608.1	X91212	Lycopersicon esculentum
BAA93462.1	AB028074	Physcomitrella patens
AAA63768.2	AF339748	Helianthus annuus
BAA93467.1	AB028079	Physcomitrella patens
AAD38144.1	AF139497	Prunus armeniaca
BAA21017.1	D26578	Daucus carota
CAA06728.1	AJ005833	Craterostigma plantagineum
CAA06717.1	AJ005820	Craterostigma plantagineum
AAD37700.1	AF145731	Oryza sativa
BAA93464.1	AB028076	Physcomitrella patens
BAA05622.1	D26573	Daucus carota
BAA93465.1	AB028077	Physcomitrella patens
AAD37699.1	AF145730	Oryza sativa

SEQ ID NO. 82

BAB18104.1	AB042714	Chlamydomonas reinhardtii
BAB18105.1	AB042715	Chlamydomonas reinhardtii
CAB82852.1	Z30329	Mesembryanthemum crystalli
CAA50374.1	X71057	Nicotiana tabacum
CAA82993.1	Z30332	Spinacia oleracea
AAA50304.1	M92989	Pisum sativum
BAB03409.1	AP002816	Oryza sativa
AAD37166.1	AF132743	Oryza sativa
CAA82994.1	Z30333	Mesembryanthemum crystalli
AAF19403.1	AF203481	Lycopersicon esculentum
AAF19402.1	AF203480	Lycopersicon esculentum
AAD23582.1	AF128443	Glycine max
BAA05649.1	D26602	Nicotiana tabacum
CAA71142.1	Y10036	Cucumis sativus
CAA65244.1	X95997	Solanum tuberosum
AAF05112.1	AF158091	Mesembryanthemum crystallinum
BAA96628.1	AP002482	Oryza sativa
CAA57898.1	X82548	Hordeum vulgare
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
AAF06969.1	AF162661	Kalanchoe fedtschenkoi
BAA96593.1	AP002481	Oryza sativa
CAA46556.1	X65606	Hordeum vulgare
CAA07813.1	AJ007990	Hordeum vulgare
CAA46554.1	X65604	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
AAF66637.1	AF143505	Lycopersicon esculentum

SEQ ID NO. 83

AAB86473.1	AF028237	Ipomoea purpurea
AAF61647.1	AF190634	Nicotiana tabacum
CAA54558.1	X77369	Solanum melongena
BAA89008.1	AB027454	Petunia x hybrida
BAA90787.1	AB038248	Ipomoea batatas
AAF17077.1	AF199453	Sorghum bicolor
CAA54612.1	X77462	Manihot esculenta
BAA12737.1	D85186	Gentiana triflora

BAA83484.1	AB031274	Scutellaria baicalensis
CAA54614.1	X77464	Manihot esculenta
AAD21086.1	AF127218	Forsythia x intermedia
BAA93039.1	AB033758	Citrus unshiu
AAB36652.1	U32643	Nicotiana tabacum
AAF98390.1	AF287143	Brassica napus
AAK28304.1	AF346432	Nicotiana tabacum
CAA30760.1	X07937	Zea mays
BAA89009.1	AB027455	Petunia x hybrida
AAD04166.1	AF101972	Phaseolus lunatus
CAA31855.1	X13500	Zea mays
AAK16410.1	AF320086	Zea mays
AAD51778.1	AF116858	Phaseolus vulgaris
CAA30761.1	X07940	Zea mays
BAA19155.1	AB000623	Nicotiana tabacum
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
AAB36653.1	U32644	Nicotiana tabacum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAK28303.1	AF346431	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
BAB41020.1	AB047093	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera

SEQ ID NO. 84

AAC36318.1	AF053127	Malus x domestica
AAC78593.1	AF053995	Lycopersicon esculentum
AAC78596.1	AF053998	Lycopersicon esculentum
AAB36558.1	U77888	Ipomoea nil
CAB55399.1	AL117264	Oryza sativa
CAA61510.1	X89226	Oryza sativa
AAD50430.1	AF166121	Hordeum vulgare
AAF34426.1	AF172282	Oryza sativa
AAC78591.1	AF053993	Lycopersicon esculentum
AAC49123.1	U37133	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata
AAB82755.1	U72725	Oryza longistaminata
AAC78595.1	AF053997	Lycopersicon esculentum
AAC78592.1	AF053994	Lycopersicon esculentum
CAA05276.1	AJ002236	Lycopersicon pimpinellifol
AAC78594.1	AF053996	Lycopersicon pimpinellifol

SEQ ID NO. 85

BAA32827.1	AB012708	Daucus carota

SEQ ID NO. 86

AAG52992.1	U77888	Ipomoea nil
AAF59906.1	AF197947	Glycine max
AAC36318.1	AF053127	Malus x domestica
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
AAB36558.1	U77888	Ipomoea nil
BAA83373.1	AP000391	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
AAF91322.1	AF244888	Glycine max
AAF59905.1	AF197946	Glycine max
AAB61708.1	U93048	Daucus carota
CAC20842.1	AJ250467	Pinus sylvestris
CAA61510.1	X89226	Oryza sativa
AAG52994.1	U77888	Ipomoea nil
AAF34426.1	AF172282	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum
AAB82755.1	U72725	Oryza longistaminata
AAK21965.1	AY028699	Brassica napus
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
CAB51836.1	AJ243961	Oryza sativa

SEQ ID NO. 87

CAA06486.1	AJ005340	Linum usitatissimum

SEQ ID NO. 88

CAC12822.1	AJ299252	Nicotiana tabacum
AAC24587.1	AF071893	Prunus armeniaca
AAF63205.1	AF245119	Mesembryanthemum crystallinum

AAG43545.1	AF211527	Nicotiana tabacum
BAA07321.1	D38123	Nicotiana tabacum
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
BAB03248.1	AB037183	Oryza sativa
BAB16083.1	AB036883	Oryza sativa
AAF23899.1	AF193803	Oryza sativa
AAF76898.1	AF274033	Atriplex hortensis
AAC62619.1	AF057373	Nicotiana tabacum
BAA78738.1	AB023482	Oryza sativa
AAG43548.1	AF211530	Nicotiana tabacum
AAG43549.1	AF211531	Nicotiana tabacum
BAA99376.1	AP002526	Oryza sativa
AAD39439.1	AF132001	Petunia x hybrida

SEQ ID NO. 89

CAA04385.1	AJ000885	Brassica napus
CAB46492.1	AJ243340	Lycopersicon esculentum
AAF62182.1	AF247164	Oryza sativa
AAF32410.1	AF230277	Triphysaria versicolor
AAC63088.1	U82123	Lycopersicon esculentum
CAA06271.2	AJ004997	Lycopersicon esculentum
AAD13632.1	AF059488	Lycopersicon esculentum
AAG13982.1	AF297521	Prunus avium
AAC33529.1	U93167	Prunus armeniaca
BAB19676.1	AB029083	Prunus persica
AAB37746.1	U30382	Cucumis sativus
AAF35901.1	AF230332	Zinnia elegans
AAC33530.1	AF038815	Prunus armeniaca
CAC19184.1	AJ291817	Cicer arietinum
AAG13983.1	AF297522	Prunus avium
AAC39512.1	AF043284	Gossypium hirsutum
AAF21101.1	AF159563	Fragaria x ananassa
AAF35900.1	AF230331	Zinnia elegans
AAC96081.1	AF049354	Nicotiana tabacum
AAB40634.1	U64890	Pinus taeda
AAB40635.1	U64891	Pinus taeda
AAD47901.1	AF085330	Pinus taeda
AAF32409.1	AF230276	Triphysaria versicolor
AAB40637.1	U64893	Pinus taeda
AAB81662.1	U85246	Oryza sativa
AAC64201.1	AF096776	Lycopersicon esculentum
CAB43197.1	AJ239068	Lycopersicon esculentum
AAF35902.1	AF230333	Zinnia elegans
AAB40636.1	U64892	Pinus taeda
AAD49956.1	AF167360	Rumex palustris
AAB38074.1	U30477	Oryza sativa
AAG32921.1	AF184233	Lycopersicon esculentum
AAF17570.1	AF202119	Marsilea quadrifolia
AAC96080.1	AF049353	Nicotiana tabacum
AAF32411.1	AF230278	Triphysaria versicolor
CAC19183.1	AJ291816	Cicer arietinum
BAB32732.1	AB049406	Eustoma grandiflorum
AAD13633.1	AF059489	Lycopersicon esculentum
AAF62180.1	AF247162	Oryza sativa
AAF17571.1	AF202120	Regnellidium diphyllum
AAF62181.1	AF247163	Oryza sativa
CAC06433.1	AJ276007	Festuca pratensis
AAC96077.1	AF049350	Nicotiana tabacum
AAG01875.1	AF291659	Striga asiatica
BAA88200.1	AP000837	Oryza sativa
AAC96079.1	AF049352	Nicotiana tabacum
AAB37749.1	U30460	Cucumis sativus
AAC96078.1	AF049351	Nicotiana tabacum
AAG32920.1	AF184232	Lycopersicon esculentum

SEQ ID NO. 90

CAC12822.1	AJ299252	Nicotiana tabacum
AAC24587.1	AF071893	Prunus armeniaca
AAF23899.1	AF193803	Oryza sativa
AAF76898.1	AF274033	Atriplex hortensis
AAF63205.1	AF245119	Mesembryanthemum crystallinum
BAB16083.1	AB036883	Oryza sativa
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
BAA78738.1	AB023482	Oryza sativa
BAA99376.1	AP002526	Oryza sativa
AAG32659.1	AF253971	Picea abies

SEQ ID NO. 91

AAG13983.1	AF297522	Prunus avium
AAC96080.1	AF049353	Nicotiana tabacum

AAF32411.1	AF230278	Triphysaria versicolor
AAF32409.1	AF230276	Triphysaria versicolor
AAF35901.1	AF230332	Zinnia elegans
AAF35902.1	AF230333	Zinnia elegans
AAD47901.1	AF085330	Pinus taeda
AAB40635.1	U64891	Pinus taeda
AAG32921.1	AF184233	Lycopersicon esculentum
CAC19184.1	AJ291817	Cicer arietinum
AAG13982.1	AF297521	Prunus avium
AAB40637.1	U64893	Pinus taeda
AAB40634.1	U64890	Pinus taeda
AAC33529.1	U93167	Prunus armeniaca
AAF21101.1	AF159563	Fragaria x ananassa
BAB19676.1	AB029083	Prunus persica
AAB40636.1	U64892	Pinus taeda
AAC96081.1	AF049354	Nicotiana tabacum
AAC33530.1	AF038815	Prunus armeniaca
CAB43197.1	AJ239068	Lycopersicon esculentum
AAC64201.1	AF096776	Lycopersicon esculentum
AAB37746.1	U30382	Cucumis sativus
AAD13633.1	AF059489	Lycopersicon esculentum
AAB81662.1	U85246	Oryza sativa
AAD49956.1	AF167360	Rumex palustris
CAC19183.1	AJ291816	Cicer arietinum
AAF62180.1	AF247162	Oryza sativa
AAC39512.1	AF043284	Gossypium hirsutum
AAB38074.1	U30477	Oryza sativa
BAB32732.1	AB049406	Eustoma grandiflorum
AAF17570.1	AF202119	Marsilea quadrifolia
CAB46492.1	AJ243340	Lycopersicon esculentum
CAC06433.1	AJ276007	Festuca pratensis
BAA88200.1	AP000837	Oryza sativa
AAD13632.1	AF059488	Lycopersicon esculentum
AAF32410.1	AF230277	Triphysaria versicolor
AAC63088.1	U82123	Lycopersicon esculentum
AAF62182.1	AF247164	Oryza sativa
AAG01874.1	AF291658	Striga asiatica
AAF62181.1	AF247163	Oryza sativa
CAA06271.2	AJ004997	Lycopersicon esculentum
AAF17571.1	AF202120	Regnellidium diphyllum
CAA04385.1	AJ000885	Brassica napus
AAB37749.1	U30460	Cucumis sativus
AAC96077.1	AF049350	Nicotiana tabacum
CAA69105.1	Y07782	Oryza sativa
AAC96078.1	AF049351	Nicotiana tabacum
AAG01875.1	AF291659	Striga asiatica
AAC96079.1	AF049352	Nicotiana tabacum

SEQ ID NO. 92

AAA17732.1	L19074	Catharanthus roseus
AAB94586.1	AF022457	Glycine max
CAA89260.1	Z49263	Pisum sativum
CAB43505.1	AJ239051	Cicer arietinum
AAB94587.1	AF022458	Glycine max
AAB37231.1	U34744	Phalaenopsis sp. SM9108
BAA84071.1	AB028151	Antirrhinum majus
BAA22423.1	AB001380	Glycyrrhiza echinata
CAA83941.1	Z33875	Mentha x piperita
AAG09208.1	AF175278	Pisum sativum

SEQ ID NO. 93

AAG33228.2	AF305070	Chlamydomonas reinhardtii
BAA96166.1	AP002092	Oryza sativa

SEQ ID NO. 96

CAA59450.1	X85138	Lycopersicon esculentum
AAB36653.1	U32644	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
BAA83484.1	AB031274	Scutellaria baicalensis
AAB48444.1	U82367	Solanum tuberosum
AAB62270.1	AF006081	Solanum berthaultii
AAF61647.1	AF190634	Nicotiana tabacum
CAA54612.1	X77462	Manihot esculenta
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
AAD04166.1	AF101972	Phaseolus lunatus
BAB41023.1	AB047096	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
AAF98390.1	AF287143	Brassica napus

AAD21086.1	AF127218	Forsythia x intermedia
AAB81683.1	AF000372	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
AAF17077.1	AF199453	Sorghum bicolor
CAA54611.1	X77461	Manihot esculenta
BAA89009.1	AB027455	Petunia x hybrida
BAA93039.1	AB033758	Citrus unshiu
CAA54609.1	X77459	Manihot esculenta
BAA89008.1	AB027454	Petunia x hybrida
BAA19659.1	AB002818	Perilla frutescens
CAA54614.1	X77464	Manihot esculenta

SEQ ID NO. 99

BAB20862.1	AB029512	Solanum tuberosum
AAC25636.1	AF044173	Solanum tuberosum
BAA03542.1	D14722	Spinacia oleracea
CAA47329.1	X66860	Spinacia oleracea
BAB20863.1	AB029513	Solanum tuberosum
AAD23909.1	AF073697	Oryza sativa
BAA05965.1	D28777	Citrullus lanatus
BAB20861.1	AB029511	Solanum tuberosum
CAA59798.1	X85803	Zea mays
BAA93051.1	AB040503	Allium tuberosum
AAD23907.1	AF073695	Oryza sativa
AAC25635.1	AF044172	Solanum tuberosum
CAC12819.1	AJ299249	Nicotiana tabacum
CAC09469.1	AL442113	Oryza sativa
BAA07177.1	D37963	Spinacia oleracea
CAA06819.1	AJ006024	Cicer arietinum
AAD23908.1	AF073696	Oryza sativa
AAD23910.1	AF073698	Oryza sativa
AAF78529.1	AF195239	Pyrus pyrifolia

SEQ ID NO. 100

AAB39510.1	U53345	Camptotheca acuminata
CAA65533.1	X96758	Zea mays

SEQ ID NO. 101

BAA85215.1	AP000570	Oryza sativa
AAA80586.1	U19490	Chlamydomonas reinhardtii
AAA80216.1	U19484	Chlamydomonas reinhardtii

SEQ ID NO. 102

AAB07452.1	U65890	Brassica napus
AAB63591.1	AF009413	Oryza sativa
AAB59307.1	M87646	Spinacia oleracea
AAF60293.1	AF233745	Lycopersicon esculentum

SEQ ID NO. 103

AAG25928.1	AF260919	Petunia x hybrida
AAG25927.1	AF260918	Petunia x hybrida
AAC28907.1	U18349	Phaseolus vulgaris
AAB00686.1	U18348	Phaseolus vulgaris
CAB92300.1	AJ251719	Zea mays
AAD15818.1	AF061107	Zea mays
AAC49219.1	U39860	Oryza sativa
AAC49216.1	U39865	Oryza officinalis
AAC39455.1	AF020545	Petunia x hybrida
AAC49212.1	U39863	Oryza australiensis
AAC49213.1	U39864	Oryza eichingeri
AAD56411.1	AF185269	Tulipa gesneriana

SEQ ID NO. 104

AAA33041.1	M33148	Citrullus lanatus
AAC41647.1	L31900	Cucumis sativus
AAB99754.1	AF020270	Medicago sativa
BAA12870.1	D85763	Oryza sativa
CAB43995.1	AJ242713	Brassica napus
CAB43994.1	AJ242712	Brassica napus
CAA63268.1	X92512	Brassica napus
CAA55383.1	X78800	Eucalyptus gunnii
AAD56659.1	AF180335	Glycine max
AAF69802.1	AF195869	Vitis vinifera
AAB99755.1	AF020271	Medicago sativa
AAB99757.1	AF020273	Medicago sativa
AAC28106.1	AF079850	Pisum sativum

AAC24855.1	AF068686	Glycine max
CAA61621.1	X89451	Brassica napus
AAA84971.1	U40212	Chlamydomonas reinhardtii
CAB45387.1	AJ006974	Plastid Nicotiana tabacum
AAD10324.1	U42979	Chlamydomonas reinhardtii
AAB39506.1	U40465	Chlamydomonas reinhardtii
CAB61751.1	AJ275317	Cicer arietinum
AAC19244.1	AF068687	Glycine max
AAC19136.1	AF068688	Glycine max
AAC19137.1	AF068689	Glycine max
AAF27629.1	AF217211	Medicago truncatula
AAF35861.1	AF220497	Medicago truncatula
AAB38970.1	U80676	Botryococcus braunii
AAA62697.1	M55684	Hordeum vulgare
BAA02971.1	D13817	Oryza sativa
AAK26431.1	AF353203	Oryza sativa
AAG13573.1	AC037425	Oryza sativa
AAA62696.1	M55685	Hordeum vulgare
AAB64290.1	AF007581	Zea mays
CAA71611.1	Y10602	Lycopersicon esculentum
CAA70100.1	Y08887	Lycopersicon esculentum
AAB99756.1	AF020272	Medicago sativa
CAC12826.1	AJ299256	Nicotiana tabacum
AAC21564.1	AF067859	Solanum tuberosum
BAA90618.1	AP001129	Oryza sativa
CAA70101.1	Y08888	Lycopersicon esculentum
CAA71612.1	Y10603	Lycopersicon esculentum
CAA77808.1	Z11754	Zea mays
AAA87008.1	U22533	Flaveria trinervia

SEQ ID NO. 105

AAG33228.2	AF305070	Chlamydomonas reinhardtii
BAA96166.1	AP002092	Oryza sativa

SEQ ID NO. 106

CAB85464.1	AJ277210	Avena sativa

SEQ ID NO. 107

BAA09852.1	D63781	Glycine max
CAA55293.1	X78547	Glycine max
CAA55294.1	X78548	Glycine max
AAA81889.1	U02494	Solanum tuberosum
AAA81891.1	U02496	Solanum tuberosum
AAA81892.1	U02497	Solanum tuberosum
AAA81890.1	U02495	Solanum tuberosum
BAA85201.1	AP000570	Oryza sativa
BAA84626.1	AP000492	Oryza sativa
AAA81893.1	U02498	Solanum tuberosum
BAA84627.1	AP000492	Oryza sativa
BAA85202.1	AP000570	Oryza sativa
AAB02006.1	U57350	Nicotiana tabacum

SEQ ID NO. 111

AAB17501.2	U43034	Zea mays

SEQ ID NO. 112

CAA71881.1	Y10990	Nicotiana tabacum

SEQ ID NO. 113

CAA70700.1	Y09506	Nicotiana tabacum
CAA77134.1	Y18349	Oryza sativa
CAA77133.1	Y18349	Oryza sativa

SEQ ID NO. 114

AAF20949.1	AF207691	Daucus carota
AAB04951.1	U36752	Chlamydomonas reinhardtii
AAC60560.2	S63824	Pinus mugo
AAF89208.1	AF279251	Vigna radiata
BAA21089.1	D50085	Cucumis sativus
BAA31693.1	AB007321	Marchantia paleacea
AAB86734.1	AF027356	Pinus strobus
AAF82471.1	AF243520	Lycopersicon esculentum
AAF82475.1	AF243522	Lycopersicon esculentum
AAD20020.1	AF126871	Chloroplast Vigna radiata
AAF82474.1	AF243524	Lycopersicon esculentum

SEQ ID NO. 116

CAA73171.1	Y12599	Apium graveolens
AAK29454.1	AF352251	Lens culinaris
CAA40362.1	X57077	Zea mays
BAA25203.1	D87064	Triticum aestivum
AAK29455.1	AF352252	Lens culinaris

AAK29450.1	AF352247	Pisum sativum
AAK29456.1	AF352253	Lens culinaris
BAA88671.1	AB029614	Nicotiana tabacum
AAK29453.1	AF352250	Lathyrus sativus
AAK29452.1	AF352249	Lathyrus sativus
AAK29449.1	AF352246	Pisum sativum
BAA25204.1	D87065	Triticum aestivum
AAK29451.1	AF352248	Pisum sativum
CAA12232.1	AJ224933	Lycopersicon esculentum
AAB86857.1	AF031547	Fritillaria agrestis
AAC41651.1	L29456	Nicotiana tabacum
AAA50578.1	U03391	Lycopersicon esculentum
BAA87331.1	AB012694	Lilium longiflorum
AAD41007.1	AF107024	Triticum aestivum
AAF27930.1	AF222804	Euphorbia esula
CAA29123.1	X05636	Pisum sativum
AAA34246.1	L07947	Volvox carteri
CAA07233.1	AJ006767	Cicer arietinum
AAA50303.1	L34578	Pisum sativum
AAD41008.1	AF107026	Triticum aestivum
AAA74723.1	L07946	Volvox carteri
CAA42529.2	X59872	Triticum aestivum
AAD41005.1	AF107022	Triticum aestivum

SEQ ID NO. 119

CAA07568.1	AJ007580	Ribes nigrum
CAA67107.1	X98474	Solanum tuberosum
BAA92520.1	AP001383	Oryza sativa
CAA72107.1	Y11220	Solanum tuberosum
AAB71744.1	U75346	Chlamydomonas reinhardtii
AAB71743.1	U75345	Chlamydomonas reinhardtii
BAA31583.1	AB016064	Zea mays
BAA31582.1	AB016063	Glycine max
BAA31584.1	AB016065	Oryza sativa
CAB61741.1	AJ275306	Cicer arietinum
CAA69726.1	Y08499	Betula pendula
CAC12820.1	AJ299250	Nicotiana tabacum
BAA08105.1	D45075	Panicum miliaceum
BAA08104.1	D45074	Panicum miliaceum
BAA08103.1	D45073	Panicum miliaceum
CAC27140.1	AJ132535	Picea abies

SEQ ID NO. 120

AAF22256.1	AF161711	Pimpinella brachycarpa
CAA67600.1	X99210	Lycopersicon esculentum
CAA64614.1	X95296	Lycopersicon esculentum
CAA78386.1	Z13996	Petunia x hybrida
CAB43399.1	AJ006292	Antirrhinum majus
CAA78387.1	Z13997	Petunia x hybrida
BAA88221.1	AB028649	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
BAA88222.1	AB028650	Nicotiana tabacum
CAA68235.1	X99973	Hordeum vulgare
CAA66952.1	X98308	Lycopersicon esculentum

SEQ ID NO. 121

CAA78387.1	Z13997	Petunia x hybrida
BAA81736.1	AB029165	Glycine max
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
BAA88221.1	AB028649	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
CAA66952.1	X98308	Lycopersicon esculentum
BAA81733.2	AB029162	Glycine max
CAA72217.1	Y11414	Oryza sativa
BAA88222.1	AB028650	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
AAK19616.1	AF336283	Gossypium hirsutum
CAA78386.1	Z13996	Petunia x hybrida
CAA72218.1	Y11415	Oryza sativa
CAA68235.1	X99973	Hordeum vulgare
AAA33500.1	M73028	Zea mays
CAA67600.1	X99210	Lycopersicon esculentum
AAG36774.1	AF210616	Zea mays
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA72187.1	Y11352	Oryza sativa

CAB43399.1	AJ006292	Antirrhinum majus
AAK19615.1	AF336282	Gossypium hirsutum
AAK19618.1	AF336285	Gossypium hirsutum
CAA72186.1	Y11351	Oryza sativa
CAA64614.1	X95296	Lycopersicon esculentum
CAA50221.1	X70876	Hordeum vulgare
BAA23338.1	D88618	Oryza sativa
AAK19619.1	AF336286	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
BAA23337.1	D88617	Oryza sativa
CAA65525.1	X96749	Oryza sativa
AAK19617.1	AF336284	Gossypium hirsutum
CAA67575.1	X99134	Lycopersicon esculentum
CAA50224.1	X70879	Hordeum vulgare

SEQ ID NO. 122

BAA88222.1	AB028650	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
CAA66952.1	X98308	Lycopersicon esculentum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
BAA81733.2	AB029162	Glycine max
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
BAA81736.1	AB029165	Glycine max
CAA72217.1	Y11414	Oryza sativa
BAA81732.1	AB029161	Glycine max
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
CAA72218.1	Y11415	Oryza sativa
CAA78386.1	Z13996	Petunia x hybrida
CAB43399.1	AJ006292	Antirrhinum majus
AAK19616.1	AF336283	Gossypium hirsutum
AAG36774.1	AF210616	Zea mays
AAA33500.1	M73028	Zea mays
CAA68235.1	X99973	Hordeum vulgare
CAA72187.1	Y11352	Oryza sativa
CAA72186.1	Y11351	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum

AAK19618.1	AF336285	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
AAK19619.1	AF336286	Gossypium hirsutum
AAK19615.1	AF336282	Gossypium hirsutum
CAA64614.1	X95296	Lycopersicon esculentum
BAA23338.1	D88618	Oryza sativa
BAA23337.1	D88617	Oryza sativa
CAA67575.1	X99134	Lycopersicon esculentum
CAA65525.1	X96749	Oryza sativa
CAA50221.1	X70876	Hordeum vulgare
AAF22256.1	AF161711	Pimpinella brachycarpa
AAK19617.1	AF336284	Gossypium hirsutum
CAA50222.1	X70877	Hordeum vulgare
CAA50224.1	X70879	Hordeum vulgare

SEQ ID NO. 125

BAA92155.1	AB007818	Citrus unshiu
AAB02879.1	M37152	Nicotiana tabacum
BAB16425.1	AB041513	Nicotiana tabacum

SEQ ID NO. 126

CAA68993.1	Y07721	Petunia x hybrida

SEQ ID NO. 134

AAB26960.1	U63726	Glycine max

SEQ ID NO. 135

CAA77403.1	Z00044	Plastid Nicotiana tabacum

SEQ ID NO. 136

AAB36543.1	U77935	Phaseolus vulgaris

SEQ ID NO. 137

AAC77928.1	AF084202	Medicago sativa
BAA07208.1	D38011	Oryza sativa

SEQ ID NO. 138

BAA77358.1	AB020023	Nicotiana tabacum
BAB16432.1	AB041520	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
AAD27591.1	AF121354	Petroselinum crispum

BAA77383.1	AB020590	Nicotiana tabacum
BAA82107.1	AB022693	Nicotiana tabacum
BAA86031.1	AB026890	Nicotiana tabacum
CAA88326.1	Z48429	Avena fatua
AAD16138.1	AF096298	Nicotiana tabacum
AAC31956.1	AF080595	Pimpinella brachycarpa
AAC49527.1	U48831	Petroselinum crispum
AAD55974.1	AF121353	Petroselinum crispum
AAF23898.1	AF193802	Oryza sativa
AAD16139.1	AF096299	Nicotiana tabacum
AAC49529.1	U58540	Petroselinum crispum
AAG35658.1	AF204925	Petroselinum crispum
AAC37515.1	L44134	Cucumis sativus
CAA88331.1	Z48431	Avena fatua
AAG35659.1	AF204926	Petroselinum crispum
AAF61864.1	AF193771	Nicotiana tabacum
BAA87069.1	AB035271	Matricaria chamomilla

SEQ ID NO. 141

BAA90392.1	AP001081	Oryza sativa
BAB40310.1	AB026055	Nicotiana tabacum
AAF73016.1	AF262934	Avicennia marina
BAB40311.1	AB026056	Nicotiana tabacum
AAA34310.1	M62720	Triticum aestivum

SEQ ID NO. 142

AAD22975.1	AF126551	Solanum tuberosum subsp. tuberosum
AAF65770.1	AF242312	Euphorbia esula
CAA48638.1	X68678	Zea mays
AAC05639.1	AF052206	Chlamydomonas reinhardtii
AAG03106.1	AC073405	Oryza sativa
BAA84791.1	AP000559	Oryza sativa

SEQ ID NO. 143

CAA53269.1	X75597	Atriplex nummularia
AAA03442.1	U02886	Atriplex nummularia
CAA42905.1	X60347	Magnolia liliiflora
CAB39974.1	AJ133422	Nicotiana tabacum
CAA42904.1	X60346	Petunia x hybrida
AAA33033.1	J05223	Mesembryanthemum crystallinum
AAA33031.1	M29956	Mesembryanthemum crystalli
CAA42103.1	X59517	Antirrhinum majus
CAA51675.1	X73150	Pisum sativum
AAA33667.1	L07500	Pisum sativum
CAA42903.1	X60345	Ranunculus acris
CAA42901.1	X60343	Hordeum vulgare
AAA33352.1	L26924	Ginkgo biloba
AAA89207.1	L26922	Taxus baccata
AAA34077.1	M14419	Nicotiana tabacum
CAA42902.1	X60344	Petroselinum crispum
AAA33779.1	L07501	Pinus sylvestris
AAA87579.1	U45856	Zea mays
CAA55116.1	X78307	Craterostigma plantagineum
AAA87880.1	U45858	Zea mays
AAA87578.1	U45855	Zea mays
CAA51676.1	X73151	Zea mays
AAA82047.1	U31676	Oryza sativa
AAA87580.1	U45857	Zea mays
AAB59010.1	U96623	Selaginella lepidophylla
AAB07758.1	U17005	Solanum tuberosum
CAA51071.1	X72381	Physcomitrella patens
AAB54003.1	U97257	Lycopersicon esculentum
AAA32956.1	M36650	Hordeum vulgare
AAB51592.1	U93208	Lycopersicon esculentum
CAA06030.1	AJ003783	Marsilea quadrifolia
AAD10215.1	L32560	Chloroplast Pinus sylvestris
AAD10214.1	L32561	Chloroplast Pinus sylvestris
CAA04942.1	AJ001706	Pinus sylvestris
AAA33466.1	L13432	Zea mays
AAF64241.1	AF251217	Triticum aestivum
AAA33465.1	L13431	Zea mays
CAA09040.1	AJ010224	Cicer arietinum
AAA86855.1	L27668	Chloroplast Chlamydomonas reinhardtii
AAA84543.1	M55147	Chloroplast Pisum sativum
AAA34076.1	M14418	Nicotiana tabacum
BAA85402.1	AP000615	Oryza sativa

SEQ ID NO. 146

CAA33082.1	X14959	Spinacia oleracea
AAF88067.1	AF286593	Triticum aestivum

AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
BAB20886.1	AB053294	Oryza sativa
AAC49357.1	U35830	Pisum sativum
CAA45098.1	X63537	Pisum sativum
CAA41415.1	X58527	Nicotiana tabacum
BAA04864.1	D21836	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAC04671.1	AF018174	Brassica napus
AAC32111.1	AF051206	Picea mariana
CAA94534.1	Z70677	Ricinus communis
BAA25681.1	AB010434	Brassica rapa
BAA13524.1	D87984	Fagopyrum esculentum
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAB53694.1	U59379	Brassica napus
CAA77847.1	Z11803	Nicotiana tabacum
CAA56850.1	X80887	Chlamydomonas reinhardtii
CAA55399.1	X78822	Chlamydomonas reinhardtii
CAA35827.1	X51463	Spinacia oleracea
CAA35826.1	X51462	Spinacia oleracea
AAD33596.1	AF133127	Hevea brasiliensis
AAB53695.1	U59380	Brassica napus

SEQ ID NO. 147

AAD33596.1	AF133127	Hevea brasiliensis
CAA77847.1	Z11803	Nicotiana tabacum
BAB20886.1	AB053294	Oryza sativa
AAF88067.1	AF286593	Triticum aestivum
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
CAA94534.1	Z70677	Ricinus communis
AAC32111.1	AF051206	Picea mariana
BAA25681.1	AB010434	Brassica rapa
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAB53694.1	U59379	Brassica napus
BAB39913.1	AP002912	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA04864.1	D21836	Oryza sativa

AAD49230.1	AF159385	Hordeum bulbosum
AAD49232.1	AF159387	Lolium perenne
AAD49233.1	AF159388	Phalaris coerulescens
AAD49234.1	AF159389	Phalaris coerulescens
BAA13524.1	D87984	Fagopyrum esculentum
CAA41415.1	X58527	Nicotiana tabacum
AAD49231.1	AF159386	Secale cereale
CAA56850.1	X80887	Chlamydomonas reinhardtii
CAA55399.1	X78822	Chlamydomonas reinhardtii
AAB53695.1	U59380	Brassica napus
AAD56954.1	AF186240	Secale cereale
CAA35827.1	X51463	Spinacia oleracea
CAA35826.1	X51462	Spinacia oleracea
CAA45098.1	X63537	Pisum sativum
CAA33082.1	X14959	Spinacia oleracea
AAC49357.1	U35830	Pisum sativum
AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA53900.1	X76269	Pisum sativum
AAC49358.1	U35831	Pisum sativum
AAC04671.1	AF018174	Brassica napus
CAA06736.1	AJ005841	Oryza sativa
AAB52409.1	U76831	Brassica napus
AAD45358.1	AF160870	Brassica napus

SEQ ID NO. 148

AAC49358.1	U35831	Pisum sativum
CAA53900.1	X76269	Pisum sativum
AAB52409.1	U76831	Brassica napus
AAD45358.1	AF160870	Brassica napus

SEQ ID NO. 149

CAB88032.1	AJ271093	Lycopersicon esculentum
AAF67141.1	AF230371	Lycopersicon esculentum
AAA03353.1	U00428	Linum usitatissimum
CAB86383.1	AJ250864	Hordeum vulgare
CAB86384.1	AJ251304	Hordeum vulgare
AAF64041.1	AF229811	Cucumis sativus
CAB54848.1	AJ249246	Medicago sativa
CAB54847.1	AJ249245	Medicago sativa

CAB54849.1	AJ249247	Medicago sativa
AAA97465.1	U51674	Capsicum annuum
AAK27266.1	AY028374	Capsicum annuum
AAK15070.1	AF239670	Psidium guajava
AAK27265.1	AY028373	Lycopersicon esculentum
AAF67142.1	AF230372	Lycopersicon esculentum
CAB43022.1	AJ239065	Lycopersicon esculentum

SEQ ID NO. 150

AAA74900.1	L34343	Ruta graveolens
AAA74901.1	L34344	Ruta graveolens
AAC27795.1	AF079168	Nicotiana tabacum
BAA82095.1	AB022603	Oryza sativa
BAA82094.1	AB022602	Oryza sativa
CAC29060.1	AJ250008	Catharanthus roseus

SEQ ID NO. 151

AAA92823.1	U18365	Brassica napus
AAK16652.1	AF194820	Populus tremula x Populus tremuloides
CAA76700.1	Y17225	Lycopersicon esculentum
AAC41680.1	L34206	Petroselinum crispum
CAA76701.1	Y17226	Lycopersicon esculentum
AAA34241.1	M99497	Vigna aconitifolia
CAA99991.1	Z75661	Sesbania rostrata
CAA61581.1	X89400	Vigna unguiculata
AAA33479.1	M60526	Zea mays
AAD30506.1	AF129886	Vigna radiata
AAD30494.1	AF126737	Phaseolus vulgaris
CAC15503.1	AJ297916	Lycopersicon esculentum
AAD08721.1	AF038570	Dunaliella tertiolecta
CAC15504.1	AJ297917	Lycopersicon esculentum
BAA19553.1	D64036	Oryza sativa
CAA37207.1	X53035	Pisum sativum
CAA41172.1	X58194	Oryza sativa
AAA98856.1	U53510	Solanum tuberosum
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAA96384.1	Z71702	Beta vulgaris

SEQ ID NO. 152

AAG01532.1	AF289465	Nicotiana tabacum
AAG01533.1	AF289466	Nicotiana tabacum
CAA65980.1	X97315	Medicago sativa
CAC15503.1	AJ297916	Lycopersicon esculentum
CAA66235.1	X97639	Antirrhinum majus
CAC17703.1	AJ278885	Chenopodium rubrum
AAD08721.1	AF038570	Dunaliella tertiolecta
CAA65982.1	X97317	Medicago sativa
CAC15504.1	AJ297917	Lycopersicon esculentum
CAA66236.1	X97640	Antirrhinum majus
BAA19553.1	D64036	Oryza sativa
AAA33479.1	M60526	Zea mays
CAA42922.1	X60374	Oryza sativa
CAA54746.1	X77680	Picea abies
AAD10483.1	U23409	Triticum aestivum
AAA92823.1	U18365	Brassica napus
CAA71242.1	Y10160	Chenopodium rubrum
CAA76700.1	Y17225	Lycopersicon esculentum
CAA56815.2	X80845	Pinus contorta
AAK16652.1	AF194820	Populus tremula x Populus tremuloides
AAG01534.1	AF289467	Nicotiana tabacum
CAA66233.1	X97637	Antirrhinum majus
CAA76701.1	Y17226	Lycopersicon esculentum
AAA34241.1	M99497	Vigna aconitifolia
CAA61581.1	X89400	Vigna unguiculata
CAA42923.1	X60375	Oryza sativa
BAA33152.1	AB008187	Pisum sativum
AAB02567.1	L77082	Nicotiana tabacum
CAA99991.1	Z75661	Sesbania rostrata
AAC41680.1	L34206	Petroselinum crispum
CAA50038.1	X70707	Medicago sativa
BAA21673.1	AB006033	Allium cepa
CAA73997.1	Y13646	Petunia x hybrida
AAB02568.1	L77083	Nicotiana tabacum
AAD10484.1	U23410	Triticum aestivum
AAB41817.1	M58365	Medicago sativa
AAD30506.1	AF129886	Vigna radiata
AAD30494.1	AF126737	Phaseolus vulgaris
CAA66234.1	X97638	Antirrhinum majus
CAA41172.1	X58194	Oryza sativa
BAA28778.1	AB015182	Mesembryanthemum crystallinum

CAA65979.1	X97314	Medicago sativa
CAA65981.1	X97316	Medicago sativa
AAG40580.1	AF216316	Oryza sativa
CAB61889.1	AJ251330	Oryza sativa
BAB18271.1	AB035141	Chlamydomonas reinhardtii

SEQ ID NO. 154

AAC50047.1	U89255	Lycopersicon esculentum
BAA97122.1	AB016264	Nicotiana sylvestris
BAA07321.1	D38123	Nicotiana tabacum
AAC62619.1	AF057373	Nicotiana tabacum
BAA87068.1	AB035270	Matricaria chamomilla
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
AAB38748.1	U81157	Nicotiana tabacum
AAC49740.1	U89256	Lycopersicon esculentum
BAA97124.1	AB016266	Nicotiana sylvestris
BAA97123.1	AB016265	Nicotiana sylvestris
AAD00708.1	U91857	Stylosanthes hamata
BAB03248.1	AB037183	Oryza sativa
AAF05606.1	AF190770	Oryza sativa
BAA76734.1	AB024575	Nicotiana tabacum
AAC49741.1	U89257	Lycopersicon esculentum
AAC29516.1	U77655	Solanum tuberosum
AAD45623.1	AF084185	Brassica napus
AAG59618.1	AF239616	Hordeum vulgare
AAK01089.1	AF298231	Hordeum vulgare

SEQ ID NO. 155

BAA97124.1	AB016266	Nicotiana sylvestris
BAA87068.1	AB035270	Matricaria chamomilla
AAC50047.1	U89255	Lycopersicon esculentum
BAA97122.1	AB016264	Nicotiana sylvestris
BAA07321.1	D38123	Nicotiana tabacum
AAC49740.1	U89256	Lycopersicon esculentum
AAC62619.1	AF057373	Nicotiana tabacum
AAB38748.1	U81157	Nicotiana tabacum
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
BAA97123.1	AB016265	Nicotiana sylvestris
BAB03248.1	AB037183	Oryza sativa
AAD00708.1	U91857	Stylosanthes hamata
AAC49741.1	U89257	Lycopersicon esculentum
AAC29516.1	U77655	Solanum tuberosum
AAF05606.1	AF190770	Oryza sativa
BAA76734.1	AB024575	Nicotiana tabacum
AAD45623.1	AF084185	Brassica napus
AAG59619.1	AF243384	Oryza sativa

SEQ ID NO. 156

CAA58775.1	X83923	Solanum tuberosum
CAA04994.1	AJ001772	Nicotiana tabacum
CAB52708.1	AJ010712	Solanum tuberosum
CAA67782.1	X99405	Nicotiana tabacum
CAA03941.1	AJ000184	Spinacia oleracea
AAB69317.1	AF012861	Petroselinum crispum
CAB52685.1	AJ132346	Dunaliella bioculata
CAA03939.1	AJ000182	Spinacia oleracea
AAF87216.1	AF231351	Nicotiana tabacum
CAA03940.1	AJ000183	Spinacia oleracea
AAB41552.1	U18238	Medicago sativa subsp. sativa
BAA97662.1	AB029454	Triticum aestivum
AAD11426.1	AF097663	Mesembryanthemum crystallinum
CAA52442.1	X74421	Solanum tuberosum
AAB69318.1	AF012862	Petroselinum crispum
BAA97663.1	AB029455	Triticum aestivum
AAB69319.1	AF012863	Petroselinum crispum
BAA97664.1	AB029456	Triticum aestivum
CAA04993.1	AJ001770	Nicotiana tabacum
CAA04992.1	AJ001769	Nicotiana tabacum
AAG23802.1	AF260736	Cucurbita pepo
CAB66330.1	AJ279688	Betula pendula
BAA82155.1	AB011441	Triticum aestivum
CAA06200.1	AJ004900	Glycine max

SEQ ID NO. 157

CAA70768.1	Y09579	Pisum sativum
CAB94801.1	AJ289774	Pisum sativum
CAB89693.1	AJ276591	Pisum sativum
AAC98912.1	AF029984	Lycopersicon esculentum
CAB89694.1	AJ276592	Pisum sativum
CAB94800.1	AJ289773	Pisum sativum

BAA94422.1	AB040053	Oryza sativa subsp. japonica
AAG31173.1	AF315714	Ipomoea nil

SEQ ID NO. 159

AAC39355.1	AF007807	Daucus carota
CAA05207.1	AJ002140	Lycopersicon esculentum
BAA92852.1	AB030726	Nicotiana tabacum
AAC49931.1	AF034419	Pisum sativum
AAG15406.1	AF229183	Zea mays
AAC39356.1	AF007808	Daucus carota
AAK11516.1	AF243043	Zea mays

SEQ ID NO. 161

CAB89693.1	AJ276591	Pisum sativum
CAB94801.1	AJ289774	Pisum sativum
CAB94800.1	AJ289773	Pisum sativum
CAB89694.1	AJ276592	Pisum sativum

SEQ ID NO. 162

AAD23582.1	AF128443	Glycine max
CAA65244.1	X95997	Solanum tuberosum
CAA46556.1	X65606	Hordeum vulgare
AAF66639.1	AF143743	Lycopersicon esculentum
BAA05649.1	D26602	Nicotiana tabacum
AAB52224.1	U83797	Solanum tuberosum
AAC99329.1	AF062479	Oryza sativa
CAA07813.1	AJ007990	Hordeum vulgare
CAA46554.1	X65604	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
CAA57898.1	X82548	Hordeum vulgare
CAA71142.1	Y10036	Cucumis sativus
CAA65243.1	X95996	Solanum tuberosum
BAA96628.1	AP002482	Oryza sativa
CAA73068.1	Y12465	Sorghum bicolor
CAA73067.1	Y12464	Sorghum bicolor
BAA83689.1	AB011968	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA83688.1	AB011967	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
AAB62693.1	AF004947	Oryza sativa
AAD00239.1	U73938	Nicotiana tabacum
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
AAD00240.1	U73939	Nicotiana tabacum
AAB68962.1	L38855	Glycine max
BAA13608.1	D88399	Oryza sativa
CAA81443.1	Z26846	Mesembryanthemum crystalli
CAA06503.1	AJ005373	Craterostigma plantagineum
AAF27340.1	AF186020	Vicia faba
AAB58348.1	U29095	Triticum aestivum
AAC98509.1	AF100162	Chlamydomonas *reinhardtii*
AAA96325.1	M94726	Triticum aestivum

SEQ ID NO. 163

CAA94534.1	Z70677	Ricinus communis
CAA77847.1	Z11803	Nicotiana tabacum
CAA41415.1	X58527	Nicotiana tabacum
BAA05546.1	D26547	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA04864.1	D21836	Oryza sativa
BAB20886.1	AB053294	Oryza sativa
BAA13524.1	D87984	Fagopyrum esculentum
AAB53695.1	U59380	Brassica napus
AAC32111.1	AF051206	Picea mariana
AAF88067.1	AF286593	Triticum aestivum
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
AAB53694.1	U59379	Brassica napus
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
BAA25681.1	AB010434	Brassica rapa
AAD49232.1	AF159387	Lolium perenne
AAD49231.1	AF159386	Secale cereale
AAD49234.1	AF159389	Phalaris coerulescens
AAD49233.1	AF159388	Phalaris coerulescens
AAD49230.1	AF159385	Hordeum bulbosum
AAD56954.1	AF186240	Secale cereale
BAB39913.1	AP002912	Oryza sativa
CAA55399.1	X78822	Chlamydomonas reinhardtii
CAA56850.1	X80887	Chlamydomonas reinhardtii
AAD33596.1	AF133127	Hevea brasiliensis
AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA45098.1	X63537	Pisum sativum

AAC49357.1	U35830	Pisum sativum
CAA35827.1	X51463	Spinacia oleracea
CAA35826.1	X51462	Spinacia oleracea
CAA53900.1	X76269	Pisum sativum
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii
AAC49358.1	U35831	Pisum sativum
AAC04671.1	AF018174	Brassica napus
CAA33082.1	X14959	Spinacia oleracea
CAA06736.1	AJ005841	Oryza sativa
AAD45358.1	AF160870	Brassica napus
AAB52409.1	U76831	Brassica napus
CAA06735.1	AJ005840	Triticum aestivum
AAB47556.1	U87141	Mesembryanthemum crystallinum

SEQ ID NO. 164

AAB53695.1	U59380	Brassica napus
BAA04864.1	D21836	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA25681.1	AB010434	Brassica rapa
AAB53694.1	U59379	Brassica napus
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
CAA94534.1	Z70677	Ricinus communis
CAA41415.1	X58527	Nicotiana tabacum
CAA77847.1	Z11803	Nicotiana tabacum
BAB20886.1	AB053294	Oryza sativa
AAF88067.1	AF286593	Triticum aestivum
BAA13524.1	D87984.	Fagopyrum esculentum
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
AAC32111.1	AF051206	Picea mariana
CAA55399.1	X78822	Chlamydomonas reinhardtii
CAA56850.1	X80887	Chlamydomonas reinhardtii
AAD49231.1	AF159386	Secale cereale
AAD49232.1	AF159387	Lolium perenne
AAD49233.1	AF159388	Phalaris coerulescens
AAD49230.1	AF159385	Hordeum bulbosum
AAD49234.1	AF159389	Phalaris coerulescens
BAB39913.1	AP002912	Oryza sativa

AAD56954.1	AF186240	Secale cereale
AAD33596.1	AF133127	Hevea brasiliensis
AAC49358.1	U35831	Pisum sativum
CAA53900.1	X76269	Pisum sativum
CAA35826.1	X51462	Spinacia oleracea
CAA35827.1	X51463	Spinacia oleracea
CAA45098.1	X63537	Pisum sativum
AAC49357.1	U35830	Pisum sativum
AAD45358.1	AF160870	Brassica napus
AAB52409.1	U76831	Brassica napus
AAC19392.1	AF069314	Mesembryanthemum crystalli
CAA06736.1	AJ005841	Oryza sativa
AAC04671.1	AF018174	Brassica napus
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA06735.1	AJ005840	Triticum aestivum
AAB47556.1	U87141	Mesembryanthemum crystallinum
CAA33082.1	X14959	Spinacia oleracea

SEQ ID NO. 165

AAF78756.1	AF271358	Oryza sativa

SEQ ID NO. 166

AAG14456.1	AF283708	Tulipa gesneriana
AAG14455.1	AF283707	Tulipa gesneriana
AAG14454.1	AF283706	Tulipa gesneriana

SEQ ID NO. 167

AAC49832.1	AF005492	Oryza sativa
BAA97100.1	AB040471	Nicotiana tabacum
AAC04862.1	AF046934	Paulownia kawakamii
CAA05898.1	AJ003142	Lycopersicon esculentum
CAA52015.1	X73635	Lycopersicon esculentum
BAA96162.1	AP002092	Oryza sativa
BAA07289.1	D38111	Triticum aestivum
CAA40101.1	X56781	Triticum aestivum
CAA71687.1	Y10685	Glycine max
AAB36514.1	U57389	Phaseolus vulgaris
CAA41453.1	X58577	Petroselinum crispum
CAC00656.1	AJ292743	Petroselinum crispum

AAB40291.1	U42208	Oryza sativa
AAK14790.1	AY027510	Catharanthus roseus
CAA71768.1	Y10809	Petroselinum crispum
AAC37418.1	L34551	Oryza sativa
CAA66478.1	X97904	Vicia faba
AAC49556.1	U04295	Oryza sativa
CAA88493.1	Z48603	Nicotiana tabacum
AAK25822.1	AF350505	Phaseolus vulgaris
CAA70216.1	Y09013	Triticum aestivum
CAA71795.1	Y10834	Hordeum vulgare

SEQ ID NO. 169

CAA06925.1	AJ006228	Nicotiana tabacum

SEQ ID NO. 170

BAA83689.1	AB011968	Oryza sativa
CAA06334.1	AJ005077	Lycopersicon esculentum
AAF05112.1	AF158091	Mesembryanthemum crystallinum
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF21062.1	AF216527	Dunaliella tertiolecta
AAF19402.1	AF203480	Lycopersicon esculentum
CAA73068.1	Y12465	Sorghum bicolor
AAF19403.1	AF203481	Lycopersicon esculentum
AAG31141.1	AF305911	Oryza sativa
AAG31142.1	AF305912	Hordeum vulgare
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
AAF06969.1	AF162661	Kalanchoe fedtschenkoi
AAF19401.1	AF203479	Glycine max
BAA90814.1	AP001168	Oryza sativa
CAA73067.1	Y12464	Sorghum bicolor
BAA34675.1	AB011670	Triticum aestivum
AAB05457.1	U55768	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
CAA39936.1	X56599	Daucus carota
CAA41172.1	X58194	Oryza sativa
BAA85396.1	AP000615	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
AAD17800.1	AF090835	Mesembryanthemum crystallinum
CAA50038.1	X70707	Medicago sativa
CAA57156.1	X81393	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
AAB66608.1	AF012889	Zea mays
AAB88537.1	AF035944	Fragaria x ananassa
BAA33152.1	AB008187	Pisum sativum
AAF22219.1	AF141378	Zea mays
CAA81443.1	Z26846	Mesembryanthemum crystalli
AAC25423.1	AF072908	Nicotiana tabacum
AAG46110.1	AC073166	Oryza sativa
AAA96325.1	M94726	Triticum aestivum
AAK30005.1	AY029067	Rosa hybrid cultivar
AAB58348.1	U29095	Triticum aestivum

SEQ ID NO. 171

CAC00658.1	AJ292745	Petroselinum crispum
CAC00657.1	AJ292744	Petroselinum crispum
CAA74023.1	Y13676	Antirrhinum majus
CAA74022.1	Y13675	Antirrhinum majus
BAA22204.1	D63951	Nicotiana tabacum
AAD55394.1	AF176641	Lycopersicon esculentum
AAK25822.1	AF350505	Phaseolus vulgaris
AAK01953.1	AY026054	Phaseolus acutifolius
CAA71687.1	Y10685	Glycine max
AAC37418.1	L34551	Oryza sativa
BAA36492.1	AB021736	Oryza sativa
BAA11431.1	D78609	Oryza sativa
CAA41453.1	X58577	Petroselinum crispum
CAA71768.1	Y10809	Petroselinum crispum
AAC49556.1	U04295	Oryza sativa
BAA07289.1	D38111	Triticum aestivum
CAA71795.1	Y10834	Hordeum vulgare
CAA70216.1	Y09013	Triticum aestivum
CAA40101.1	X56781	Triticum aestivum
CAA11499.1	AJ223624	Spinacia oleracea
AAC49474.1	U41817	Phaseolus vulgaris
AAB40291.1	U42208	Oryza sativa
BAA02304.1	D12920	Triticum aestivum

SEQ ID NO. 180

AAD26116.1	AF106954	Brassica napus
CAB51533.1	AJ237693	Ajuga reptans
CAB51534.1	AJ237694	Ajuga reptans
AAD55726.1	AF178569	Vitis riparia

SEQ ID NO. 181

AAA80173.1	U11446	Pennisetum glaucum
AAA80172.1	U11445	Pennisetum glaucum
AAA33504.1	M26227	Zea mays
AAA80171.1	U11444	Pennisetum glaucum
AAG25927.1	AF260918	Petunia x hybrida
AAG25928.1	AF260919	Petunia x hybrida
CAA40544.1	X57276	Zea mays
AAA80175.1	U11450	Sorghum bicolor
AAC49216.1	U39865	Oryza officinalis
AAB03841.1	U57899	Zea mays

SEQ ID NO. 185

CAA10134.1	AJ012693	Cicer arietinum
CAB65280.1	AJ248323	Medicago sativa subsp. x varia
AAC32448.1	U76296	Spinacia oleracea
AAF66243.1	AF243181	Lycopersicon esculentum
AAD10251.1	AF031195	Triticum aestivum
AAF66242.1	AF243180	Lycopersicon esculentum
CAA80963.1	Z25471	Pisum sativum
AAC64163.1	AF093537	Zea mays

SEQ ID NO. 187

AAD32207.1	AF134733	Prunus armeniaca
AAB70919.1	AF019376	Brassica napus
AAB71420.1	U74631	Ricinus communis
AAB71419.1	U74630	Ricinus communis
CAA95999.1	Z71395	Nicotiana plumbaginifolia
CAA05161.1	AJ002057	Beta vulgaris
AAA32949.1	L27349	Hordeum vulgare
AAF01470.1	AF190454	Zea mays
CAA86728.1	Z46772	Zea mays
CAA61939.1	X89813	Zea mays
AAG01147.1	AF283816	Pinus taeda
AAA32948.1	L27348	Hordeum vulgare
BAA88900.1	AB021259	Oryza sativa
AAD17490.1	AF052040	Berberis stolonifera
CAA54975.1	X78057	Zea mays
CAB54526.1	AJ000765	Chlamydomonas reinhardtii
BAA85118.1	AB018243	Solanum melongena
AAK15502.1	AF325720	Pennisetum ciliare
CAA57914.1	X82578	Parthenium argentatum
BAA77025.1	AB026251	Lithospermum erythrorhizon

SEQ ID NO. 188

BAA04611.1	D17765	Oryza sativa

SEQ ID NO. 189

CAC12883.1	AJ295006	Nicotiana tabacum
CAA55090.1	X78284	Medicago sativa
BAA92964.1	AP001551	Oryza sativa
AAB82139.1	AF022736	Oryza sativa
CAA64625.1	X95313	Chlamydomonas reinhardtii
AAF78516.1	AF195217	Pyrus pyrifolia
AAF43806.1	AF166114	Chloroplast Mesostigma viride
BAA58003.1	AB001684	Chlorella vulgaris
AAC64970.1	AF095708	Oryza sativa
AAD54793.1	AF137379	Chloroplast Nephroselmis olivacea

SEQ ID NO. 190

CAB61752.1	AJ275318	Cicer arietinum
CAC14890.1	AJ295156	Phragmites australis
AAB68605.1	U82433	Prunus armeniaca
AAA86532.1	U31544	Pisum sativum

SEQ ID NO. 191

BAA02157.1	D12632	Oryza sativa
BAB19390.1	AP002542	Oryza sativa
AAF64190.1	AF245665	Mesembryanthemum crystallinum

SEQ ID NO. 192

CAA12358.1	AJ225027	Cicer arietinum
CAA63960.1	X94296	Hordeum vulgare
AAG13986.1	AF298827	Prunus avium

SEQ ID NO. 193

BAA94964.1	AB042113	Glycine max
BAA94966.1	AB042115	Oryza sativa
AAF67099.1	AF216853	Zea mays
BAA94965.1	AB042114	Glycine max

SEQ ID NO. 194

CAA61158.1	X87931	Beta vulgaris
AAA33136.1	L16983	Daucus carota

SEQ ID NO. 199

BAB12433.1	AB025030	Coptis japonica
AAF05621.1	AF191772	Papaver somniferum
AAC39452.1	AF014800	Eschscholzia californica
AAC39453.1	AF014801	Eschscholzia californica
AAA32913.1	M32885	Persea americana
AAA19701.1	L24438	Thlaspi arvense
CAA50648.1	X71657	Solanum melongena
AAG44132.1	AF218296	Pisum sativum
BAA12159.1	D83968	Glycine max
AAC48987.1	U09610	Berberis stolonifera
AAD56282.1	AF155332	Petunia x hybrida
AAC32274.1	AF081575	Petunia x hybrida
AAB17562.1	U72654	Eustoma grandiflorum
BAA84916.1	AB032833	Cicer arietinum
AAB94588.1	AF022459	Glycine max
BAB40324.1	AB037245	Asparagus officinalis
BAB40323.1	AB037244	Asparagus officinalis
CAA50155.1	X70824	Solanum melongena
AAC39318.1	AF029858	Sorghum bicolor
CAB56503.1	AJ238612	Catharanthus roseus
BAA84071.1	AB028151	Antirrhinum majus
CAA70575.1	Y09423	Nepeta racemosa
CAA70576.1	Y09424	Nepeta racemosa
BAA84072.1	AB028152	Torenia hybrida
BAA13076.1	D86351	Glycine max

SEQ ID NO. 200

CAA54612.1	X77462	Manihot esculenta
CAA54611.1	X77461	Manihot esculenta
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAA54613.1	X77463	Manihot esculenta
AAK28303.1	AF346431	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
CAA54609.1	X77459	Manihot esculenta
CAA59450.1	X85138	Lycopersicon esculentum
AAD04166.1	AF101972	Phaseolus lunatus
BAB41017.1	AB047090	Vitis labrusca x Vitis vi
BAA83484.1	AB031274	Scutellaria baicalensis
BAB41020.1	AB047093	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
AAF61647.1	AF190634	Nicotiana tabacum
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAA89009.1	AB027455	Petunia x hybrida
CAA54614.1	X77464	Manihot esculenta
AAD21086.1	AF127218	Forsythia x intermedia
AAD26203.1	AF117267	Malus x domestica
AAB48444.1	U82367	Solanum tuberosum

SEQ ID NO. 201

CAA33932.1	X15901	Plastid Oryza sativa

SEQ ID NO. 202

AAD50774.1	AF161704	Lycopersicon esculentum
CAA58444.1	X83421	Lycopersicon esculentum

SEQ ID NO. 203

AAC77928.1	AF084202	Medicago sativa
BAA07208.1	D38011	Oryza sativa

SEQ ID NO. 204

AAF04624.1	AF098672	Brassica oleracea
BAA24697.1	AB003378	Salix bakko
AAB88615.1	AF034944	Zea mays
AAC67556.1	AF094774	Oryza sativa
AAC61599.1	AF091857	Pimpinella brachycarpa

SEQ ID NO. 206

AAB26960.1	U63726	Glycine max

SEQ ID NO. 207

CAB61752.1	AJ275318	Cicer arietinum
CAC14890.1	AJ295156	Phragmites australis
AAA86532.1	U31544	Pisum sativum
AAB68605.1	U82433	Prunus armeniaca

SEQ ID NO. 210

AAG43835.1	AF213455	Zea mays
AAC36698.1	AF075580	Mesembryanthemum crystallinum
CAC10359.1	AJ277087	Nicotiana tabacum
CAB90633.1	AJ277743	Fagus sylvatica
CAC10358.1	AJ277086	Nicotiana tabacum
CAA72341.1	Y11607	Medicago sativa
AAC36697.1	AF075579	Mesembryanthemum crystallinum
AAC36700.1	AF075582	Mesembryanthemum crystallinum
AAD17804.1	AF092431	Lotus japonicus
AAD17805.1	AF092432	Lotus japonicus
CAC09575.1	AJ298987	Fagus sylvatica
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAD11430.1	AF097667	Mesembryanthemum crystallinum
CAB90634.1	AJ277744	Fagus sylvatica
AAC26828.1	AF075603	Oryza sativa
AAC35951.1	AF079355	Mesembryanthemum crystallinum
AAB93832.1	U81960	Zea mays
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 211

CAA67922.1	X99608	Oryza sativa
CAA05079.1	AJ001901	Cicer arietinum

SEQ ID NO. 212

AAD17805.1	AF092432	Lotus japonicus
CAA72341.1	Y11607	Medicago sativa
AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAD17804.1	AF092431	Lotus japonicus
AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAC10359.1	AJ277087	Nicotiana tabacum
CAC10358.1	AJ277086	Nicotiana tabacum
CAB90633.1	AJ277743	Fagus sylvatica
AAC36700.1	AF075582	Mesembryanthemum crystalli
AAG43835.1	AF213455	Zea mays
CAC09575.1	AJ298987	Fagus sylvatica
AAC35951.1	AF079355	Mesembryanthemum crystalli
CAB90634.1	AJ277744	Fagus sylvatica
AAC26828.1	AF075603	Oryza sativa
AAD11430.1	AF097667	Mesembryanthemum crystalli
AAB93832.1	U81960	Zea mays
AAC36699.1	AF075581	Mesembryanthemum crystalli
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 216

CAA30699.1	X07851	Triticum aestivum
CAB51619.1	X07852	Ricinus communis
CAA89836.1	Z49766	Pseudotsuga menziesii

SEQ ID NO. 217

CAA11219.1	AJ223281	Manihot esculenta
AAC49184.1	U40402	Hevea brasiliensis
CAA82334.1	Z29091	Manihot esculenta
CAA11428.1	AJ223506	Manihot esculenta

SEQ ID NO. 218

AAB97167.1	AF030882	Zea mays
AAA91298.1	U18908	Zea mays
AAD33889.1	AF142589	Hordeum vulgare
BAA29041.1	AB015615	Oryza sativa
AAD33891.1	AF142591	Solanum tuberosum
AAD33890.1	AF142590	Triticum aestivum
AAD53260.1	AF142588	Hordeum vulgare

SEQ ID NO. 221

CAA64728.1	X95458	Zea mays

SEQ ID NO. 223

CAA52782.1	X74772	Helianthus annuus

SEQ ID NO. 225

BAA13524.1	D87984	Fagopyrum esculentum
AAC32111.1	AF051206	Picea mariana

CAA41415.1	X58527	Nicotiana tabacum
AAB53695.1	U59380	Brassica napus
BAB20886.1	AB053294	Oryza sativa
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
AAF88067.1	AF286593	Triticum aestivum
BAA05546.1	D26547	Oryza sativa
BAA04864.1	D21836	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA25681.1	AB010434	Brassica rapa
CAA94534.1	Z70677	Ricinus communis
AAB53694.1	U59379	Brassica napus
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
CAA77847.1	Z11803	Nicotiana tabacum
AAD49231.1	AF159386	Secale cereale
AAD49233.1	AF159388	Phalaris coerulescens
AAD49234.1	AF159389	Phalaris coerulescens
BAB39913.1	AP002912	Oryza sativa
AAD49230.1	AF159385	Hordeum bulbosum
AAD49232.1	AF159387	Lolium perenne
AAD33596.1	AF133127	Hevea brasiliensis
CAA55399.1	X78822	Chlamydomonas reinhardtii
CAA56850.1	X80887	Chlamydomonas reinhardtii
AAD56954.1	AF186240	Secale cereale
CAA44209.1	X62335	Chlamydomonas reinhardtii
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA55398.1	X78821	Chlamydomonas reinhardtii
AAC19392.1	AF069314	Mesembryanthemum crystallinum
AAC04671.1	AF018174	Brassica napus
AAC49357.1	U35830	Pisum sativum
CAA45098.1	X63537	Pisum sativum
CAA35827.1	X51463	Spinacia oleracea
CAA35826.1	X51462	Spinacia oleracea
CAA53900.1	X76269	Pisum sativum
AAC49358.1	U35831	Pisum sativum
CAA33082.1	X14959	Spinacia oleracea
AAD45358.1	AF160870	Brassica napus
AAB52409.1	U76831	Brassica napus
CAA06736.1	AJ005841	Oryza sativa
CAA06735.1	AJ005840	Triticum aestivum
AAB03681.1	U43609	Chlamydomonas reinhardtii

SEQ ID NO. 227

AAA34140.1	M17633	Lycopersicon esculentum
CAA45523.1	X64198	Nicotiana tabacum
AAA34186.1	J03558	Lycopersicon esculentum
AAF23819.1	AF218305	Hordeum vulgare
AAC67558.1	AF094776	Oryza sativa
CAA41404.1	X58514	Pinus sylvestris
AAF44702.1	AF241524	Asarina barclaiana
CAA41405.1	X58515	Pinus sylvestris
AAG28464.1	AF195794	Chlamydomonas reinhardtii
AAC14566.1	AF058796	Oryza sativa
CAA90681.1	Z50801	Zea mays
AAF90200.1	AF287276	Hordeum vulgare
CAA33903.1	X15894	Sinapis alba
CAA34459.1	X16436	Sinapis alba
AAC67557.1	AF094775	Oryza sativa
AAB18209.1	U73218	Triticum aestivum
AAA64414.1	U23188	Zea mays
CAA44777.1	X63052	Hordeum vulgare
CAA41406.1	X58516	Pinus sylvestris
AAA18529.1	L07119	Chloroplast Gossypium hirsutum
AAA64415.1	U23189	Zea mays
CAA32658.1	X14506	Pinus sylvestris
CAA32197.1	X14036	Lycopersicon esculentum
AAA34159.1	M20241	Lycopersicon esculentum
AAF13731.1	AF002248	Pisum sativum
CAA57877.1	X82497	Nicotiana tabacum
AAA34142.1	M17559	Lycopersicon esculentum
BAA25392.1	AB012638	Nicotiana sylvestris
AAA34056.1	M21398	Nicotiana plumbaginifolia
CAA57492.1	X81962	Pisum sativum
BAA25396.1	AB012641	Nicotiana sylvestris
CAA28639.1	X04966	Petunia x hybrida
AAA33711.1	M21317	Petunia x hybrida
AAA34141.1	M17558	Lycopersicon esculentum

SEQ ID NO. 228

CAA40474.1	X57187	Phaseolus vulgaris
AAB65776.1	U97521	Vitis vinifera
CAA61281.1	X88803	Vigna unguiculata

AAB65777.1	U97522	Vitis vinifera
BAA22966.1	D45182	Chenopodium amaranticolor
BAA22968.1	D45184	Chenopodium amaranticolor
BAA22965.1	D45181	Chenopodium amaranticolor
CAA43708.1	X61488	Brassica napus
BAA22967.1	D45183	Chenopodium amaranticolor
CAA53544.1	X75945	Beta vulgaris
AAC49435.1	U52845	Daucus carota
AAB08468.1	U52846	Daucus carota
AAB08470.1	U52848	Daucus carota
AAB08469.1	U52847	Daucus carota
AAA33445.1	M84165	Zea mays
AAA33444.1	M84164	Zea mays
AAA32916.1	L25826	Beta vulgaris
AAD28733.1	AF112966	Triticum aestivum
BAB21377.1	AB054811	Oryza sativa
BAB21374.1	AB054687	Oryza sativa
BAA19793.1	AB003194	Oryza sativa
AAA85364.1	L42467	Picea glauca
AAB01665.1	U21848	Brassica napus
AAC35981.1	AF090336	Citrus sinensis
AAD28730.1	AF112963	Triticum aestivum
AAF04454.1	AF000966	Poa pratensis
CAC17793.1	AJ301671	Nicotiana sylvestris
AAF04453.1	AF000964	Poa pratensis
CAA34812.1	X16938	Nicotiana tabacum
CAA34813.1	X16939	Nicotiana tabacum
CAA45822.1	X64519	Nicotiana tabacum
CAA35945.1	X51599	Nicotiana tabacum
AAB23374.1	S44869	Nicotiana tabacum
AAA34070.1	M15173	Nicotiana tabacum
CAA30142.1	X07130	Solanum tuberosum
CAA33517.1	X15494	Solanum tuberosum
AAG53609.1	AF280437	Secale cereale
CAB01591.1	Z78202	Persea americana
CAA53626.1	X76041	Triticum aestivum
CAA78845.1	Z15140	Lycopersicon esculentum
AAC16010.1	AF061805	Elaeagnus umbellata
AAA32640.1	M94106	Allium sativum
AAA32641.1	M94105	Allium sativum
AAA56787.1	L34211	Hordeum vulgare
AAA17409.1	U02607	Solanum tuberosum
AAA18332.1	U02605	Solanum tuberosum
CAA45821.1	X64518	Nicotiana tabacum

SEQ ID NO. 229

AAB35812.1	S80554	Arabidopsis
AAF23570.1	AF112095	Arabidopsis halleri
AAF23568.1	AF112093	Arabidopsis griffithiana
AAG43351.1	AF144533	Arabidopsis korshinskyi
AAF23581.1	AF112106	Capsella rubella
AAF23569.1	AF112094	Halimolobos perplexa var. perplexa
AAG43349.1	AF144531	Arabidopsis himalaica
AAF23575.1	AF112100	Arabidopsis lyrata subsp. lyrata
AAF23567.1	AF112092	Arabidopsis griffithiana
AAF23578.1	AF112103	Arabidopsis lyrata subsp. petraea
AAF23576.1	AF112101	Arabis parishii
AAF23574.1	AF112099	Arabis lyallii
AAF23566.1	AF112091	Arabis glabra
AAF23565.1	AF112090	Arabis fendleri
AAF23563.1	AF112088	Arabis drummondii
AAF23564.1	AF112089	Arabis drummondii
AAF23579.1	AF112104	Arabidopsis lyrata subsp. petraea
AAF23573.1	AF112098	Arabis lignifera
AAF23560.1	AF112085	Cardamine amara
AAG43348.1	AF144530	Rorippa amphibia
AAG43356.1	AF144538	Cardamine penzesii
AAG43359.1	AF144541	Sisymbrium irio
AAG43352.1	AF144534	Lepidium campestre
CAA32495.1	X14314	Sinapis alba
AAG43357.1	AF144539	Cardamine rivularis
AAF23583.1	AF112108	Barbarea vulgaris
AAC31914.1	AF076336	Brassica napus
AAC31912.1	AF076334	Brassica napus
AAF23577.1	AF112102	Arabis pauciflora
AAG43350.1	AF144532	Cochlearia danica
CAA34460.1	X16437	Sinapis alba
CAA35600.1	X17577	Matthiola incana

AAG43358.1	AF144540	Cardamine pratensis
AAG43353.1	AF144535	Thlaspi arvense
AAC31913.1	AF076335	Brassica napus
AAF23571.1	AF112096	Arabis hirsuta
AAF23582.1	AF112107	Arabis turrita
AAG43406.1	AF174529	Aubrieta deltoidea
AAG43355.1	AF144537	Alliaria petiolata
AAF23580.1	AF112105	Arabis procurrens
AAF23572.1	AF112097	Arabis jacquinii
AAF23562.1	AF112087	Arabis blepharophylla
AAF23584.1	AF112109	Aubrieta deltoidea
AAG43354.1	AF144536	Microthlaspi perfoliatum
AAF23557.1	AF112082	Aethionema grandiflora
AAF23558.1	AF112083	Arabis alpina
AAF23559.1	AF112084	Arabis alpina
AAB87072.1	AF031922	Raphanus sativus
AAG43360.1	AF144542	Ionopsidium abulense
AAC31911.1	AF076333	Brassica napus

SEQ ID NO. 231

AAD10327.1	U63534	Fragaria x ananassa
AAK28509.1	AF320110	Fragaria x ananassa
AAB38503.1	U79770	Mesembryanthemum crystallinum
CAA48028.1	X67817	Petroselinum crispum
AAC15467.1	U24561	Apium graveolens
AAC35846.1	AF083333	Medicago sativa
AAC61854.1	AF067082	Apium graveolens
AAA74882.1	L36823	Stylosanthes humilis
AAA74883.1	L36456	Stylosanthes humilis
AAF72100.1	AF146691	Lycopersicon esculentum
CAA86072.1	Z37991	Pinus taeda
CAA05095.1	AJ001924	Picea abies
AAB38774.1	U62394	Pinus radiata
CAA51226.1	X72675	Picea abies
CAA05097.1	AJ001926	Picea abies
CAA05096.1	AJ001925	Picea abies
AAC31166.1	AF060491	Pinus radiata
CAA86073.1	Z37992	Pinus taeda
CAA44216.1	X62343	Nicotiana tabacum
CAA44217.1	X62344	Nicotiana tabacum
BAA03099.1	D13991	Aralia cordata
CAA79625.1	Z19573	Medicago sativa
AAF43140.1	AF217957	Populus tremuloides
AAC35845.1	AF083332	Medicago sativa
CAC07423.1	AJ295837	Populus balsamifera subsp. trichocarpa
CAA79622.1	Z19568	Populus deltoides
AAC07987.1	AF038561	Eucalyptus globulus
AAG15553.1	AF294793	Eucalyptus saligna
AAK00679.1	AF229407	Brassica napus
CAA46585.1	X65631	Eucalyptus gunnii
CAA53211.1	X75480	Eucalyptus gunnii
AAK00681.1	AF229409	Brassica napus
AAB70908.1	AF010290	Lolium perenne
AAK00682.1	AF229410	Brassica oleracea
CAA74070.1	Y13733	Zea mays
CAA06687.1	AJ005702	Zea mays
AAK00678.1	AF229406	Brassica napus
CAA13177.1	AJ231135	Saccharum officinarum
AAK00684.1	AF229412	Brassica rapa
AAK00680.1	AF229408	Brassica napus
AAK00683.1	AF229411	Brassica rapa
BAA19487.1	D86590	Zinnia elegans
BAA04046.1	D16624	Eucalyptus botryoides
AAD18000.1	AF109157	Eucalyptus globulus
AAF23409.1	AF207552	Brassica napus
AAF23412.1	AF207555	Brassica rapa
AAF23411.1	AF207554	Brassica oleracea
AAF23410.1	AF207553	Brassica napus
AAF23416.1	AF207559	Brassica rapa
AAF23415.1	AF207558	Brassica oleracea

SEQ ID NO. 232

CAA72793.1	Y12072	Gossypium arboreum
AAA87729.1	U20771	Lupinus albus
AAA86687.1	U15777	Lupinus albus
BAB40666.1	AB053487	Humulus lupulus
BAB40665.1	AB053486	Humulus lupulus
AAC73051.1	AF048747	Lycopersicon esculentum
CAA59170.1	X84695	Capsicum annuum
CAA57892.1	X82542	Parthenium argentatum
AAC78557.1	AF019892	Helianthus annuus

CAA57893.1	X82543	Parthenium argentatum
AAC49452.1	U36376	Artemisia annua
AAD17204.1	AF112881	Artemisia annua
BAA19856.1	D85317	Oryza sativa
BAA36276.1	AB021747	Oryza sativa
AAD32648.1	AF136602	Artemisia annua
BAA36347.1	AB021979	Oryza sativa
AAD37789.1	AF149257	Artemisia annua
AAD45122.1	AF164026	Xanthoceras sorbifolium
AAB93951.1	U97330	Nicotiana tabacum
AAB93984.1	AF005201	Parthenium argentatum

SEQ ID NO. 233

CAB59893.1	AJ238697	Hordeum vulgare
BAA22194.1	D63425	Spinacia oleracea
CAB59895.1	AJ238745	Hordeum vulgare
CAB96145.1	AJ250951	Mesembryanthemum crystallinum
CAA42780.1	X60219	Nicotiana sylvestris
BAB16430.1	AB041518	Nicotiana tabacum
AAB94892.1	AF037051	Gossypium hirsutum
CAA75054.1	Y14762	Lycopersicon esculentum
AAC78466.1	AF053311	Zantedeschia aethiopica
CAA75009.1	Y14707	Helianthus annuus
CAA74775.1	Y14429	Helianthus annuus
CAA04142.1	AJ000508	Pisum sativum
CAB59894.1	AJ238744	Hordeum vulgare
CAA75055.1	Y14763	Lycopersicon esculentum
BAA83594.1	AB009083	Chlamydomonas sp. W80
AAB66330.1	AF014927	Chlamydomonas reinhardtii
CAA09194.1	AJ010455	Triticum aestivum
CAB66331.1	AJ279689	Betula pendula

SEQ ID NO. 234

BAA83710.1	AB014483	Nicotiana tabacum
CAA39034.1	X55347	Lycopersicon peruvianum
CAA87077.1	Z46953	Glycine max
CAA87080.1	Z46956	Glycine max
CAA47869.1	X67600	Lycopersicon peruvianum
CAA47868.1	X67599	Lycopersicon esculentum
BAA83711.1	AB014484	Nicotiana tabacum
CAA58117.1	X82943	Zea mays
CAA87075.1	Z46951	Glycine max
CAA87076.1	Z46952	Glycine max
CAA47870.1	X67601	Lycopersicon peruvianum
AAF74563.1	AF208544	Lycopersicon peruvianum
AAF37579.1	AF235958	Medicago sativa
CAA87079.1	Z46955	Glycine max
CAA09301.1	AJ010644	Pisum sativum
CAA09300.1	AJ010643	Pisum sativum

SEQ ID NO. 236

AAB72109.1	AF022217	Brassica rapa
AAD49336.1	AF166277	Nicotiana tabacum
CAA37847.1	X53851	Daucus carota
CAA08908.1	AJ009880	Castanea sativa
CAB36910.1	AJ000691	Quercus suber
CAA41547.1	X58711	Medicago sativa
AAC39360.1	U63631	Fragaria x ananassa
AAB03893.1	M11318	Glycine max
AAA33975.1	M11395	Glycine max
CAA25578.1	X01104	Glycine max
CAA37848.1	X53852	Daucus carota
BAA33062.1	AB017273	Cuscuta japonica
CAB55634.2	AJ237596	Helianthus annuus
AAA61632.1	U08601	Papaver somniferum
AAA33672.1	M33899	Pisum sativum
AAB63311.1	U46545	Helianthus annuus
CAB08441.1	Z95153	Helianthus annuus
CAA42222.1	X59701	Helianthus annuus
AAB63310.1	U46544	Helianthus annuus
AAD30454.1	AF123257	Lycopersicon esculentum
AAD30452.1	AF123255	Lycopersicon esculentum
AAC78392.1	U83669	Oryza sativa
CAA39603.1	X56138	Lycopersicon esculentum
BAA02160.1	D12635	Oryza sativa
AAA33974.1	M11317	Glycine max
CAA63903.1	X94193	Pennisetum glaucum
AAD30453.1	AF123256	Lycopersicon esculentum
AAC78394.1	U83671	Oryza sativa
AAA33910.1	M80939	Oryza sativa
AAC78393.1	U83670	Oryza sativa
CAA63570.1	X92983	Pseudotsuga menziesii

CAA43210.1	X60820	Oryza sativa
AAA33909.1	M80938	Oryza sativa
CAA37864.1	X53870	Chenopodium rubrum
CAA63571.1	X92984	Pseudotsuga menziesii
CAA63901.1	X94191	Pennisetum glaucum
AAA33671.1	M33900	Pisum sativum
CAA46641.1	X65725	Zea mays
CAA31785.1	X13431	Triticum aestivum
CAA63902.1	X94192	Pennisetum glaucum
AAB39856.1	U81385	Oryza sativa

SEQ ID NO. 237

AAC14577.1	U72396	Lycopersicon esculentum
AAA33670.1	M33901	Pisum sativum
CAA82653.1	Z29554	Helianthus annuus
AAD41409.1	AF159562	Prunus dulcis
CAA65020.1	X95716	Petroselinum crispum
AAC36312.1	AF090115	Lycopersicon esculentum
AAB01561.1	L47717	Picea glauca
AAB39336.1	M99430	Ipomoea nil
AAB01562.1	L47740	Picea glauca
CAA67206.1	X98617	Medicago sativa
CAA41218.1	X58279	Triticum aestivum
CAA67726.1	X99346	Picea abies
CAA38012.1	X54075	Zea mays
CAA38013.1	X54076	Zea mays
AAB26481.1	S59777	Zea mays
AAB39335.1	M99429	Ipomoea nil
AAD09184.1	AF089845	Funaria hygrometrica
BAA04841.1	D21817	Lilium longiflorum
AAD09185.1	AF089846	Funaria hygrometrica
BAA04842.1	D21818	Lilium longiflorum
CAA63570.1	X92983	Pseudotsuga menziesii
CAA63571.1	X92984	Pseudotsuga menziesii
AAC39360.1	U63631	Fragaria x ananassa
AAD09178.1	AF087640	Funaria hygrometrica
AAD09182.1	AF089843	Funaria hygrometrica
BAA04840.1	D21816	Lilium longiflorum
AAD30452.1	AF123255	Lycopersicon esculentum
AAB63311.1	U46545	Helianthus annuus
CAA31785.1	X13431	Triticum aestivum
CAA63901.1	X94191	Pennisetum glaucum
AAA33672.1	M33899	Pisum sativum
CAA41547.1	X58711	Medicago sativa
CAA46641.1	X65725	Zea mays
AAB39856.1	U81385	Oryza sativa
AAC78394.1	U83671	Oryza sativa
AAC78392.1	U83669	Oryza sativa
CAA39603.1	X56138	Lycopersicon esculentum
AAA33910.1	M80939	Oryza sativa
AAA33909.1	M80938	Oryza sativa
CAA43210.1	X60820	Oryza sativa
AAD30453.1	AF123256	Lycopersicon esculentum
AAA34294.1	L14444	Triticum aestivum
AAD30454.1	AF123257	Lycopersicon esculentum

SEQ ID NO. 238

AAD30456.1	AF123259	Lycopersicon esculentum
AAF31705.1	AF221856	Euphorbia esula
AAC32131.1	AF051230	Picea mariana
CAA78738.1	Z15018	Oryza sativa

SEQ ID NO. 239

CAB57979.1	AJ011914	Lycopersicon esculentum

SEQ ID NO. 240

AAA33945.1	J03919	Glycine max
CAA48297.1	X68215	Pisum sativum
AAA33944.1	J03920	Glycine max
CAA48298.1	X68216	Pisum sativum
CAA48300.1	X68218	Pisum sativum
CAA48299.1	X68217	Pisum sativum
AAD50278.1	AF169830	Glycine max
CAB61882.1	AJ249996	Lycopersicon esculentum

SEQ ID NO. 241

AAA33944.1	J03920	Glycine max
CAA48300.1	X68218	Pisum sativum
CAA48299.1	X68217	Pisum sativum
AAA33945.1	J03919	Glycine max
CAA48297.1	X68215	Pisum sativum
CAA48298.1	X68216	Pisum sativum

AAD50278.1	AF169830	Glycine max

SEQ ID NO. 242

AAD32142.1	AF123504	Nicotiana tabacum
CAA48297.1	X68215	Pisum sativum
CAA48298.1	X68216	Pisum sativum
AAD32143.1	AF123505	Nicotiana tabacum
AAD32146.1	AF123508	Nicotiana tabacum
AAA33945.1	J03919	Glycine max
BAA85821.1	AB026822	Cucumis sativus
AAA33944.1	J03920	Glycine max
CAA48300.1	X68218	Pisum sativum
CAA48299.1	X68217	Pisum sativum
AAC13253.1	AF022013	Lycopersicon esculentum
AAD50278.1	AF169830	Glycine max
BAA95840.1	AP002070	Oryza sativa

SEQ ID NO. 244

AAC49376.1	U43840	Glycine max
AAC49374.1	U43838	Glycine max
CAC24490.1	AJ305033	Pisum sativum
AAC49375.1	U43839	Glycine max

SEQ ID NO. 249

CAA48630.1	X68664	Solanum tuberosum
AAG29840.1	AF307843	Chlamydomonas reinhardtii
AAG29839.1	AF307842	Chlamydomonas reinhardtii

SEQ ID NO. 251

AAC08401.1	AF053564	Mesembryanthemum crystallinum
AAG14454.1	AF283706	Tulipa gesneriana
AAG14455.1	AF283707	Tulipa gesneriana
AAG14456.1	AF283708	Tulipa gesneriana

SEQ ID NO. 257

BAA02720.1	D13502	Glycine max

SEQ ID NO. 259

BAA84791.1	AP000559	Oryza sativa
CAA10766.1	AJ132763	Pseudotsuga menziesii
AAC05639.1	AF052206	Chlamydomonas reinhardtii
AAF65770.1	AF242312	Euphorbia esula
AAD22975.1	AF126551	Solanum tuberosum subsp. tuberosum
AAG03106.1	AC073405	Oryza sativa
CAA48638.1	X68678	Zea mays

SEQ ID NO. 262

AAB65777.1	U97522	Vitis vinifera
AAB65776.1	U97521	Vitis vinifera
AAG53609.1	AF280437	Secale cereale
CAA53626.1	X76041	Triticum aestivum
BAA03750.1	D16222	Oryza sativa
CAB01591.1	Z78202	Persea americana
CAA30142.1	X07130	Solanum tuberosum
BAA03751.1	D16223	Oryza sativa

SEQ ID NO. 263

AAD10836.1	U52079	Solanum tuberosum
BAA83352.1	AP000391	Oryza sativa
BAA90508.1	AP001111	Oryza sativa
BAA90507.1	AP001111	Oryza sativa
BAA94511.1	AB041505	Populus nigra

SEQ ID NO. 265

AAC35496.1	AF052690	Raphanus sativus
AAC99310.1	AF052585	Malus x domestica
AAC99309.1	AF052584	Malus x domestica
AAG27547.1	AF269128	Brassica nigra
AAC27696.1	AF016011	Brassica napus
AAC27694.1	AF016009	Brassica napus
AAC27695.1	AF016010	Brassica napus
AAG27546.1	AF269126	Brassica nigra
AAG24863.1	AF300700	Ipomoea nil
AAD22518.1	AF001136	Pinus radiata
BAA33205.1	AB001887	Oryza sativa
BAA33201.1	AB001883	Oryza sativa
BAA33203.1	AB001885	Oryza sativa
BAA33206.1	AB001888	Oryza sativa
BAA33202.1	AB001884	Oryza sativa
BAA33204.1	AB001886	Oryza sativa
BAA33200.1	AB001882	Oryza sativa

SEQ ID NO. 268

CAA46990.1	X66284	Solanum tuberosum
CAA56520.1	X80236	Solanum tuberosum
AAG42149.1	AY011123	Dactylis glomerata
AAK07827.1	AF297643	Cucumis melo
CAA56521.1	X80237	Solanum tuberosum
CAA56519.1	X80235	Solanum tuberosum
BAA04964.1	D25241	Oryza sativa

SEQ ID NO. 274

BAA92986.1	AP001550	Oryza sativa
AAF19807.1	AF180356	Brassica oleracea
AAF19403.1	AF203481	Lycopersicon esculentum
AAF19402.1	AF203480	Lycopersicon esculentum
BAA05648.1	D26601	Nicotiana tabacum
AAF23901.2	AF194414	Oryza sativa
AAC04324.1	U73937	Nicotiana tabacum
AAF23900.1	AF194413	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
BAA13440.1	D87707	Ipomoea batatas
AAD17800.1	AF090835	Mesembryanthemum crystallinum
CAA57157.1	X81394	Oryza sativa
AAD23582.1	AF128443	Glycine max
CAA39936.1	X56599	Daucus carota
BAA12715.1	D85039	Zea mays
CAA58750.1	X83869	Daucus carota
AAB80693.1	U69174	Glycine max
AAF21062.1	AF216527	Dunaliella tertiolecta
AAD28192.2	AF115406	Solanum tuberosum
BAA05649.1	D26602	Nicotiana tabacum
AAA69507.1	U28376	Zea mays
AAB05457.1	U55768	Oryza sativa
AAG36872.1	AF239819	Zea mays
CAA89202.1	Z49233	Chlamydomonas eugametos
CAA72362.1	Y11649	Zea mays
CAA72290.1	Y11526	Zea mays
CAA43659.1	X61387	Zea mays
CAA65244.1	X95997	Solanum tuberosum
AAF76187.1	AF271237	Zea mays
BAB21591.1	AB036788	Oryza sativa
BAB21589.1	AB036786	Oryza sativa
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
AAF06969.1	AF162661	Kalanchoe fedtschenkoi
CAA41172.1	X58194	Oryza sativa
CAA65500.1	X96723	Medicago sativa
BAA12691.1	D84507	Zea mays
AAB47181.1	S82324	Zea mays
CAA07481.1	AJ007366	Zea mays
AAF40430.1	AF234652	Mesembryanthemum crystalli

SEQ ID NO. 276

AAK30202.1	AF349961	Daucus carota
AAA53296.1	L18908	Nicotiana tabacum
CAA63112.1	X92367	Spinacia oleracea
CAA63107.1	X92350	Spinacia oleracea
AAB86852.1	AF031542	Fritillaria agrestis
AAC24573.1	AF061508	Zea mays
CAA62040.1	X90414	Spinacia oleracea

SEQ ID NO. 277

BAA08104.1	D45074	Panicum miliaceum
BAA08103.1	D45073	Panicum miliaceum
BAA08105.1	D45075	Panicum miliaceum
CAA72107.1	Y11220	Solanum tuberosum
CAC12820.1	AJ299250	Nicotiana tabacum
AAB71744.1	U75346	Chlamydomonas reinhardtii
AAB71743.1	U75345	Chlamydomonas reinhardtii
CAA07568.1	AJ007580	Ribes nigrum
CAA56325.1	X80023	Triticum turgidum
CAA46311.1	X65194	Chlamydomonas reinhardtii
CAA67107.1	X98474	Solanum tuberosum
CAC27140.1	AJ132535	Picea abies
CAA69726.1	Y08499	Betula pendula
BAA31583.1	AB016064	Zea mays
CAB61741.1	AJ275306	Cicer arietinum
BAA31584.1	AB016065	Oryza sativa
BAA92520.1	AP001383	Oryza sativa

SEQ ID NO. 278

CAA64729.1	X95462	Brassica napus
AAB20114.2	S60064	Brassica napus

CAA74177.1	Y13862	Nicotiana tabacum
CAA74176.1	Y13861	Nicotiana tabacum
CAA05879.1	AJ003124	Petunia x hybrida
CAA05816.1	AJ003025	Oryza sativa
AAF14562.1	AF181724	Brassica napus
AAF14561.1	AF181723	Brassica napus
AAF14563.1	AF181725	Brassica oleracea
BAA13547.1	D88156	Hyoscyamus niger
BAA85844.1	AB026544	Hyoscyamus niger
AAA33281.1	L20473	Datura stramonium
CAC19810.1	AJ292343	Solanum tuberosum
CAB52307.1	AJ245634	Solanum tuberosum
AAB09776.1	L20485	Hyoscyamus niger
BAA85845.1	AB026545	Hyoscyamus niger
CAC34420.1	AJ307584	Solanum tuberosum
AAA33282.1	L20474	Datura stramonium
AAA33280.1	L20475	Datura stramonium

SEQ ID NO. 279

BAA29041.1	AB015615	Oryza sativa
AAB97167.1	AF030882	Zea mays
AAA91298.1	U18908	Zea mays
AAD33889.1	AF142589	Hordeum vulgare
AAD33890.1	AF142590	Triticum aestivum
AAD33891.1	AF142591	Solanum tuberosum
AAD53260.1	AF142588	Hordeum vulgare

SEQ ID NO. 281

AAD17487.1	AF049347	Berberis stolonifera
AAB20352.1	S65550	Eschscholzia californica
AAC39358.1	AF005655	Eschscholzia californica
AAC61839.1	AF025430	Papaver somniferum

SEQ ID NO. 283

CAA90427.1	Z50099	Solanum tuberosum
CAA75777.1	Y15781	Capsicum annuum
CAA86609.1	Z46648	Craterostigma plantagineum
CAA86608.1	Z46647	Craterostigma plantagineum
CAA86607.1	Z46646	Craterostigma plantagineum
BAA76432.1	AB025004	Cicer arietinum

SEQ ID NO. 292

AAF36996.1	AF236092	Brassica oleracea var. bot
AAF29973.1	AF188060	Adonis palaestina
AAB67743.1	U48963	Clarkia breweri
BAB40973.1	AB049815	Nicotiana tabacum
AAF29974.1	AF188061	Adonis palaestina
AAF29978.1	AF188065	Oryza sativa
BAB40974.1	AB049816	Nicotiana tabacum
AAF29976.1	AF188063	Lactuca sativa
CAA57947.1	X82627	Clarkia breweri
AAF29977.1	AF188064	Tagetes erecta
AAB94132.1	AF031079	Camptotheca acuminata
AAB94133.1	AF031080	Camptotheca acuminata
AAB67742.1	U48962	Clarkia xantiana
AAG10423.1	AF251011	Tagetes erecta
AAF29975.1	AF188062	Lactuca sativa
AAD41766.1	AF111843	Hevea brasiliensis
AAD41765.1	AF111842	Hevea brasiliensis
AAC32208.1	AF082325	Haematococcus pluvialis
AAC32209.1	AF082326	Haematococcus pluvialis
BAA33978.1	AB019034	Haematococcus pluvialis
CAA70850.1	Y09634	Nicotiana tabacum
AAC32601.1	AF082869	Chlamydomonas reinhardtii
AAF91499.1	AF227951	Daucus carota

SEQ ID NO. 293

AAC26828.1	AF075603	Oryza sativa
AAB93832.1	U81960	Zea mays
AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAD17804.1	AF092431	Lotus japonicus
AAD17805.1	AF092432	Lotus japonicus
AAC36700.1	AF075582	Mesembryanthemum crystallinum
CAA72341.1	Y11607	Medicago sativa
AAG43835.1	AF213455	Zea mays
CAC10359.1	AJ277087	Nicotiana tabacum
CAC10358.1	AJ277086	Nicotiana tabacum
AAC36697.1	AF075579	Mesembryanthemum crystallinum
AAC36699.1	AF075581	Mesembryanthemum crystallinum
CAC09575.1	AJ298987	Fagus sylvatica

SEQ ID NO. 294

CAA12646.1	AJ225806	Egeria densa
AAC50046.1	U46758	Oryza sativa
AAB97617.1	U83687	Apium graveolens
AAB41555.1	U13924	Medicago sativa subsp. sativa
AAB41556.1	U13925	Medicago sativa subsp. sativa
BAA12084.1	D83718	Glycyrrhiza echinata
BAA13114.1	D86559	Glycyrrhiza glabra
BAA13113.1	D86558	Glycyrrhiza glabra

SEQ ID NO. 295

BAA76904.1	AB025714	Nicotiana tabacum
BAA03959.1	D16507	Oryza sativa
AAF32399.1	AF224499	Triticum aestivum
AAF32400.1	AF224500	Triticum aestivum
AAF32398.1	AF224498	Triticum aestivum
BAA77817.1	AB007623	Oryza sativa
BAA31688.1	AB016071	Oryza sativa
AAD00692.1	U90092	Picea mariana
AAC84001.1	AF063248	Picea abies
AAD00691.1	U90091	Picea mariana
AAA20882.1	L13663	Glycine max
BAA25546.1	AB004785	Nicotiana tabacum
CAB88029.1	AJ276389	Dendrobium grex Madame Thong-In
BAA79223.1	AB028882	Oryza sativa
BAA76905.1	AB025715	Nicotiana tabacum
BAA79225.1	AB028884	Oryza sativa
BAA79224.1	AB028883	Oryza sativa
BAA76903.1	AB025713	Nicotiana tabacum
BAA79226.1	AB028885	Oryza sativa
BAA77818.1	AB007624	Oryza sativa
BAA76750.1	AB025573	Nicotiana tabacum
BAA77819.1	AB007625	Oryza sativa
AAC79869.1	AF100326	Dendrobium grex Madame Thong-In

SEQ ID NO. 296

AAA33711.1	M21317	Petunia x hybrida
AAA34159.1	M20241	Lycopersicon esculentum
CAA32197.1	X14036	Lycopersicon esculentum
CAA57492.1	X81962	Pisum sativum
CAA41406.1	X58516	Pinus sylvestris
CAA57877.1	X82497	Nicotiana tabacum
AAF13731.1	AF002248	Pisum sativum
AAC67557.1	AF094775	Oryza sativa
AAF90200.1	AF287276	Hordeum vulgare
CAA33330.1	X15258	Lycopersicon esculentum
CAA41407.1	X58517	Pinus sylvestris
CAA45523.1	X64198	Nicotiana tabacum
AAD27882.2	AF139470	Vigna radiata
AAA34140.1	M17633	Lycopersicon esculentum
AAA34143.1	M32605	Lycopersicon esculentum
CAA49209.1	X69434	Pyrobotrys stellata
CAA50763.1	X71965	Pyrobotrys stellata
AAF44703.1	AF241525	Alonsoa meridionalis
AAF23819.1	AF218305	Hordeum vulgare
AAA64416.1	U23190	Zea mays
AAC67558.1	AF094776	Oryza sativa
AAA34186.1	J03558	Lycopersicon esculentum
AAA34146.1	M32606	Lycopersicon esculentum
CAA41404.1	X58514	Pinus sylvestris
CAA41405.1	X58515	Pinus sylvestris
CAA57408.1	X81809	Picea abies
CAA57409.1	X81810	Picea abies
AAA33949.1	M21396	Glycine max
BAA25395.1	AB012640	Nicotiana sylvestris
BAA25393.1	AB012638	Nicotiana sylvestris
CAA47950.1	X67714	Pinus contorta
CAA44777.1	X63052	Hordeum vulgare
AAC78690.1	S73603	Pinus thunbergii
AAA50172.1	U01964	Glycine max
AAD27879.2	AF139467	Vigna radiata
AAA34056.1	M21398	Nicotiana plumbaginifolia
CAA41187.1	X58229	Nicotiana tabacum
AAA68425.1	M34396	Polystichum munitum

SEQ ID NO. 298

AAB70241.1	AF016845	Lycopersicon esculentum
CAB52219.1	Y18519	Silene latifolia
AAF97517.1	AF250047	Zea mays
CAB52218.1	Y18517	Silene latifolia
AAF97518.1	AF250048	Zea mays
AAF27919.1	AF220203	Malus x domestica
AAF97519.1	AF250049	Zea mays

AAK19620.1	AF336287	Gossypium hirsutum
BAA76895.1	AB022686	Lycopersicon esculentum
AAC18914.1	U94748	Petunia x hybrida
BAA76896.1	AB022687	Lycopersicon esculentum

SEQ ID NO. 299

AAB70241.1	AF016845	Lycopersicon esculentum
CAB52219.1	Y18519	Silene latifolia
CAB52218.1	Y18517	Silene latifolia
AAF97517.1	AF250047	Zea mays
AAF97518.1	AF250048	Zea mays
AAK19620.1	AF336287	Gossypium hirsutum
AAF97519.1	AF250049	Zea mays
AAC18914.1	U94748	Petunia x hybrida
BAA76895.1	AB022686	Lycopersicon esculentum
AAF37386.1	AF134835	Medicago truncatula
AAB63030.1	U83921	Daucus carota

SEQ ID NO. 300

AAF97517.1	AF250047	Zea mays
CAB52219.1	Y18519	Silene latifolia
CAB52218.1	Y18517	Silene latifolia
AAF97518.1	AF250048	Zea mays
AAF97519.1	AF250049	Zea mays
AAB70241.1	AF016845	Lycopersicon esculentum
BAA76895.1	AB022686	Lycopersicon esculentum
AAF27919.1	AF220203	Malus x domestica
BAA76896.1	AB022687	Lycopersicon esculentum

SEQ ID NO. 305

AAB94599.1	AF024652	Glycine max
AAB94598.1	AF024651	Glycine max

SEQ ID NO. 308

CAA54255.1	X76932	Spinacia oleracea
CAA58020.1	X82776	Pisum sativum

SEQ ID NO. 309

AAB29482.1	S68726	Brassica napus
AAA66068.1	U14665	Brassica napus
AAA52230.1	U16751	Brassica oleracea
AAB29483.1	S68879	Brassica napus
AAB29484.1	S68727	Brassica napus

SEQ ID NO. 310

AAC49184.1	U40402	Hevea brasiliensis
CAA11219.1	AJ223281	Manihot esculenta
CAA82334.1	Z29091	Manihot esculenta

SEQ ID NO. 313

AAA80575.1	U13148	Pennisetum ciliare
AAF34174.1	AF195243	Chlamydomonas reinhardtii

SEQ ID NO. 314

AAA34085.1	M93436	Nicotiana tabacum
AAA34054.1	M96432	Nicotiana tabacum
BAB41080.1	AB052729	Pisum sativum

SEQ ID NO. 315

CAA67291.1	X98739	Pisum sativum
CAA67290.1	X98738	Pisum sativum
CAA10643.1	AJ132349	Antirrhinum majus

SEQ ID NO. 316

AAB97366.1	AF039531	Oryza sativa

SEQ ID NO. 317

AAK15322.1	AF332134	Chloroplast Medicago sativa
BAA33755.2	AB017480	Nicotiana tabacum
AAD17230.1	AF117339	Nicotiana tabacum
CAA09935.1	AJ012165	Capsicum annuum
BAA57906.1	AB001684	Chlorella vulgaris
CAA06853.1	AJ006095	Cicer arietinum

SEQ ID NO. 318

AAF01467.1	AF190450	Avicennia marina

SEQ ID NO. 319

AAC61839.1	AF025430	Papaver somniferum
AAC39358.1	AF005655	Eschscholzia californica
AAB20352.1	S65550	Eschscholzia californica
AAD17487.1	AF049347	Berberis stolonifera

SEQ ID NO. 320

AAG43998.1	AF215837	Apium graveolens var. dulce
AAF74566.1	AF215852	Nicotiana tabacum
AAF74565.1	AF215851	Spinacia oleracea
AAF74568.1	AF215854	Zea mays
AAF74567.1	AF215853	Solanum tuberosum
CAA68813.1	Y07520	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri
BAB19864.1	AB052885	Oryza sativa
CAB07812.1	Z93775	Vicia faba
CAA47324.1	X66856	Nicotiana tabacum
CAA53192.1	X75440	Chlorella kessleri
BAB19863.1	AB052884	Oryza sativa
AAB06594.1	U38651	Medicago truncatula
CAA04511.1	AJ001061	Vitis vinifera
AAA79761.1	L08196	Ricinus communis
CAA09419.1	AJ010942	Lycopersicon esculentum
CAA70777.1	Y09590	Vitis vinifera
CAB52689.1	AJ132224	Lycopersicon esculentum
BAB19862.1	AB052883	Oryza sativa
CAB06079.1	Z83829	Picea abies
BAA85398.1	AP000615	Oryza sativa
AAD55054.1	AF173655	Beta vulgaris
CAB52688.1	AJ132223	Lycopersicon esculentum
CAB52690.1	AJ132225	Lycopersicon esculentum
AAF74025.1	AF156696	Nicotiana tabacum
BAB21545.1	AB042950	Nicotiana tabacum
BAA20522.1	AB004809	Catharanthus roseus
CAA67395.1	X98890	Solanum tuberosum
AAD38859.1	AF156695	Solanum tuberosum
AAB82146.1	AF022873	Lycopersicon esculentum

SEQ ID NO. 324

AAB71078.1	U62751	Zea mays
BAA92988.1	AP001550	Oryza sativa
AAA91168.1	U40147	Zea mays
AAB71079.1	U62752	Zea mays
CAA47042.1	X66411	Chlamydomonas reinhardtii
AAD11446.1	U62749	Zea mays
CAA60251.1	X86553	Zea mays
CAA55047.1	X78213	Parthenium argentatum

SEQ ID NO. 331

CAA78387.1	Z13997	Petunia x hybrida
CAA66952.1	X98308	Lycopersicon esculentum
BAA88222.1	AB028650	Nicotiana tabacum
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
AAB41101.1	U72762	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
BAA81732.1	AB029161	Glycine max
BAA88221.1	AB028649	Nicotiana tabacum
BAA81736.1	AB029165	Glycine max
BAA81733.2	AB029162	Glycine max
CAA72217.1	Y11414	Oryza sativa
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
AAK19616.1	AF336283	Gossypium hirsutum
CAA78386.1	Z13996	Petunia x hybrida
CAB43399.1	AJ006292	Antirrhinum majus
CAA72218.1	Y11415	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum
CAA64614.1	X95296	Lycopersicon esculentum
AAG36774.1	AF210616	Zea mays
AAA33500.1	M73028	Zea mays
AAK19618.1	AF336285	Gossypium hirsutum
AAF22256.1	AF161711	Pimpinella brachycarpa
BAA23338.1	D88618	Oryza sativa
CAA67575.1	X99134	Lycopersicon esculentum
AAK19619.1	AF336286	Gossypium hirsutum
CAA72186.1	Y11351	Oryza sativa
CAA65525.1	X96749	Oryza sativa
AAK19611.1	AF336278	Gossypium hirsutum
BAA23337.1	D88617	Oryza sativa
AAK19615.1	AF336282	Gossypium hirsutum
CAA72187.1	Y11352	Oryza sativa
CAA50221.1	X70876	Hordeum vulgare
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
AAK19617.1	AF336284	Gossypium hirsutum

CAA68235.1	X99973	Hordeum vulgare
SEQ ID NO. 334		
AAD25355.1	AF115574	Pisum sativum
AAB18669.1	U11716	Pisum sativum
AAA33662.1	M18250	Pisum sativum
SEQ ID NO. 337		
CAA56319.1	X80009	Pisum sativum
CAB40743.1	AJ011885	Solanum tuberosum
CAB40746.1	AJ011888	Solanum tuberosum
BAA82348.1	AB029548	Phaseolus vulgaris
CAB40748.1	AJ011890	Solanum tuberosum
AAD30186.1	AF076679	Triticum aestivum
BAA01616.1	D10838	Oryza sativa
AAB67316.1	U65948	Zea mays
CAB40747.1	AJ011889	Solanum tuberosum
BAA82828.1	AB023498	Oryza sativa
CAA03846.1	AJ000004	Solanum tuberosum
CAA72154.1	Y11282	Triticum aestivum
AAG27623.1	AF286319	Triticum aestivum
BAA03738.1	D16201	Oryza sativa
AAD30187.1	AF076680	Aegilops tauschii
AAC69754.1	AF064561	Hordeum vulgare
AAK26822.1	AF338432	Triticum aestivum
CAA56320.1	X80010	Pisum sativum
AAC33764.1	AF072725	Zea mays
AAA18571.1	L08065	Zea mays
AAB17086.1	U66376	Triticum aestivum
AAK26821.1	AF338431	Aegilops tauschii
AAC69753.1	AF064560	Hordeum vulgare
BAB40334.1	AB042937	Ipomoea batatas
CAA54308.1	X77012	Manihot esculenta
CAA70038.1	Y08786	Solanum tuberosum
BAA82349.1	AB029549	Phaseolus vulgaris
CAA49463.1	X69805	Solanum tuberosum
CAB40981.1	AJ237897	Triticum aestivum
CAB40979.1	AJ237897	Triticum aestivum
CAB40980.1	AJ237897	Triticum aestivum
AAG27622.1	AF286318	Triticum aestivum
AAD50279.2	AF169833	Sorghum bicolor
BAA01855.1	D11082	Oryza sativa
BAA01584.1	D10752	Oryza sativa
AAD28284.1	AF136268	Oryza sativa subsp. japoni
CAA72987.1	Y12320	Triticum aestivum
AAG27621.1	AF286317	Triticum aestivum
AAA82735.1	U17897	Zea mays
BAA01854.1	D11081	Zea mays
AAC36471.1	AF072724	Zea mays
AAB61925.1	AF002820	Triticum aestivum
CAB40749.1	AJ011891	Solanum tuberosum
CAB40745.1	AJ011887	Solanum tuberosum
CAB40744.1	AJ011886	Solanum tuberosum
BAA85762.1	AB028067	Nicotiana tabacum
BAB40335.1	AB042940	Ipomoea batatas
CAA49371.1	X69713	Manihot esculenta
CAA49370.1	X69712	Manihot esculenta
AAC72336.1	AF064563	Hordeum vulgare
SEQ ID NO. 339		
CAB96173.1	AJ271719	Spinacia oleracea
AAA21277.1	U09194	Mesembryanthemum crystallinum
AAB34986.1	S79242	Mesembryanthemum crystallinum
CAA41115.1	X58108	Lycopersicon esculentum
CAB75428.1	AJ271785	Lupinus luteus
CAA82232.1	Z28386	Ricinus communis
CAC00533.1	AJ132581	Hevea brasiliensis
CAC00532.1	AJ132580	Hevea brasiliensis
AAC49173.1	U09450	Oryza sativa
AAD04187.1	U17973	Zea mays
CAA39454.1	X55981	Zea mays
CAA47043.1	X66412	Chlamydomonas reinhardtii
CAA41116.1	X58109	Lycopersicon esculentum
AAB35826.2	S79816	Echinochloa phyllopogon
BAA04612.1	D17767	Oryza sativa
AAC34559.1	AF082596	Leavenworthia crassa
AAC34558.1	AF082595	Leavenworthia stylosa
AAC34557.1	AF082594	Leavenworthia uniflora
AAC34555.1	AF082592	Leavenworthia stylosa
AAC34554.1	AF082591	Leavenworthia crassa
AAD46409.1	AF096253	Lycopersicon esculentum
AAC34556.1	AF082593	Leavenworthia uniflora

SEQ ID NO. 340

BAA78764.1	AB023482	Oryza sativa
BAA94509.1	AB041503	Populus nigra
AAG16628.1	AY007545	Brassica napus
BAA94510.1	AB041504	Populus nigra
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAF91336.1	AF249317	Glycine max
AAF91337.1	AF249318	Glycine max
CAB51834.1	C0069	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum
AAG33377.1	AF290411	Oryza meyeriana
AAC27894.1	AF023164	Zea mays
AAC27895.1	AF023165	Zea mays
AAB61708.1	U93048	Daucus carota
CAA97692.1	Z73295	Catharanthus roseus
AAK11566.1	AF318490	Lycopersicon hirsutum
AAG25966.1	AF302082	Nicotiana tabacum
AAG00510.1	AF285172	Phaseolus vulgaris
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
AAF66615.1	AF142596	Nicotiana tabacum
AAK11567.1	AF318491	Lycopersicon hirsutum
CAA73134.1	Y12531	Brassica oleracea

SEQ ID NO. 341

AAG43283.1	AF139210	Oryza sativa
AAD37698.1	AF145729	Oryza sativa
AAF01765.1	AF184278	Glycine max
CAA62608.1	X91212	Lycopersicon esculentum
BAA21017.1	D26578	Daucus carota
CAA64491.1	X95193	Pimpinella brachycarpa
CAA64152.1	X94375	Pimpinella brachycarpa
AAD38144.1	AF139497	Prunus armeniaca
AAA63768.2	AF339748	Helianthus annuus
BAA93465.1	AB028077	Physcomitrella patens
CAA06728.1	AJ005833	Craterostigma plantagineum
BAA93467.1	AB028079	Physcomitrella patens
BAA05622.1	D26573	Daucus carota
AAD37699.1	AF145730	Oryza sativa

SEQ ID NO. 342

AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
BAA94509.1	AB041503	Populus nigra
AAG16628.1	AY007545	Brassica napus
AAB61708.1	U93048	Daucus carota
BAA94510.1	AB041504	Populus nigra
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
CAA73134.1	Y12531	Brassica oleracea
AAF91322.1	AF244888	Glycine max
AAC61805.1	U28007	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
AAB09771.1	U67422	Zea mays
CAC20842.1	AJ250467	Pinus sylvestris
AAF34428.1	AF172282	Oryza sativa
AAK11568.1	AF318492	Lycopersicon hirsutum
AAK11569.1	AF318493	Lycopersicon hirsutum
AAC23542.1	U20948	Ipomoea trifida
AAB93834.1	U82481	Zea mays
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
AAK11567.1	AF318491	Lycopersicon hirsutum
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAF59906.1	AF197947	Glycine max
AAF59905.1	AF197946	Glycine max
BAA92954.1	AP001551	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus

SEQ ID NO. 344

BAA06108.1	D29629	Cucurbita sp.
AAC26045.1	AF073507	Citrus limon
AAG28426.1	AF194945	Nicotiana tabacum
CAA58047.1	X82840	Cucumis melo

SEQ ID NO. 345

BAB03447.1	AP002817	Oryza sativa
BAA92400.1	AP001366	Oryza sativa
BAA84803.1	AP000559	Oryza sativa
CAA63102.2	X92205	Petunia x hybrida
CAA63101.1	X92204	Petunia x hybrida

SEQ ID NO. 348

CAB61745.1	AJ275311	Cicer arietinum

SEQ ID NO. 350

BAA05539.1	D26538	Oryza sativa
AAB66889.1	AF010584	Oryza sativa
BAA74736.1	AB016809	Citrus unshiu

SEQ ID NO. 354

AAB71743.1	U75345	Chlamydomonas reinhardtii
AAB71744.1	U75346	Chlamydomonas reinhardtii
BAA92520.1	AP001383	Oryza sativa
CAA07568.1	AJ007580	Ribes nigrum
CAC27140.1	AJ132535	Picea abies
CAA56325.1	X80023	Triticum turgidum
CAC12820.1	AJ299250	Nicotiana tabacum

SEQ ID NO. 360

CAA72681.1	Y11931	Nicotiana rustica
CAA63777.1	X93564	Solanum tuberosum
AAA74441.1	U25027	Glycine max
AAD26119.1	AF108123	Brassica napus

SEQ ID NO. 361

AAC33765.1	AF072849	Oryza sativa subsp. indica

SEQ ID NO. 362

AAF34800.1	AF227980	Euphorbia esula

SEQ ID NO. 363

BAA22813.1	D26015	Nicotiana tabacum
BAB21205.1	AP002913	Oryza sativa

SEQ ID NO. 366

AAD21872.1	AF078082	Phaseolus vulgaris

CAA73134.1	Y12531	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
AAB93834.1	U82481	Zea mays
CAB89179.1	AJ245479	Brassica napus subsp. napu
BAA92836.1	AB032473	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
AAA33008.1	M97667	Brassica napus
AAA62232.1	U00443	Brassica napus
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
AAC23542.1	U20948	Ipomoea trifida
BAA92837.1	AB032474	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
BAA07577.2	D38564	Brassica rapa
BAA23676.1	AB000970	Brassica rapa
CAA74662.1	Y14286	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
CAA73133.1	Y12530	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
AAD52097.1	AF088885	Nicotiana tabacum
AAK21965.1	AY028699	Brassica napus
AAA33915.1	L27821	Oryza sativa
CAB51836.1	AJ243961	Oryza sativa
BAA92954.1	AP001551	Oryza sativa
BAA82556.1	AB030083	Populus nigra

SEQ ID NO. 368

BAB16860.1	AP002537	Oryza sativa

SEQ ID NO. 373

CAB06081.1	Z83832	Avena sativa

SEQ ID NO. 374

BAB32917.1	AP003047	Oryza sativa
CAB56058.1	AJ133787	Oryza sativa

SEQ ID NO. 375

AAB67721.1	AF015269	Zea mays

SEQ ID NO. 379

AAA17732.1	L19074	Catharanthus roseus
AAB94586.1	AF022457	Glycine max
AAK31592.1	AY029178	Brassica rapa subsp. pekinensis
CAA89260.1	Z49263	Pisum sativum
AAB94588.1	AF022459	Glycine max
BAB40322.1	AB036772	Triticum aestivum
AAG33645.1	AF092917	Vicia sativa
AAD10204.1	AF030260	Vicia sativa
CAA70575.1	Y09423	Nepeta racemosa
BAA22422.1	AB001379	Glycyrrhiza echinata
AAA32913.1	M32885	Persea americana
AAG14962.1	AF214008	Brassica napus
AAG14961.1	AF214007	Brassica napus
BAA93634.1	AB025016	Lotus japonicus

SEQ ID NO. 386

AAG14454.1	AF283706	Tulipa gesneriana
AAG14456.1	AF283708	Tulipa gesneriana
AAG14455.1	AF283707	Tulipa gesneriana
AAC08401.1	AF053564	Mesembryanthemum crystallinum

SEQ ID NO. 393

CAA73171.1	Y12599	Apium graveolens
AAA50578.1	U03391	Lycopersicon esculentum
AAK29450.1	AF352247	Pisum sativum
AAC41651.1	L29456	Nicotiana tabacum
AAK29452.1	AF352249	Lathyrus sativus
AAK29454.1	AF352251	Lens culinaris
AAK29456.1	AF352253	Lens culinaris
AAK29453.1	AF352250	Lathyrus sativus
BAA88671.1	AB029614	Nicotiana tabacum
AAK29449.1	AF352246	Pisum sativum
AAK29455.1	AF352252	Lens culinaris
AAK29451.1	AF352248	Pisum sativum
CAA12232.1	AJ224933	Lycopersicon esculentum
CAA29123.1	X05636	Pisum sativum
AAF27930.1	AF222804	Euphorbia esula
CAA40362.1	X57077	Zea mays
CAA42529.2	X59872	Triticum aestivum
AAD41006.1	AF107023	Triticum aestivum
BAA87331.1	AB012694	Lilium longiflorum
AAB86857.1	AF031547	Fritillaria agrestis
CAA07233.1	AJ006767	Cicer arietinum
AAA50303.1	L34578	Pisum sativum
CAA77867.1	Z11842	Lycopersicon esculentum
AAF64525.1	AF253416	Lycopersicon chilense
AAB03076.1	U01890	Lycopersicon pennellii

SEQ ID NO. 396

CAA85320.1	Z36749	Glycine max

SEQ ID NO. 402

AAD40979.1	AF089851	Glycine max
CAA08855.1	AJ009825	Cicer arietinum
AAD49420.1	AF172681	Canavalia lineata
BAA77206.1	AB026253	Pisum sativum
AAA62490.1	L39931	Pisum sativum
CAA45526.1	X64201	Lens culinaris
AAB34918.2	S78994	Lens culinaris
CAA06833.1	AJ006052	Cicer arietinum

SEQ ID NO. 413

AAD21872.1	AF078082	Phaseolus vulgaris
AAB93834.1	U82481	Zea mays
CAA73134.1	Y12531	Brassica oleracea
AAC23542.1	U20948	Ipomoea trifida
CAA67145.1	X98520	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
CAB41878.1	Y18259	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
CAA74662.1	Y14286	Brassica oleracea
AAA62232.1	U00443	Brassica napus
AAA33000.1	M76647	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
BAA92836.1	AB032473	Brassica oleracea
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
BAA21132.1	D88193	Brassica rapa
BAA06285.1	D30049	Brassica rapa

CAA79355.1	Z18921	Brassica oleracea
BAA92837.1	AB032474	Brassica oleracea
AAD52097.1	AF088885	Nicotiana tabacum
BAA07576.1	D38563	Brassica rapa
BAA07577.2	D38564	Brassica rapa
BAB21001.1	AB054061	Brassica rapa
BAA94516.1	AP001800	Oryza sativa
BAA94517.1	AP001800	Oryza sativa
AAA33915.1	L27821	Oryza sativa
BAA94529.2	AP001800	Oryza sativa
AAK21965.1	AY028699	Brassica napus
AAG16628.1	AY007545	Brassica napus

SEQ ID NO. 414

CAA57446.1	X81853	Nicotiana tabacum
CAA38039.1	X54106	Petunia x hybrida
AAA33807.1	M25153	Solanum tuberosum
AAA33806.1	M25154	Solanum tuberosum
AAF23527.1	AF110429	Arabis alpina
CAA37333.1	X53242	Solanum tuberosum
AAA33808.1	M25152	Solanum tuberosum
CAA54450.1	X77233	Lycopersicon esculentum
AAA34133.1	M86724	Lycopersicon esculentum
AAG01381.1	AF194173	Vitis vinifera
AAF23524.1	AF110426	Arabis alpina
AAF23536.1	AF110438	Arabis fendleri
AAB65840.1	U36586	Vitis vinifera
AAF23546.1	AF110448	Arabis lyallii
AAF23548.1	AF110450	Arabis parishii
AAF34414.1	AF172282	Oryza sativa
AAF23545.1	AF110447	Arabis lignifera
AAF23523.1	AF110425	Aubrieta deltoidea
AAF23532.1	AF110434	Brassica oleracea
AAA33434.1	M32984	Zea mays
AAF23525.1	AF110427	Arabis alpina
AAF23555.1	AF110457	Arabis turrita
AAF23549.1	AF110451	Arabis pauciflora
AAF23539.1	AF110441	Halimolobos perplexa var. lemhiensis
CAA27682.1	X04050	Zea mays
AAF43977.1	AF123535	Zea mays
AAF23534.1	AF110436	Arabis drummondii
AAC34295.1	AF050457	Zea mays
BAA07911.1	D44449	Lactuca sativa
CAA27681.1	X04049	Zea mays
AAF23543.1	AF110445	Arabis hirsuta
AAF23537.1	AF110439	Arabis glabra
CAA32934.1	X14826	Trifolium repens
AAF23529.1	AF110431	Arabis blepharophylla
AAF23535.1	AF110437	Arabis drummondii
CAA34547.1	X16547	Pennisetum glaucum
AAF23541.1	AF110443	Arabis hirsuta
AAF23526.1	AF110428	Arabis alpina
AAF23551.1	AF110453	Arabidopsis lyrata subsp. petraea
BAA22973.1	D63454	Arabis gemmifera
BAA22976.1	D63457	Arabis gemmifera
AAG01382.1	AF194174	Vitis vinifera
CAA80691.1	Z23170	Phaseolus acutifolius
AAC49546.1	U48373	Pinus banksiana
AAC49540.1	U48367	Pinus banksiana
AAF44335.1	AF195866	Vitis vinifera
CAA88271.1	Z48234	Malus x domestica

SEQ ID NO. 416

CAA32375.1	X14172	Oryza sativa
CAA65510.1	X96738	Pinus sylvestris
CAA27000.1	X03243	Avena sativa
CAA47284.1	X66784	Nicotiana tabacum
CAA53165.1	X75412	Petrosclinum crispum
CAA26999.1	X03242	Avena sativa
AAF14344.1	AF069305	Pisum sativum
AAA76820.1	M18822	Avena sativa
AAC49301.2	U32444	Lycopersicon esculentum
AAB03339.1	U60264	Picea abies
CAA64796.1	X95550	Mougeotia scalaris
AAC49128.1	U31284	Mesotaenium caldariorum
BAA33774.1	AB016231	Adiantum capillus-veneris
BAA33775.1	AB016232	Adiantum capillus-veneris
BAA74448.1	AB018442	Oryza sativa
AAF66603.1	AF141942	Oryza sativa
AAB41399.1	U56731	Sorghum bicolor

BAB39687.1	AB022917	Marchantia paleacea var. diptera
AAB67863.1	U56698	Ceratodon purpureus
AAB19058.1	U72993	Ceratodon purpureus
CAA43698.1	X61458	Selaginella martensii
CAA52933.1	X75025	Physcomitrella patens
AAB41397.1	U56729	Sorghum bicolor
AAA33957.1	L34842	Glycine max
CAA32242.1	X14077	Pisum sativum
AAA33682.1	M37217	Pisum sativum
AAB21533.2	S84872	Solanum tuberosum
AAB47994.1	U84970	Lathyrus sativus
AAA33115.1	M15265	Cucurbita pepo
CAA04679.1	AJ001318	Populus tremula x Populus tremuloides
BAA99408.1	AB036762	Armoracia rusticana
BAA99410.1	AB036764	Armoracia rusticana
BAA99409.1	AB036763	Armoracia rusticana
AAB41398.2	AF182394	Sorghum bicolor
BAA31856.1	AB016168	Adiantum capillus-veneris
BAA31710.1	AB016151	Adiantum capillus-veneris
CAA74992.1	Y14676	Nicotiana plumbaginifolia
AAA34092.1	L10114	Nicotiana tabacum
CAA74908.1	Y14572	Solanum tuberosum
AAG25725.1	AF309806	Populus balsamifera subsp. trichocarpa
CAA05293.1	AJ002281	Lycopersicon esculentum
AAB24397.1	S51538	Solanum tuberosum
AAD50631.1	AF122901	Lycopersicon esculentum
CAA40795.2	X57563	Oryza sativa subsp. indica
AAG25726.1	AF309807	Populus balsamifera subsp. trichocarpa

SEQ ID NO. 418

AAF78018.1	AF238474	Oryza sativa
AAD46917.1	AF164021	Oryza sativa
AAF78044.1	AF248493	Oryza sativa
AAC27489.1	AF077130	Oryza sativa
AAC02535.1	AF044260	Oryza sativa
AAC49629.1	U51330	Triticum aestivum
AAF68398.1	AF237568	Oryza sativa
AAC01746.1	AF044489	Oryza sativa
AAF78016.1	AF238472	Oryza sativa
AAD44029.1	AF085164	Hordeum vulgare
AAD46416.1	AF100766	Oryza sativa
AAF68400.1	AF237570	Oryza sativa
AAF78021.1	AF238477	Oryza sativa
AAF68397.1	AF237567	Oryza sativa
AAD46916.1	AF164020	Oryza sativa
AAD44032.1	AF085167	Hordeum vulgare
AAD44031.1	AF085166	Hordeum vulgare
BAB39437.1	AP003338	Oryza sativa
AAF78019.1	AF238475	Oryza sativa

SEQ ID NO. 420

AAA73563.1	L16767	Nicotiana tabacum
AAA34109.1	L16787	Nicotiana tabacum
CAA98188.1	Z73960	Lotus japonicus
CAA98187.1	Z73959	Lotus japonicus
AAD18006.1	AF112244	Zea mays
CAA98168.1	Z73940	Lotus japonicus
CAA89049.1	Z49190	Beta vulgaris
AAA34254.1	L08131	Volvox carteri
CAA98182.1	Z73954	Lotus japonicus
CAA98169.1	Z73941	Lotus japonicus
CAA89021.1	Z49152	Beta vulgaris
AAB97114.1	U58853	Glycine max
CAA98179.1	Z73951	Lotus japonicus
AAD28731.1	AF112964	Triticum aestivum
CAA04701.1	AJ001367	Daucus carota
BAA02112.1	D12544	Pisum sativum
CAC19792.1	AJ292320	Oryza sativa
CAA98170.1	Z73942	Lotus japonicus
AAB71504.1	U82219	Prunus armeniaca
BAA02110.1	D12542	Pisum sativum
CAA98171.1	Z73943	Lotus japonicus
CAA46600.1	X65650	Pisum sativum
CAA46112.1	X64941	Nicotiana plumbaginifolia
CAA90082.1	Z49902	Pisum sativum
BAA02113.1	D12545	Pisum sativum
CAC24477.1	AJ296336	Cichorium intybus x Cichorium endivia

CAA98175.1	Z73947	Lotus japonicus

SEQ ID NO. 421

AAD04034.1	AF081794	Nicotiana tabacum
AAD20458.1	AF099969	Nicotiana tabacum

SEQ ID NO. 422

BAA19928.1	AB003491	Oryza sativa
AAA33491.1	M76685	Zea mays
AAB97526.1	AF042321	Camptotheca acuminata
AAB97087.1	AF042320	Camptotheca acuminata
AAA33490.1	M76684	Zea mays
AAC25986.1	AF047024	Chlamydomonas reinhardtii

SEQ ID NO. 423

AAC04671.1	AF018174	Brassica napus
CAA45098.1	X63537	Pisum sativum
AAC49357.1	U35830	Pisum sativum
AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA33082.1	X14959	Spinacia oleracea
BAB20886.1	AB053294	Oryza sativa
AAC32111.1	AF051206	Picea mariana
AAB53695.1	U59380	Brassica napus
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
CAA77847.1	Z11803	Nicotiana tabacum
BAA13524.1	D87984	Fagopyrum esculentum
BAA04864.1	D21836	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAF88067.1	AF286593	Triticum aestivum
CAA41415.1	X58527	Nicotiana tabacum
CAA94534.1	Z70677	Ricinus communis
AAD49232.1	AF159387	Lolium perenne
AAD49234.1	AF159389	Phalaris coerulescens
AAD49233.1	AF159388	Phalaris coerulescens
AAD49230.1	AF159385	Hordeum bulbosum
BAA25681.1	AB010434	Brassica rapa
CAA55399.1	X78822	Chlamydomonas reinhardtii
CAA56850.1	X80887	Chlamydomonas reinhardtii
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAB53694.1	U59379	Brassica napus
AAD49231.1	AF159386	Secale cereale
BAB39913.1	AP002912	Oryza sativa
AAD56954.1	AF186240	Secale cereale
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii
CAA56851.1	X80888	Chlamydomonas reinhardtii
AAD45358.1	AF160870	Brassica napus
AAB52409.1	U76831	Brassica napus
CAA06736.1	AJ005841	Oryza sativa
CAA06735.1	AJ005840	Triticum aestivum
CAA53900.1	X76269	Pisum sativum
AAC49358.1	U35831	Pisum sativum
CAA35826.1	X51462	Spinacia oleracea
CAA35827.1	X51463	Spinacia oleracea

SEQ ID NO. 425

AAD16139.1	AF096299	Nicotiana tabacum
AAC37515.1	L44134	Cucumis sativus
AAF23898.1	AF193802	Oryza sativa
BAA82107.1	AB022693	Nicotiana tabacum
BAA77383.1	AB020590	Nicotiana tabacum
AAD55974.1	AF121353	Petroselinum crispum
CAA88326.1	Z48429	Avena fatua
AAC31956.1	AF080595	Pimpinella brachycarpa
AAC49527.1	U48831	Petroselinum crispum
BAA86031.1	AB026890	Nicotiana tabacum
AAD16138.1	AF096298	Nicotiana tabacum
AAC49529.1	U58540	Petroselinum crispum
AAG35658.1	AF204925	Petroselinum crispum
BAB16432.1	AB041520	Nicotiana tabacum
CAA88331.1	Z48431	Avena fatua
BAA77358.1	AB020023	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
AAG35659.1	AF204926	Petroselinum crispum
CAB66338.1	AJ279697	Betula pendula
AAD27591.1	AF121354	Petroselinum crispum
AAF61864.1	AF193771	Nicotiana tabacum
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 433

CAA59800.1	X85805	Zea mays
AAB60276.1	U09989	Zea mays
AAD46188.1	AF156691	Nicotiana plumbaginifolia
BAA08134.1	D45189	Zostera marina
BAA01058.1	D10207	Oryza sativa
AAB17186.1	U72148	Lycopersicon esculentum
CAA54045.1	X76535	Solanum tuberosum
CAA47275.1	X66737	Nicotiana plumbaginifolia
AAB84202.2	AF029256	Kosteletzkya virginica
CAB69823.1	AJ271438	Prunus persica
BAA37150.1	AB022442	Vicia faba
CAA59799.1	X85804	Phaseolus vulgaris
CAC29436.1	AJ310524	Vicia faba
AAB41898.1	U84891	Mesembryanthemum crystallinum
AAB35314.2	S79323	Vicia faba
AAD46186.1	AF156679	Nicotiana plumbaginifolia
CAB69824.1	AJ271439	Prunus persica
AAA34052.1	M27888	Nicotiana plumbaginifolia
AAF98344.1	AF275745	Lycopersicon esculentum
AAD55399.1	AF179442	Lycopersicon esculentum
AAA34094.1	M80489	Nicotiana plumbaginifolia
CAA54046.1	X76536	Solanum tuberosum
AAA34173.1	M60166	Lycopersicon esculentum
AAA34098.1	M80490	Nicotiana plumbaginifolia
CAC29435.1	AJ310523	Vicia faba
BAA06629.1	D31843	Oryza sativa
CAB85495.1	AJ132892	Medicago truncatula
CAB85494.1	AJ132891	Medicago truncatula
AAD46187.1	AF156683	Nicotiana plumbaginifolia
AAK31799.1	AY029190	Lilium longiflorum
AAA34099.1	M80491	Nicotiana plumbaginifolia
CAA52107.1	X73901	Dunaliella bioculata
AAB49042.1	U54690	Dunaliella acidophila
AAG01028.1	AF289025	Cucumis sativus
AAA81348.1	U38965	Vicia faba
AAA34096.1	M80492	Nicotiana plumbaginifolia
AAA20600.1	U08984	Zea mays
AAA20601.1	U08985	Zea mays
AAK32118.1	AF308816	Hordeum vulgare
CAC10554.1	AJ295612	Hordeum vulgare
AAF97591.1	AF263917	Lycopersicon esculentum
AAD20330.1	AF110268	Oryza sativa
CAB85496.1	AJ132894	Medicago truncatula
CAC28223.1	AJ286748	Sesbania rostrata
CAC28222.1	AJ286747	Sesbania rostrata
CAB85497.1	AJ132893	Medicago truncatula
AAB84204.1	AF029258	Kosteletzkya virginica
CAC28220.1	AJ286745	Sesbania rostrata

SEQ ID NO. 434

AAF13731.1	AF002248	Pisum sativum
CAA78932.1	Z17226	Pinus sylvestris
CAA78901.1	Z16409	Pinus sylvestris
CAA57877.1	X82497	Nicotiana tabacum
AAF90200.1	AF287276	Hordeum vulgare
AAC67557.1	AF094775	Oryza sativa
CAA32197.1	X14036	Lycopersicon esculentum
AAA34159.1	M20241	Lycopersicon esculentum
AAA33711.1	M21317	Petunia x hybrida
CAA57492.1	X81962	Pisum sativum
CAA41406.1	X58516	Pinus sylvestris
CAA59049.1	X84308	Hordeum vulgare
AAB65793.1	AF010321	Oryza sativa
AAD55568.1	AF110786	Volvox carteri f. nagariensis
CAA41407.1	X58517	Pinus sylvestris
CAA33330.1	X15258	Lycopersicon esculentum
CAA50763.1	X71965	Pyrobotrys stellata
AAA84545.1	L19651	Chloroplast Pisum sativum
AAF44703.1	AF241525	Alonsoa meridionalis
CAA45523.1	X64198	Nicotiana tabacum
AAD55569.1	AF110787	Volvox carteri f. nagariensis
AAA34140.1	M17633	Lycopersicon esculentum
AAC67558.1	AF094776	Oryza sativa
AAF23819.1	AF218305	Hordeum vulgare
CAA46235.1	X65119	Chlamydomonas reinhardtii
AAD03734.1	AF104633	Chlamydomonas reinhardtii
AAD03733.1	AF104632	Chlamydomonas reinhardtii
AAA34186.1	J03558	Lycopersicon esculentum
AAG28464.1	AF195794	Chlamydomonas reinhardtii
CAA41404.1	X58514	Pinus sylvestris
CAA41405.1	X58515	Pinus sylvestris
CAA78900.1	Z16408	Pinus sylvestris

AAF44702.1	AF241524	Asarina barclaiana
CAA44777.1	X63052	Hordeum vulgare
CAA39883.1	X56538	Pisum sativum
CAA31232.1	X12735	Hordeum vulgare
AAA33651.1	K02067	Pisum sativum
CAA10284.1	AJ131044	Cicer arietinum
AAA33396.1	M29334	Lemna gibba
CAA74179.1	Y13865	Beta vulgaris
AAF89207.1	AF279250	Vigna radiata
AAA64414.1	U23188	Zea mays
AAA64415.1	U23189	Zea mays
CAA39376.1	X55892	Zea mays
CAA26211.1	X02358	Petunia sp.

SEQ ID NO. 436

AAD10836.1	U52079	Solanum tuberosum
BAA83352.1	AP000391	Oryza sativa
BAA90508.1	AP001111	Oryza sativa
BAA90507.1	AP001111	Oryza sativa

SEQ ID NO. 438

CAA81057.1	Z25802	Petunia x hybrida
CAA50377.1	X71060	Petunia x hybrida
CAA50376.1	X71059	Petunia x hybrida
BAA89008.1	AB027454	Petunia x hybrida

SEQ ID NO. 439

AAF28385.1	AF151214	Nicotiana glauca
AAA74624.1	U31766	Oryza sativa
AAG29777.1	AF228333	Gossypium hirsutum
AAB70539.1	AF017359	Oryza sativa
AAB70538.1	AF017358	Oryza sativa
AAC00499.1	AF044204	Gossypium hirsutum
AAF71695.1	AF198168	Aerides japonica
CAA48621.1	X68654	Hordeum vulgare
CAA91436.1	Z66529	Hordeum vulgare
AAB05812.1	U63993	Hordeum vulgare
CAA91435.1	Z66528	Hordeum vulgare
AAK01293.1	AF331710	Avicennia marina
AAG27707.1	AF302788	Triticum aestivum
CAA85484.1	Z37115	Hordeum vulgare
AAF35186.1	AF195865	Gossypium hirsutum
CAA48623.1	X68656	Hordeum vulgare
AAA86694.1	U18127	Hordeum vulgare
AAF35185.1	AF195864	Gossypium hirsutum
AAF35184.1	AF195863	Gossypium hirsutum
AAK20395.1	AF334185	Triticum aestivum
AAF23459.1	AF208833	Capsicum annuum
AAF26451.1	AF221503	Pyrus communis
AAF14232.1	AF109195	Hordeum vulgare
CAA80809.1	Z23271	Oryza sativa
AAB06443.1	U66105	Zea mays
AAA75599.1	U15153	Gossypium hirsutum
AAB34774.1	S78173	Gossypium hirsutum
AAA33493.1	J04176	Zea mays
AAF26450.1	AF221502	Malus x domestica
AAF23460.1	AF208834	Capsicum annuum
CAA50661.1	X71668	Sorghum bicolor
CAA50660.1	X71667	Sorghum bicolor
CAA05771.1	AJ002958	Cicer arietinum
CAA63407.1	X92748	Beta vulgaris
CAB96874.1	AJ277164	Malus x domestica
AAA34032.1	M58635	Spinacia oleracea
AAD09107.1	AF101038	Brassica napus
CAA65477.1	X96716	Prunus dulcis
CAA48622.1	X68655	Hordeum vulgare
CAA85483.1	Z37114	Hordeum vulgare
AAB80805.1	U90342	Pinus radiata
AAB18815.1	U77295	Oryza sativa
CAA65475.1	X96714	Prunus dulcis
CAA69949.1	Y08691	Oryza sativa
AAK28533.1	AF329829	Corylus avellana
AAB96834.1	M64746	Daucus carota
AAF26449.1	AF221501	Prunus avium
CAA45210.1	X63669	Triticum turgidum subsp. durum

SEQ ID NO. 445

AAC98091.1	AF067401	Oryza sativa
BAB39155.1	AB048713	Pisum sativum
AAG13663.1	AF263457	Zea mays
BAA90816.1	AP001168	Oryza sativa
AAC98090.1	AF067400	Zea mays

SEQ ID NO. 452

AAC48996.1	U20260	Glycine max
AAB59330.1	M31545	Hordeum vulgare
AAA81881.1	L39279	Lycopersicon esculentum
CAA46787.1	X65974	Nicotiana tabacum
CAA46786.1	X65973	Nicotiana tabacum
AAA18861.1	U03632	Chlamydomonas reinhardtii
AAA18862.1	U03633	Chlamydomonas reinhardtii

SEQ ID NO. 458

BAA78745.1	AB023482	Oryza sativa

SEQ ID NO. 459

CAA81057.1	Z25802	Petunia x hybrida
CAA50377.1	X71060	Petunia x hybrida
CAA50376.1	X71059	Petunia x hybrida
BAA83484.1	AB031274	Scutellaria baicalensis
BAA36410.1	AB012114	Vigna mungo
AAF61647.1	AF190634	Nicotiana tabacum
BAA93039.1	AB033758	Citrus unshiu
BAA36411.1	AB012115	Vigna mungo
AAD51778.1	AF116858	Phaseolus vulgaris
AAB48444.1	U82367	Solanum tuberosum
AAF98390.1	AF287143	Brassica napus
BAA19659.1	AB002818	Perilla frutescens
AAD04166.1	AF101972	Phaseolus lunatus
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAA90787.1	AB038248	Ipomoea batatas
BAB41022.1	AB047095	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAA36421.1	AB013596	Perilla frutescens
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
BAA36972.1	AB009370	Vigna mungo
BAB41025.1	AB047098	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
AAB86473.1	AF028237	Ipomoea purpurea
BAA36412.1	AB012116	Vigna mungo

SEQ ID NO. 460

AAD29050.1	AF132855	Gossypium hirsutum
AAD29049.1	AF132854	Gossypium hirsutum

SEQ ID NO. 462

CAB56225.1	AJ133278	Hordeum vulgare

SEQ ID NO. 464

AAK15322.1	AF332134	Chloroplast Medicago sativ
BAA33755.2	AB017480	Nicotiana tabacum
AAD17230.1	AF117339	Nicotiana tabacum
CAA09935.1	AJ012165	Capsicum annuum
CAA06853.1	AJ006095	Cicer arietinum
BAA57906.1	AB001684	Chlorella vulgaris

SEQ ID NO. 475

AAD27882.2	AF139470	Vigna radiata
AAA34146.1	M32606	Lycopersicon esculentum
AAA34143.1	M32605	Lycopersicon esculentum
AAA64416.1	U23190	Zea mays
AAA33711.1	M21317	Petunia x hybrida
CAA41406.1	X58516	Pinus sylvestris
CAA57492.1	X81962	Pisum sativum
CAA32197.1	X14036	Lycopersicon esculentum
AAA34159.1	M20241	Lycopersicon esculentum
CAA50763.1	X71965	Pyrobotrys stellata
CAA90681.1	Z50801	Zea mays
AAC14566.1	AF058796	Oryza sativa
AAD27878.1	AF139466	Vigna radiata
AAF13731.1	AF002248	Pisum sativum
CAA57877.1	X82497	Nicotiana tabacum
CAA33330.1	X15258	Lycopersicon esculentum
AAF90200.1	AF287276	Hordeum vulgare
AAC67557.1	AF094775	Oryza sativa
AAA34140.1	M17633	Lycopersicon esculentum
CAA45523.1	X64198	Nicotiana tabacum
AAA34186.1	J03558	Lycopersicon esculentum

CAA41407.1	X58517	Pinus sylvestris
CAA49149.1	X69215	Pisum sativum
AAA68425.1	M34396	Polystichum munitum
CAA57407.1	X81808	Picea abies
CAA41405.1	X58515	Pinus sylvestris
CAA41404.1	X58514	Pinus sylvestris
AAF44703.1	AF241525	Alonsoa meridionalis
CAA33903.1	X15894	Sinapis alba
CAA34459.1	X16436	Sinapis alba
AAF23819.1	AF218305	Hordeum vulgare

SEQ ID NO. 476

AAB18633.1	L49175	Amaranthus hypochondriacus
CAA45504.1	X64143	Flaveria trinervia
AAB80714.1	AF008939	Gossypium hirsutum
AAG17619.1	AF248080	Flaveria trinervia
CAA62469.1	X90982	Solanum tuberosum
CAA47437.1	X67053	Solanum tuberosum
CAA31956.1	X13660	Mesembryanthemum crystallinum
CAA88829.1	Z48966	Flaveria pringlei
AAG17618.1	AF248079	Flaveria trinervia
BAA01560.1	D10717	Glycine max
CAA45505.1	X64144	Flaveria pringlei
CAA41758.1	X59016	Nicotiana tabacum
CAB65170.1	AJ243416	Lycopersicon esculentum
CAC28225.1	AJ286750	Sesbania rostrata
BAA03100.1	D13998	Glycine max
BAA23419.1	AB008540	Glycine max
CAA55700.1	X79090	Picea abies
CAA09807.1	AJ011844	Solanum tuberosum
CAB65171.1	AJ243417	Lycopersicon esculentum
CAA32727.1	X14587	Mesembryanthemum crystallinum
AAD31452.1	AF135371	Lotus corniculatus
AAC33164.1	M86661	Saccharum sp.
BAA03094.1	D13987	Brassica napus
CAA43601.1	X61304	Flaveria trinervia
CAA81072.1	Z25853	Flaveria australasica
AAK28444.1	AF288382	Phaseolus vulgaris
CAA92209.1	Z68125	Amaranthus hypochondriacus
CAA43709.1	X61489	Zea mays
CAA11415.1	AJ223497	Brassica juncea
CAA11414.1	AJ223496	Brassica juncea
BAA10902.1	D64037	Pisum sativum
AAB46618.1	M83086	Medicago sativa
AAB41903.1	L39371	Medicago sativa
AAG00180.1	AF271995	Oryza sativa
CAA42549.1	X59925	Sorghum bicolor
CAA07610.1	AJ007705	Triticum aestivum
CAA09588.1	AJ011302	Vicia faba
AAG42288.1	AF268091	Chloris gayana
CAA33317.1	X15239	Zea mays
BAA28170.1	AB012228	Zea mays
CAA46267.1	X65137	Sorghum bicolor
CAA39197.1	X55664	Sorghum bicolor
CAA33316.1	X15238	Zea mays
CAA33663.1	X15642	Zea mays
CAA32728.2	X14588	Mesembryanthemum crystallinum
AAD45696.1	AF159051	Picea abies
CAA60626.1	X87148	Vanilla planifolia
CAA60627.1	X87149	Vanilla planifolia
CAA62747.1	X91404	Welwitschia mirabilis

SEQ ID NO. 477

CAA65042.1	X95727	Brassica juncea
AAA64415.1	U23189	Zea mays
CAA44777.1	X63052	Hordeum vulgare
AAA64414.1	U23188	Zea mays
AAA50310.1	L36064	Prunus persica
AAB70556.1	AF017998	Tetraselmis sp. RG-15
CAA32108.1	X13908	Oryza sativa
BAA77273.1	AB026686	Physcomitrella patens
CAA32658.1	X14506	Pinus sylvestris
AAA80591.1	U21111	Solanum tuberosum
CAA10284.1	AJ131044	Cicer arietinum
AAA34147.1	M14443	Lycopersicon esculentum
AAA80589.1	U20983	Solanum tuberosum
CAA32109.1	X13909	Oryza sativa
BAA00536.1	D00641	Oryza sativa
AAA80593.1	U21113	Solanum tuberosum
AAC25775.1	AF072931	Medicago sativa
AAA80594.1	U21114	Solanum tuberosum
AAA33396.1	M29334	Lemna gibba

BAA03104.1	D14002	Lactuca sativa
CAA47950.1	X67714	Pinus contorta
AAA33124.1	M16057	Cucumis sativus
BAA25392.1	AB012638	Nicotiana sylvestris
BAA25396.1	AB012641	Nicotiana sylvestris
AAB18209.1	U73218	Triticum aestivum
AAA50172.1	U01964	Glycine max
AAA33636.1	M23532	Physcomitrella patens
CAA39883.1	X56538	Pisum sativum
AAB61237.1	AF003128	Mesembryanthemum crystallinum
AAB61238.1	AF003129	Mesembryanthemum crystallinum
AAA18529.1	L07119	Chloroplast Gossypium hirsutum
CAA99993.1	Z75663	Apium graveolens
AAB61236.1	AF003127	Mesembryanthemum crystallinum
CAA39376.1	X55892	Zea mays
CAA32657.1	X14505	Pinus sylvestris
AAA80592.1	U21112	Solanum tuberosum
BAA24493.1	AB006081	Fagus crenata
CAA57408.1	X81809	Picea abies
BAA25389.1	AB012637	Nicotiana sylvestris
BAA25391.1	AB012637	Nicotiana sylvestris
AAC78690.1	S73603	Pinus thunbergii
CAA32900.1	X14794	Zea mays

SEQ ID NO. 479

AAF72557.1	AF130426	Lycopersicon esculentum
AAF72556.1	AF130425	Lycopersicon esculentum
AAD44161.1	AF130423	Lycopersicon esculentum
BAA83338.1	AB027528	Physcomitrella patens
AAF72555.1	AF130424	Lycopersicon esculentum
CAA04247.1	AJ000695	Lycopersicon esculentum
CAA04246.1	AJ000694	Mougeotia scalaris

SEQ ID NO. 480

AAD33602.1	AF133302	Brassica rapa subsp. pekinensis
AAG40130.1	AF203879	Oryza sativa

SEQ ID NO. 481

CAA55039.1	X78203	Hyoscyamus muticus
AAB65163.1	AF002692	Solanum commersonii
CAA96431.1	Z71749	Nicotiana plumbaginifolia
BAA01394.1	D10524	Nicotiana tabacum
AAA33930.1	M84968	Silene vulgaris
AAA33931.1	M84969	Silene vulgaris
AAF61392.1	AF133894	Persea americana
CAB38119.1	AJ010296	Zea mays
CAB38118.1	AJ010295	Zea mays
AAG34811.1	AF243376	Glycine max
CAA09190.1	AJ010451	Alopecurus myosuroides
CAA09192.1	AJ010453	Alopecurus myosuroides
CAA09193.1	AJ010454	Alopecurus myosuroides
AAG34814.1	AF243379	Glycine max
CAA09191.1	AJ010452	Alopecurus myosuroides
AAG34812.1	AF243377	Glycine max
CAA39487.1	X56012	Triticum aestivum
AAD56395.1	AF184059	Triticum aestivum
CAA68993.1	Y07721	Petunia x hybrida
AAA33469.1	M16902	Zea mays
AAA33470.1	M16901	Zea mays
AAA20585.1	U12679	Zea mays
CAA56047.1	X79515	Zea mays
CAA39480.1	X56004	Triticum aestivum
AAC64007.1	AF062403	Oryza sativa
AAG34823.1	AF244680	Zea mays
AAG34817.1	AF244674	Zea mays
CAA05354.1	AJ002380	Oryza sativa
AAG34820.1	AF244677	Zea mays
AAG34821.1	AF244678	Zea mays
CAB66333.1	AJ279691	Betula pendula
AAG34818.1	AF244675	Zea mays
AAG34816.1	AF244673	Zea mays
AAG34822.1	AF244679	Zea mays
CAA05355.1	AJ002381	Oryza sativa

SEQ ID NO. 482

BAA31452.1	AB010416	Raphanus sativus
AAB04557.1	U62778	Gossypium hirsutum
CAA49854.1	X70417	Antirrhinum majus
AAK26770.1	AF326503	Zea mays
AAF90121.1	AF254799	Hordeum vulgare
AAK26768.1	AF326501	Zea mays
AAK26769.1	AF326502	Zea mays

AAD10495.1	U86763	Triticum aestivum
BAA12711.1	D84669	Raphanus sativus
AAD39372.1	AF118381	Brassica napus
AAD10494.1	U86762	Triticum aestivum
AAB51393.1	U92651	Brassica oleracea var. botrytis
CAA56553.1	X80266	Hordeum vulgare
BAB12722.1	AB048248	Pyrus communis
BAA05017.1	D25534	Oryza sativa
AAC09245.1	AF037061	Zea mays
AAK26767.1	AF326500	Zea mays
AAB17284.1	U43291	Mesembryanthemum crystallinum
CAA64952.1	X95650	Tulipa gesneriana
AAC04846.1	AF020793	Medicago sativa

SEQ ID NO. 483

AAC28135.1	AF034572	Glycine max
CAC19494.1	AJ293343	Zea mays
BAA96829.1	AB026558	Oryza sativa
CAA74725.1	Y14339	Lycopersicon esculentum
AAB51521.1	U92540	Oryza sativa
BAA96830.1	AB026559	Oryza sativa
BAA99540.1	AB032061	Oryza sativa
BAA96832.1	AB026561	Oryza sativa
CAA65660.1	X96974	Spinacia oleracea
AAB82138.1	AF022735	Oryza sativa
AAC35982.1	AF088914	Petunia x hybrida
BAA07128.1	D37886	Oryza sativa
AAF70292.1	AF255338	Glycine max
AAF34770.1	AF227625	Euphorbia esula
BAA78755.1	AB023482	Oryza sativa
BAA95832.1	AP002069	Oryza sativa
BAA95822.1	AP002069	Oryza sativa
BAA96831.1	AB026560	Oryza sativa
BAA21651.1	D78173	Spinacia oleracea
BAA96833.1	AB026562	Oryza sativa

SEQ ID NO. 484

AAB84193.1	AF029242	Pisum sativum

SEQ ID NO. 487

AAG45487.1	AY013255	Lycopersicon esculentum
AAD43343.1	AF159139	Gossypium hirsutum
AAG45488.1	AY013256	Lycopersicon esculentum
AAF78756.1	AF271358	Oryza sativa
AAF78754.1	AF271356	Oryza sativa
CAB43062.1	AJ133000	Craterostigma plantagineum
CAB43063.1	AJ133001	Craterostigma plantagineum
BAA19467.1	AB001920	Oryza sativa
BAA19466.1	AB001919	Oryza sativa
CAB06620.1	Z84822	Nicotiana tabacum
AAG48162.1	AF154425	Lycopersicon esculentum
AAB51392.1	U92656	Vigna unguiculata
AAD17208.1	AF113918	Brassica oleracea var. cap
AAC78487.1	AF090445	Brassica oleracea
AAG45486.1	AY013253	Lycopersicon esculentum
BAA11135.1	D73410	Zea mays
AAB70463.1	U96438	Pimpinella brachycarpa
AAF78755.1	AF271357	Oryza sativa
AAC79125.1	U85482	Brassica oleracea var. capitata
AAD17209.1	AF113919	Brassica oleracea var. capitata
AAC78486.1	AF090444	Brassica oleracea
BAA11136.1	D73411	Oryza sativa
AAB04095.1	L33686	Ricinus communis
AAB37305.1	U72693	Ricinus communis
AAG45485.1	AY013252	Lycopersicon esculentum
AAF17557.1	AF201661	Lycopersicon esculentum
AAF05818.1	AF195614	Nicotiana tabacum
AAG50297.1	AY013254	Lycopersicon esculentum

SEQ ID NO. 489

CAC34417.1	AJ311624	Pisum sativum
AAA86365.1	U21743	Brassica napus
BAB17848.1	AB015593	Oryza sativa
AAC04836.1	AF032975	Oryza sativa
AAC05682.1	AF051156	Oryza sativa
BAA74702.1	AB010876	Oryza sativa
CAA75907.1	Y15962	Hordeum vulgare
CAB77393.1	AJ276491	Phaseolus vulgaris
BAA08266.1	D45425	Ipomoea nil
AAG36666.1	AF310017	Beta vulgaris
AAG36667.1	AF310018	Beta vulgaris
AAK28807.1	AF310960	Linum usitatissimum

AAG36665.1	AF310016	Beta vulgaris
CAA11031.1	AJ222979	Pisum sativum
CAB55394.1	AL117264	Oryza sativa
BAB39980.1	AP003020	Oryza sativa
BAB39965.1	AP003018	Oryza sativa
AAC04835.1	AF032974	Oryza sativa
BAA86880.1	AB028454	Barbula unguiculata
AAC25777.1	AF072694	Oryza sativa
BAA78563.1	AB024338	Atriplex lentiformis
AAA33030.1	M93041	Mesembryanthemum crystallinum
AAF03355.1	AF132671	Nicotiana plumbaginifolia
CAB65369.1	AJ250832	Pisum sativum
CAB65371.1	AJ250834	Pisum sativum
CAB65370.1	AJ250833	Pisum sativum
AAG00425.1	AF250933	Hordeum vulgare
AAC05146.1	AF049065	Pinus radiata
CAB55559.1	AJ237943	Triticum aestivum
AAC04833.1	AF032972	Oryza sativa
AAC78470.1	AF067731	Solanum tuberosum
CAA63659.1	X93171	Hordeum vulgare
CAB55558.1	AJ237942	Triticum aestivum
BAA25197.1	AB012138	Lycopersicon esculentum
AAC04832.1	AF032971	Oryza sativa
AAC99473.1	AF039201	Pinus caribaea
AAA20245.1	U01963	Hordeum vulgare
AAA34270.1	M63223	Triticum aestivum
AAA34268.1	M21962	Triticum aestivum

SEQ ID NO. 490

CAB62537.1	AJ012583	Hevea brasiliensis
AAA33357.1	M36986	Hevea brasiliensis
CAA05978.1	AJ003196	Hevea brasiliensis

SEQ ID NO. 491

AAD44769.1	AF146341	Physcomitrella patens
AAD44768.1	AF146340	Physcomitrella patens
AAD26198.1	AF115476	Physcomitrella patens
AAK27450.1	AF329814	Oryza sativa subsp. japonica
AAF28764.1	AF218381	Oryza sativa subsp. japonica
CAA98189.1	Z73961	Lotus japonicus
BAA76424.1	AB024996	Cicer arietinum
CAA89050.1	Z49191	Beta vulgaris
AAF91343.1	AF250327	Oryza sativa
AAD34356.1	AF126053	Zea mays
AAD34358.1	AF126055	Zea mays
AAB97458.1	AF042330	Brassica rapa
AAA96980.1	L19093	Mitochondrion Pisum sativu
CAA10815.2	AJ222545	Nicotiana tabacum
AAF43429.1	AF233446	Physcomitrella patens
CAA98190.1	Z73962	Lotus japonicus
CAB62075.1	AJ251210	Medicago sativa
AAB35093.1	S79308	Gossypium hirsutum
AAC32124.1	AF051223	Picea mariana
AAD47828.1	AF165925	Gossypium hirsutum
AAB35094.1	S79309	Gossypium hirsutum
AAF43430.1	AF233447	Physcomitrella patens
BAA84494.1	AB029510	Oryza sativa
AAD34355.1	AF126052	Zea mays
AAF43923.1	AF239751	Tradescantia virginiana
BAA94775.1	AP001859	Oryza sativa
BAA84492.1	AB029508	Oryza sativa
BAA84493.1	AB029509	Oryza sativa
AAD34357.1	AF126054	Zea mays
AAD45722.1	AF161018	Erysimum cheiri
AAA34251.1	L08128	Volvox carteri
CAA04701.1	AJ001367	Daucus carota
CAA98172.1	Z73944	Lotus japonicus
CAA90081.1	Z49901	Pisum sativum
CAA90082.1	Z49902	Pisum sativum
CAA90080.1	Z49900	Pisum sativum
CAA98176.1	Z73948	Lotus japonicus
CAA98175.1	Z73947	Lotus japonicus
CAA49600.1	X69980	Lycopersicon esculentum
CAA98174.1	Z73946	Lotus japonicus
CAA89021.1	Z49152	Beta vulgaris
AAB17726.1	U38471	Brassica rapa
AAA34253.1	L08130	Volvox carteri

SEQ ID NO. 492

CAA45119.1	X63558	Brassica oleracea
CAB07804.1	Z93769	Nicotiana tabacum
AAA74625.1	U31773	Oryza sativa

CAB07803.1	Z93768	Nicotiana tabacum
CAA05491.1	AJ002485	Medicago sativa
BAA92244.1	AB038648	Vicia faba
CAA07470.1	AJ007332	Catharanthus roseus
CAA05492.1	AJ002486	Medicago sativa
CAA05494.1	AJ002488	Medicago sativa
AAA33545.1	M60215	Zea mays
CAA82263.1	Z28627	Acetabularia cliftonii
CAA82264.1	Z28632	Acetabularia cliftonii
CAA56766.1	X80788	Medicago sativa subsp. x varia
AAD38856.1	AF156101	Chlamydomonas reinhardtii
CAA05493.1	AJ002487	Medicago sativa
CAB07805.1	Z93770	Nicotiana tabacum
CAA88254.1	Z48221	Phaseolus vulgaris
CAA40686.1	X57438	Brassica napus
AAD41126.1	AF159061	Oryza sativa subsp. indica
CAB46506.1	AJ007496	Nicotiana tabacum
AAD22116.1	AF134552	Oryza sativa subsp. indica
BAA92699.1	AB039918	Vicia faba
CAA49849.1	X70399	Medicago sativa
AAD48068.1	AF173881	Oryza sativa subsp. indica
CAA81395.1	Z26654	Acetabularia cliftonii
CAB07807.1	Z93772	Nicotiana tabacum
CAA40687.1	X57439	Brassica napus
CAA07471.1	AJ007333	Catharanthus roseus
BAA92698.1	AB039917	Vicia faba
BAA92697.1	AB039916	Vicia faba
AAF86353.1	AF283668	Oryza sativa subsp. indica
CAA81126.1	Z26041	Helianthus annuus
AAC72838.1	AF097182	Oryza sativa
CAC11129.1	AJ298829	Fagus sylvatica
AAA91806.1	U49113	Oryza sativa
AAD09953.1	AF107464	Hevea brasiliensis
CAA87385.1	Z47076	Malus x domestica
CAB07806.1	Z93771	Nicotiana tabacum
CAC11128.1	AJ298828	Fagus sylvatica
CAA87387.1	Z47078	Malus x domestica
BAA92333.1	AB038786	Vicia faba
CAA87386.1	Z47077	Malus x domestica
BAA92338.1	AB038791	Vicia faba
BAA92334.1	AB038787	Vicia faba
BAA92337.1	AB038790	Vicia faba
BAA92336.1	AB038789	Vicia faba

SEQ ID NO. 493

AAD51109.1	AF176040	Mesembryanthemum crystalli
CAA51821.1	X73419	Lycopersicon esculentum
AAA64427.1	L29077	Pisum sativum
AAA34125.1	L23762	Lycopersicon esculentum
AAB88617.1	AF034946	Zea mays
AAB02168.1	U15971	Oryza sativa
AAA86089.1	U17250	Brassica oleracea
BAA21006.1	D17786	Oryza sativa
AAD42941.1	AF091621	Catharanthus roseus
BAB40310.1	AB026055	Nicotiana tabacum
BAB40311.1	AB026056	Nicotiana tabacum
AAA34310.1	M62720	Triticum aestivum
AAF73016.1	AF262934	Avicennia marina
CAA58111.1	X82938	Lycopersicon esculentum
CAA06493.1	AJ005348	Cicer arietinum
BAA90392.1	AP001081	Oryza sativa
AAC12662.1	AF032468	Zea mays
CAA05772.1	AJ002959	Zea mays
AAF22280.1	AF165420	Mesembryanthemum crystallinum
AAB63513.1	AF008910	Prunus armeniaca
AAF03236.1	AF180143	Glycine max
AAA34309.1	M28059	Triticum aestivum
CAA10494.1	AJ131733	Pseudotsuga menziesii
AAC32141.1	AF051240	Picea mariana

SEQ ID NO. 495

BAA05965.1	D28777	Citrullus lanatus
BAB20861.1	AB029511	Solanum tuberosum
AAC25635.1	AF044172	Solanum tuberosum
AAD23909.1	AF073697	Oryza sativa
AAD23907.1	AF073695	Oryza sativa
CAA59798.1	X85803	Zea mays
BAB20862.1	AB029512	Solanum tuberosum
AAC25636.1	AF044173	Solanum tuberosum
BAA03542.1	D14722	Spinacia oleracea
CAA47329.1	X66860	Spinacia oleracea
CAC12819.1	AJ299249	Nicotiana tabacum

BAA93051.1	AB040503	Allium tuberosum
BAB20863.1	AB029513	Solanum tuberosum
CAA06819.1	AJ006024	Cicer arietinum
CAC09469.1	AL442113	Oryza sativa
BAA07177.1	D37963	Spinacia oleracea
AAD23908.1	AF073696	Oryza sativa
AAD23910.1	AF073698	Oryza sativa
AAF78529.1	AF195239	Pyrus pyrifolia

SEQ ID NO. 497

AAG34812.1	AF243377	Glycine max
AAG34814.1	AF243379	Glycine max
CAA68993.1	Y07721	Petunia x hybrida
CAB38119.1	AJ010296	Zea mays
CAA09190.1	AJ010451	Alopecurus myosuroides
CAA09192.1	AJ010453	Alopecurus myosuroides
CAA09191.1	AJ010452	Alopecurus myosuroides
CAB38118.1	AJ010295	Zea mays
CAA09193.1	AJ010454	Alopecurus myosuroides
AAG34811.1	AF243376	Glycine max
CAA55039.1	X78203	Hyoscyamus muticus
AAA20585.1	U12679	Zea mays
AAA33930.1	M84968	Silene vulgaris
CAA56047.1	X79515	Zea mays
AAA33931.1	M84969	Silene vulgaris
AAB65163.1	AF002692	Solanum commersonii
BAA01394.1	D10524	Nicotiana tabacum
AAG34823.1	AF244680	Zea mays
AAC64007.1	AF062403	Oryza sativa
CAA96431.1	Z71749	Nicotiana plumbaginifolia
AAA33470.1	M16901	Zea mays
AAA33469.1	M16902	Zea mays
CAA39487.1	X56012	Triticum aestivum
AAG34817.1	AF244674	Zea mays
AAG34822.1	AF244679	Zea mays
AAD56395.1	AF184059	Triticum aestivum
AAG34820.1	AF244677	Zea mays
CAA39480.1	X56004	Triticum aestivum
AAF61392.1	AF133894	Persea americana
AAG34821.1	AF244678	Zea mays
AAG34818.1	AF244675	Zea mays
AAG34816.1	AF244673	Zea mays
CAA05354.1	AJ002380	Oryza sativa
AAG34824.1	AF244681	Zea mays
CAA05355.1	AJ002381	Oryza sativa

SEQ ID NO. 498

AAB05871.2	U63784	Catharanthus roseus
CAB65911.1	AJ249831	Lemna minor
AAF18999.1	AF212155	Allium cepa
AAC26855.1	AF069951	Enteromorpha intestinalis

SEQ ID NO. 499

AAC62017.1	AF077547	Brassica juncea
AAF26434.1	AF220097	Brassica juncea
AAF26435.1	AF220098	Brassica juncea
AAB60880.1	AF002017	Dianthus caryophyllus
AAF42972.1	AF127241	Nicotiana tabacum
BAA25685.1	AB012873	Nicotiana sylvestris
CAA85773.1	Z37540	Pisum sativum
CAB64599.1	AJ251898	Datura stramonium
AAD09204.1	U35367	Glycine max
BAA84799.1	AP000559	Oryza sativa
AAB67887.1	U63832	Dianthus caryophyllus
AAF42971.1	AF127240	Nicotiana tabacum
AAF42970.1	AF127239	Nicotiana tabacum
AAC68511.1	AF045666	Theobroma cacao
CAA65585.1	X96791	Vitis vinifera
AAA61347.1	L16582	Lycopersicon esculentum
AAC68530.1	AF045685	Arabidopsis arenosa
AAC68529.1	AF045684	Capsella bursa-pastoris
AAC68525.1	AF045680	Arabis drummondii
AAC68526.1	AF045681	Barbarea vulgaris
AAC68535.1	AF045690	Nasturtium officinale
AAC68534.1	AF045689	Thellungiella salsuginea
AAC68533.1	AF045688	Thlaspi arvense
AAC68532.1	AF045687	Stanleya pinnata
AAC68531.1	AF045686	Sisymbrium altissimum
AAC68510.1	AF045665	Aethionema grandiflora
AAC68528.1	AF045683	Brassica oleracea
AAC68519.1	AF045674	Arabidopsis arenosa
AAC68527.1	AF045682	Brassica nigra

AAC68523.1	AF045678	Thellungiella salsuginea
AAC68514.1	AF045669	Arabis drummondii
AAC68524.1	AF045679	Nasturtium officinale
AAC68522.1	AF045677	Thlaspi arvense
AAC68513.1	AF045668	Polanisia dodecandra
AAC68518.1	AF045673	Capsella bursa-pastoris
AAC68515.1	AF045670	Barbarea vulgaris
AAC68521.1	AF045676	Stanleya pinnata
AAC68520.1	AF045675	Sisymbrium altissimum
AAC68517.1	AF045672	Brassica oleracea
AAC68516.1	AF045671	Brassica nigra
AAC68512.1	AF045667	Carica papaya
CAA40137.1	X56802	Avena sativa
AAD24801.1	AF132498	Brassica napus
BAA21617.1	AB005880	Nicotiana tabacum
AAB82607.1	AF026809	Ipomoea nil

SEQ ID NO. 501

CAA52201.1	X74072	Lycopersicon esculentum

SEQ ID NO. 513

AAB36543.1	U77935	Phaseolus vulgaris

SEQ ID NO. 514

CAA32121.1	X13934	Lycopersicon esculentum
CAA90564.1	Z50185	Populus nigra
CAA28398.1	X04693	Spinacia oleracea
CAA90565.1	Z50186	Populus nigra
AAB86855.1	AF031545	Fritillaria agrestis
AAC78108.1	AF093636	Oryza sativa
AAB63590.1	AF009412	Oryza sativa
CAA82201.1	Z28347	Hordeum vulgare
CAA68696.1	Y00704	Hordeum vulgare
BAA77274.1	AB026687	Physcomitrella patens
AAA33089.1	L07282	Chlamydomonas reinhardtii
AAA33078.1	J05524	Chlamydomonas reinhardtii
AAD03610.1	AF114235	Scenedesmus obliquus
BAA84778.1	AB017810	Pediastrum boryanum

SEQ ID NO. 521

BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
BAA95704.1	AB042643	Oryza sativa
BAA95705.1	AB042644	Oryza sativa
AAD20980.1	AF079782	Zea mays

SEQ ID NO. 532

BAA95893.1	AP002071	Oryza sativa
AAB09771.1	U67422	Zea mays
AAG25966.1	AF302082	Nicotiana tabacum
BAA78764.1	AB023482	Oryza sativa
AAK21965.1	AY028699	Brassica napus
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
CAB51834.1	00069	Oryza sativa
CAC20842.1	AJ250467	Pinus sylvestris
BAA06538.1	D31737	Nicotiana tabacum
AAG00510.1	AF285172	Phaseolus vulgaris
AAC27894.1	AF023164	Zea mays
AAF91322.1	AF244888	Glycine max
AAG16628.1	AY007545	Brassica napus
AAF59906.1	AF197947	Glycine max
AAF43496.1	AF131222	Lophopyrum elongatum
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
AAK11674.1	AF339747	Lophopyrum elongatum
AAC27895.1	AF023165	Zea mays
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAB61708.1	U93048	Daucus carota
AAC36318.1	AF053127	Malus x domestica
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
AAK11569.1	AF318493	Lycopersicon hirsutum
AAF59905.1	AF197946	Glycine max

SEQ ID NO. 538

AAD39440.1	AF132002	Petunia x hybrida
AAD39439.1	AF132001	Petunia x hybrida
AAG32659.1	AF253971	Picea abies

AAG32658.1	AF253970	Picea abies
AAD22495.3	AF134116	Hyacinthus orientalis
CAC12822.1	AJ299252	Nicotiana tabacum
BAB03248.1	AB037183	Oryza sativa
BAB16083.1	AB036883	Oryza sativa
AAC24587.1	AF071893	Prunus armeniaca
AAF63205.1	AF245119	Mesembryanthemum crystallinum
BAA78738.1	AB023482	Oryza sativa
AAF76898.1	AF274033	Atriplex hortensis
AAG43545.1	AF211527	Nicotiana tabacum
AAG43549.1	AF211531	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum

SEQ ID NO. 539

BAA09645.1	D63331	Nicotiana tabacum
BAA11770.1	D83078	Nicotiana tabacum
BAA77679.1	AB027054	Oryza sativa

SEQ ID NO. 541

CAB56756.1	AJ011589	Pisum sativum
AAD01907.1	AF030516	Pisum sativum
AAG48834.1	AC084218	Oryza sativa

SEQ ID NO. 542

AAD29703.1	AF140490	Oryza sativa

SEQ ID NO. 545

CAA24924.1	X00043	Triticum aestivum
CAB01914.1	Z79638	Sesbania rostrata
AAA86948.1	U10042	Pisum sativum
AAA33476.1	M13377	Zea mays
AAA33475.1	M13370	Zea mays
AAA33474.1	M36659	Zea mays
CAC34411.1	Y18575	Flaveria trinervia
AAG46106.1	AC073166	Oryza sativa
BAA85120.1	AB018245	Solanum melongena
CAB01913.1	Z79637	Sesbania rostrata
CAA48924.1	X69180	Lycopersicon esculentum
CAA48923.1	X69179	Lycopersicon esculentum
AAB94924.1	AF038387	Capsicum annuum
CAA56154.1	X79715	Lolium temulentum
AAA34292.1	M12277	Triticum aestivum
AAA98456.1	U16825	Chlamydomonas reinhardtii
AAA98449.1	U16725	Chlamydomonas reinhardtii
AAA98445.1	U16724	Chlamydomonas reinhardtii
CAA59110.1	X84376	Zea mays
CAA30036.1	X06964	Volvox carteri
CAA30034.1	X06963	Volvox carteri
CAA64985.1	X95689	Allium cepa

SEQ ID NO. 550

AAD46491.1	AF135014	Zea mays
BAA90623.1	AP001129	Oryza sativa
BAA77024.1	AB026124	Lithospermum erythrorhizon

SEQ ID NO. 551

AAC31886.1	AF059484	Gossypium hirsutum
AAC49651.1	U68461	Striga asiatica
CAA39280.1	X55751	Solanum tuberosum
AAC49652.1	U68462	Striga asiatica
AAF03692.1	AF172094	Picea rubens
AAF71264.1	AF246714	Phalaenopsis sp. 'True Lady'
AAG10041.1	AF288226	Setaria italica
AAD41039.1	AF112538	Malva pusilla
CAA45149.1	X63603	Nicotiana tabacum
AAF31643.1	AF143208	Vigna radiata
BAA89214.1	AB032361	Mimosa pudica
CAA39278.1	X55749	Solanum tuberosum
AAD03741.1	AF111812	Brassica napus
AAF71265.1	AF246715	Phalaenopsis sp. 'True Lady'
CAA39281.1	X55752	Solanum tuberosum
AAB38512.1	U81047	Pisum sativum
AAB38511.1	U81046	Pisum sativum
AAB18642.1	U76191	Pisum sativum
AAB18641.1	U76190	Pisum sativum
CAA62028.1	X90378	Pisum sativum
CAA47899.1	X67666	Pisum sativum
CAA33874.1	X15865	Oryza sativa
AAF82805.1	AF282624	Helianthus annuus
CAA48609.1	X68649	Pisum sativum
AAC64127.1	AF091809	Anemia phyllitidis
AAF40438.1	AF234528	Avena nuda

CAA39279.1	X55750	Solanum tuberosum
CAA55923.1	X79378	Sorghum bicolor
CAA34356.1	X16280	Oryza sativa
AAC16054.1	AF061019	Coleochaete scutata
AAB38514.1	U81049	Pisum sativum
AAB18644.1	U76193	Pisum sativum
CAA33873.1	X15864	Oryza sativa
AAC64128.1	AF091810	Anemia phyllitidis
AAD02328.1	AF044573	Brassica oleracea
AAC05272.1	AF049106	Glycine max
AAC16055.1	AF061020	Mesostigma viride
AAF87302.1	AF281323	Magnolia denudata
BAA09450.1	D50839	Chlamydomonas reinhardtii
BAA09449.1	D50838	Chlamydomonas reinhardtii
AAA34243.1	M33963	Volvox carteri
AAC16053.1	AF061018	Scherffelia dubia
AAA33433.1	J01238	Zea mays
AAC64126.1	AF091808	Anemia phyllitidis
CAA33871.1	X15862	Oryza sativa
AAA33940.1	J01297	Glycine max
BAA25911.1	AB013098	Nannochloris bacillaris
AAD48335.1	AF090969	Selaginella apoda
AAD48334.1	AF090968	Selaginella apoda
CAA39276.1	X55746	Solanum tuberosum

SEQ ID NO. 553

AAF67262.1	AF165186	Nicotiana tabacum
CAA04261.2	AJ000728	Lycopersicon esculentum
AAC83393.1	U83625	Zea mays
BAB32405.1	AB055514	Nicotiana tabacum
CAC24705.1	AJ302651	Nicotiana tabacum
AAG40578.1	AF216314	Oryza sativa
BAA06731.1	D31964	Nicotiana tabacum
AAG53979.1	AF325168	Nicotiana tabacum
CAA08758.1	AJ009609	Brassica napus
CAA08757.1	AJ009608	Brassica napus
BAA05648.1	D26601	Nicotiana tabacum
AAF34436.1	AF172282	Oryza sativa
CAA08995.1	AJ010091	Brassica napus
CAA08997.1	AJ010093	Brassica napus
CAA71142.1	Y10036	Cucumis sativus
BAA96628.1	AP002482	Oryza sativa
BAA05649.1	D26602	Nicotiana tabacum
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
CAA65244.1	X95997	Solanum tuberosum
AAD23582.1	AF128443	Glycine max
AAF19402.1	AF203480	Lycopersicon esculentum
AAF19403.1	AF203481	Lycopersicon esculentum
CAA46556.1	X65606	Hordeum vulgare
CAA07813.1	AJ007990	Hordeum vulgare
AAF19401.1	AF203479	Glycine max
BAA83688.1	AB011967	Oryza sativa
AAB05457.1	U55768	Oryza sativa
AAD17800.1	AF090835	Mesembryanthemum crystalli
AAD28791.1	AF145593	Nicotiana tabacum
AAD52098.1	U70923	Nicotiana tabacum
CAA82993.1	Z30332	Spinacia oleracea
CAA46554.1	X65604	Hordeum vulgare
BAA34675.1	AB011670	Triticum aestivum

SEQ ID NO. 554

AAF69017.1	AF261654	Dianthus caryophyllus
CAC09582.1	AJ298994	Fagus sylvatica
AAG00419.1	AF247568	Nicotiana tabacum

SEQ ID NO. 555

AAF20002.1	AF213936	Prunus dulcis
AAC32034.1	AF023472	Hordeum vulgare
AAD01600.1	AF016713	Lycopersicon esculentum
AAF07875.1	AF140606	Oryza sativa
AAD16016.1	AF080545	Nepenthes alata
CAC07206.1	AJ278966	Brassica napus
AAB69642.1	AF000392	Lotus japonicus
CAA93316.1	Z69370	Cucumis sativus
BAB19760.1	AB052788	Glycine max
BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 556

BAA20848.1	AB004932	Vigna radiata

CAA48297.1	X68215	Pisum sativum
CAA48298.1	X68216	Pisum sativum
BAA20849.1	AB004933	Vigna radiata
AAA33945.1	J03919	Glycine max
AAA33944.1	J03920	Glycine max
BAA20847.1	AB004931	Vigna radiata
CAA48300.1	X68218	Pisum sativum
CAA48299.1	X68217	Pisum sativum
AAD50278.1	AF169830	Glycine max

SEQ ID NO. 558

CAA11857.1	AJ224160	Brassica napus
CAA60621.1	X87143	Helianthus annuus
AAD01240.1	AF005096	Ricinus communis
AAG43277.1	AF133728	Borago officinalis
AAD01410.1	AF007561	Borago officinalis
AAC49700.1	U79010	Borago officinalis
AAD10250.1	AF031194	Triticum aestivum
CAB94992.1	AJ250734	Ceratodon purpureus
CAB94993.1	AJ250735	Ceratodon purpureus
CAA11033.1	AJ222981	Physcomitrella patens
CAA11032.1	AJ222980	Physcomitrella patens

SEQ ID NO. 559

AAC39333.1	AF030052	Oryza sativa subsp. japonica
AAD39534.2	AF150630	Gossypium hirsutum

SEQ ID NO. 560

AAD01600.1	AF016713	Lycopersicon esculentum
AAC32034.1	AF023472	Hordeum vulgare
CAC07206.1	AJ278966	Brassica napus
AAF20002.1	AF213936	Prunus dulcis
AAF07875.1	AF140606	Oryza sativa
CAA93316.1	Z69370	Cucumis sativus
AAB69642.1	AF000392	Lotus japonicus
BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
BAB19760.1	AB052788	Glycine max
AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 561

CAA65456.2	X96681	Oryza sativa
BAA05622.1	D26573	Daucus carota
BAA05625.1	D26576	Daucus carota
BAA21017.1	D26578	Daucus carota
BAA05624.1	D26575	Daucus carota
BAA05623.1	D26574	Daucus carota

SEQ ID NO. 563

AAA33134.1	M92660	Daucus carota
AAA50160.1	L23875	Lupinus angustifolius
AAA33408.1	M92094	Lupinus angustifolius
AAB46610.1	L25334	Medicago sativa
CAA43779.1	X61577	Medicago sativa
AAC50015.1	AF034210	Glycine max
AAC50014.1	AF034210	Glycine max
BAA03504.1	D14673	Oryza sativa
CAA45023.1	X63429	Panicum miliaceum
BAA04992.1	D25322	Panicum miliaceum
CAA63894.1	X94184	Lotus japonicus
AAA33942.1	L09702	Glycine max
CAA42430.1	X59761	Lupinus angustifolius
AAC12674.1	AF029898	Lotus corniculatus
AAB26677.2	S60967	Chloroplast Glycine max
BAA08106.1	D45076	Panicum miliaceum
AAB46611.1	L25335	Medicago sativa
AAB68396.1	U89494	Canavalia lineata
CAA45022.1	X63428	Panicum miliaceum
CAA04697.1	AJ001360	Plastid Canavalia lineata
CAA45024.1	X63430	Panicum miliaceum
BAA04993.1	D25323	Panicum miliaceum
AAA98603.1	L40579	Glycine max
BAA23815.1	D67043	Oryza sativa
BAA23814.1	D67042	Oryza sativa

SEQ ID NO. 564

AAF37732.1	AF052221	Lolium perenne
BAA08366.2	D49367	Lithospermum erythrorhizon
BAA08365.1	D49366	Lithospermum erythrorhizon
CAC36095.1	X69955	Glycine max
AAF91308.1	AF239685	Rubus idaeus

AAF91309.1	AF239686	Rubus idaeus
AAB18638.1	U50846	Nicotiana tabacum
BAA07828.1	D43773	Nicotiana tabacum
AAC39366.1	AF008184	Populus x generosa
AAC24504.1	AF041050	Populus tremuloides
AAG43823.1	AF212317	Capsicum annuum
AAC24503.1	AF041049	Populus tremuloides
AAB18637.1	U50845	Nicotiana tabacum
AAA33842.1	M62755	Solanum tuberosum
AAD40664.1	AF150686	Solanum tuberosum
AAF37733.1	AF052222	Lolium perenne
AAF37734.1	AF052223	Lolium perenne
AAF91310.1	AF239687	Rubus idaeus
AAC39365.1	AF008183	Populus x generosa
CAA31696.1	X13324	Petroselinum crispum
CAA31697.1	X13325	Petroselinum crispum
CAA36850.1	X52623	Oryza sativa
AAB42382.1	U39404	Pinus taeda
AAB42383.1	U39405	Pinus taeda
AAA92669.1	U12013	Pinus taeda
AAA92668.1	U12012	Pinus taeda
AAD40665.1	AF150687	Solanum tuberosum
AAF73997.2	AF144504	Picea smithiana
AAF73998.2	AF144505	Cathaya argyrophylla
AAF73995.2	AF144502	Pinus armandii
AAF73994.2	AF144501	Pinus armandii
AAF73996.2	AF144503	Pinus armandii
CAA49575.1	X69954	Glycine max
AAF74019.2	AF144526	Tsuga canadensis
AAF74004.2	AF144511	Pseudotsuga sinensis
AAF74016.2	AF144523	Nothotsuga longibracteata
AAF74022.2	AF144529	Cedrus atlantica
AAF74018.2	AF144525	Tsuga canadensis
AAF74002.2	AF144509	Pseudotsuga sinensis
AAF74001.2	AF144508	Pseudotsuga menziesii
AAF73993.2	AF144500	Pinus banksiana
AAF73992.1	AF144499	Pinus banksiana
CAB97359.1	AJ278455	Juglans nigra
AAF74003.2	AF144510	Pseudotsuga sinensis
AAF73999.2	AF144506	Pseudotsuga menziesii
AAF74007.2	AF144514	Abies firma
AAA64913.1	U23787	Sorghum bicolor
AAF74000.2	AF144507	Pseudotsuga menziesii
AAF74021.2	AF144528	Pseudolarix amabilis
SEQ ID NO. 565		
AAC32149.1	AF051249	Picea mariana
AAF43837.1	AF166114	Chloroplast Mesostigma vir
AAC72192.1	AF069908	Zea mays
AAC72193.1	AF069909	Zea mays
AAC72194.1	AF069910	Zea mays
AAB01223.1	U56697	Pisum sativum
AAD22077.1	AF124755	Pinus banksiana
AAD38941.1	AF143812	Lycopersicon esculentum
AAD56390.2	AF182286	Artemisia annua
SEQ ID NO. 566		
BAA02018.1	D11465	Spinacia oleracea
CAA86071.1	Z37990	Pisum sativum
AAF91407.1	AF271362	Lolium perenne
AAC25999.1	AF072289	Mesembryanthemum crystallinum
AAF65509.1	AF108881	Capsicum annuum
AAB67996.1	U72142	Helianthus annuus
BAA01510.1	D10659	Spinacia oleracea
CAA50511.1	X71388	Pisum sativum
BAA03798.1	D16292	Oryza sativa
AAA19005.1	U10283	Flaveria bidentis
AAB40609.1	U55019	Saccharum officinarum
AAA19004.1	U10282	Flaveria bidentis
AAA93030.1	U50150	Glycine max
CAA53073.1	X75324	Lycopersicon esculentum
AAF08537.1	AF191098	Pisum sativum
BAA96460.1	AB029400	Brassica rapa
SEQ ID NO. 567		
AAF60293.1	AF233745	Lycopersicon esculentum
SEQ ID NO. 568		
AAG28436.1	AF195029	Glycine max
AAG28435.1	AF195028	Glycine max
AAD46188.1	AF156691	Nicotiana plumbaginifolia
CAA68234.1	X99972	Brassica oleracea

AAA34094.1	M80489	Nicotiana plumbaginifolia
AAF98344.1	AF275745	Lycopersicon esculentum
AAD55399.1	AF179442	Lycopersicon esculentum
AAA34052.1	M27888	Nicotiana plumbaginifolia
CAA54046.1	X76536	Solanum tuberosum
AAA34098.1	M80490	Nicotiana plumbaginifolia
AAB41898.1	U84891	Mesembryanthemum crystallinum
CAA52107.1	X73901	Dunaliella bioculata
BAA06629.1	D31843	Oryza sativa
AAB60276.1	U09989	Zea mays
CAC29435.1	AJ310523	Vicia faba
AAA34173.1	M60166	Lycopersicon esculentum
CAB69824.1	AJ271439	Prunus persica
AAD46187.1	AF156683	Nicotiana plumbaginifolia
AAB49042.1	U54690	Dunaliella acidophila
CAA59799.1	X85804	Phaseolus vulgaris
AAB84202.2	AF029256	Kosteletzkya virginica
CAA47275.1	X66737	Nicotiana plumbaginifolia
AAB35314.2	S79323	Vicia faba
BAA37150.1	AB022442	Vicia faba
CAC29436.1	AJ310524	Vicia faba
AAK31799.1	AY029190	Lilium longiflorum
CAA54045.1	X76535	Solanum tuberosum
BAA01058.1	D10207	Oryza sativa
AAB17186.1	U72148	Lycopersicon esculentum
CAB85495.1	AJ132892	Medicago truncatula
CAB85494.1	AJ132891	Medicago truncatula
CAA59800.1	X85805	Zea mays
BAA08134.1	D45189	Zostera marina
CAB69823.1	AJ271438	Prunus persica
AAD46186.1	AF156679	Nicotiana plumbaginifolia
AAD31896.1	AF145478	Mesembryanthemum crystallinum
BAA90510.2	AP001111	Oryza sativa
AAD11617.1	AF050495	Lycopersicon esculentum
AAD11618.1	AF050496	Lycopersicon esculentum
AAA34138.1	M96324	Lycopersicon esculentum
CAA63790.1	X93592	Dunaliella bioculata
AAA81348.1	U38965	Vicia faba
AAK32118.1	AF308816	Hordeum vulgare
AAK32119.1	AF308817	Hordeum vulgare
AAF97591.1	AF263917	Lycopersicon esculentum
AAA34096.1	M80492	Nicotiana plumbaginifolia
AAG01028.1	AF289025	Cucumis sativus

SEQ ID NO. 569

AAC49186.1	U37088	Simmondsia chinensis
AAG28600.1	AF247134	Limnanthes douglasii
AAC34858.1	AF082033	Hemèrocallis hybrid cultiv
AAB72178.1	AF009563	Brassica napus
AAA96054.1	U50771	Brassica napus
CAA71898.1	Y11007	Brassica juncea
AAK11266.1	AF333040	Dunaliella salina
CAC17746.1	AJ291728	Zea mays
AAC25109.1	AF054497	Brassica napus
AAC25110.1	AF054498	Brassica napus
AAC25111.1	AF054499	Brassica rapa
AAC25112.1	AF054500	Brassica oleracea

SEQ ID NO. 571

AAD41126.1	AF159061	Oryza sativa subsp. indica
BAA92697.1	AB039916	Vicia faba
BAA92698.1	AB039917	Vicia faba
CAC11129.1	AJ298829	Fagus sylvatica
AAC72838.1	AF097182	Oryza sativa
AAD09953.1	AF107464	Hevea brasiliensis
CAA81126.1	Z26041	Helianthus annuus
AAA91806.1	U49113	Oryza sativa
CAB07806.1	Z93771	Nicotiana tabacum
AAD48068.1	AF173881	Oryza sativa subsp. indica
CAB46506.1	AJ007496	Nicotiana tabacum
AAD22116.1	AF134552	Oryza sativa subsp. indica
BAA92699.1	AB039918	Vicia faba
CAA49849.1	X70399	Medicago sativa
CAA40687.1	X57439	Brassica napus
CAB07807.1	Z93772	Nicotiana tabacum
CAA07471.1	AJ007333	Catharanthus roseus
AAF86353.1	AF283668	Oryza sativa subsp. indica
CAA81395.1	Z26654	Acetabularia cliftonii
CAA87385.1	Z47076	Malus x domestica
CAA05491.1	AJ002485	Medicago sativa
CAA82263.1	Z28627	Acetabularia cliftonii
CAA07470.1	AJ007332	Catharanthus roseus

CAA88254.1	Z48221	Phaseolus vulgaris
AAD38856.1	AF156101	Chlamydomonas reinhardtii
BAA92244.1	AB038648	Vicia faba
AAA33545.1	M60215	Zea mays
CAA56766.1	X80788	Medicago sativa subsp. x varia
CAB07803.1	Z93768	Nicotiana tabacum
CAA05493.1	AJ002487	Medicago sativa
CAB07804.1	Z93769	Nicotiana tabacum
CAA82264.1	Z28632	Acetabularia cliftonii
CAB07805.1	Z93770	Nicotiana tabacum
CAA45119.1	X63558	Brassica oleracea
CAA05492.1	AJ002486	Medicago sativa
AAA74625.1	U31773	Oryza sativa
CAA05494.1	AJ002488	Medicago sativa
CAA40686.1	X57438	Brassica napus
CAA87386.1	Z47077	Malus x domestica
CAA87387.1	Z47078	Malus x domestica
BAA92334.1	AB038787	Vicia faba
CAC11128.1	AJ298828	Fagus sylvatica
BAA92335.1	AB038788	Vicia faba
CAC09574.1	AJ298986	Fagus sylvatica
BAA92337.1	AB038790	Vicia faba
BAA92336.1	AB038789	Vicia faba
BAA92338.1	AB038791	Vicia faba
AAG29592.1	AF196285	Medicago sativa subsp. x varia

SEQ ID NO. 572

AAF36996.1	AF236092	Brassica oleracea var. botrytis
AAF29978.1	AF188065	Oryza sativa
AAB67743.1	U48963	Clarkia breweri
BAB40974.1	AB049816	Nicotiana tabacum
AAF29974.1	AF188061	Adonis palaestina
AAF29973.1	AF188060	Adonis palaestina
CAA57947.1	X82627	Clarkia breweri
AAF29976.1	AF188063	Lactuca sativa
BAB40973.1	AB049815	Nicotiana tabacum
AAF29977.1	AF188064	Tagetes erecta
AAG10423.1	AF251011	Tagetes erecta
AAB94132.1	AF031079	Camptotheca acuminata
AAB94133.1	AF031080	Camptotheca acuminata
AAB67742.1	U48962	Clarkia xantiana
AAF29975.1	AF188062	Lactuca sativa
AAD41765.1	AF111842	Hevea brasiliensis
AAD41766.1	AF111843	Hevea brasiliensis
AAC32209.1	AF082326	Haematococcus pluvialis
AAC32208.1	AF082325	Haematococcus pluvialis
BAA33978.1	AB019034	Haematococcus pluvialis
CAA70850.1	Y09634	Nicotiana tabacum
AAF91499.1	AF227951	Daucus carota
AAC32601.1	AF082869	Chlamydomonas reinhardtii

SEQ ID NO. 573

BAA05079.1	D26086	Petunia x hybrida
AAD26942.1	AF119050	Datisca glomerata
AAC06243.1	AF053077	Nicotiana tabacum
BAA05077.1	D26084	Petunia x hybrida
BAA05076.1	D26083	Petunia x hybrida
BAA05078.1	D26085	Petunia x hybrida
AAK01713.1	AF332876	Oryza sativa
AAB53260.1	U76554	Brassica rapa
AAB53261.1	U76555	Brassica rapa
BAA96070.1	AB035132	Petunia x hybrida
BAA21919.1	AB006597	Petunia x hybrida
BAA96071.1	AB035133	Petunia x hybrida
BAA21927.1	AB006605	Petunia x hybrida
BAA19112.1	AB000453	Petunia x hybrida
BAA21928.1	AB006606	Petunia x hybrida
BAA21922.1	AB006600	Petunia x hybrida
BAA19114.1	AB000455	Petunia x hybrida
BAA21920.1	AB006598	Petunia x hybrida
BAA21921.1	AB006599	Petunia x hybrida
BAA19110.1	AB000451	Petunia x hybrida
BAA21926.1	AB006604	Petunia x hybrida
BAA21925.1	AB006603	Petunia x hybrida
BAA19111.1	AB000452	Petunia x hybrida
BAA21923.1	AB006601	Petunia x hybrida
BAA21924.1	AB006602	Petunia x hybrida
BAA19113.1	AB000454	Petunia x hybrida
BAA19926.1	AB000456	Petunia x hybrida

SEQ ID NO. 574

AAC32146.1	AF051246	Picea mariana

BAA96836.1	AB026565	Oryza sativa
BAA28276.1	AB014058	Oryza sativa
AAC35983.1	AF088915	Petunia x hybrida
BAA21650.1	D78172	Spinacia oleracea
BAA96838.1	AB026567	Oryza sativa
CAA09603.1	AJ011383	Cicer arietinum
BAA96834.1	AB026563	Oryza sativa

SEQ ID NO. 575

AAF08537.1	AF191098	Pisum sativum
BAA96460.1	AB029400	Brassica rapa
AAC25999.1	AF072289	Mesembryanthemum crystallinum
AAA19005.1	U10283	Flaveria bidentis
AAB67996.1	U72142	Helianthus annuus
BAA01510.1	D10659	Spinacia oleracea
AAF91407.1	AF271362	Lolium perenne
AAF65509.1	AF108881	Capsicum annuum
AAB40609.1	U55019	Saccharum officinarum
AAA93030.1	U50150	Glycine max
CAA50511.1	X71388	Pisum sativum
BAA02018.1	D11465	Spinacia oleracea
CAA86071.1	Z37990	Pisum sativum
AAA19004.1	U10282	Flaveria bidentis
BAA03798.1	D16292	Oryza sativa
CAA53073.1	X75324	Lycopersicon esculentum

SEQ ID NO. 576

AAA96980.1	L19093	Mitochondrion Pisum sativum
CAA89050.1	Z49191	Beta vulgaris
CAA10815.2	AJ222545	Nicotiana tabacum
AAK27450.1	AF329814	Oryza sativa subsp. japonica
AAF28764.1	AF218381	Oryza sativa subsp. japonica
CAA98189.1	Z73961	Lotus japonicus
AAD34358.1	AF126055	Zea mays
BAA76424.1	AB024996	Cicer arietinum
AAF91343.1	AF250327	Oryza sativa
AAD34356.1	AF126053	Zea mays
AAB97458.1	AF042330	Brassica rapa
AAD44769.1	AF146341	Physcomitrella patens
AAD44768.1	AF146340	Physcomitrella patens
AAD26198.1	AF115476	Physcomitrella patens
AAC32124.1	AF051223	Picea mariana
AAF43429.1	AF233446	Physcomitrella patens
CAA98190.1	Z73962	Lotus japonicus
AAB35093.1	S79308	Gossypium hirsutum
BAA84494.1	AB029510	Oryza sativa
AAB35094.1	S79309	Gossypium hirsutum
AAD34355.1	AF126052	Zea mays
AAF43430.1	AF233447	Physcomitrella patens
AAF43923.1	AF239751	Tradescantia virginiana
BAA94775.1	AP001859	Oryza sativa
BAA84492.1	AB029508	Oryza sativa
BAA84493.1	AB029509	Oryza sativa
AAD34357.1	AF126054	Zea mays
AAD45722.1	AF161018	Erysimum cheiri
AAA34251.1	L08128	Volvox carteri
CAA89021.1	Z49152	Beta vulgaris
CAA90081.1	Z49901	Pisum sativum
CAA90080.1	Z49900	Pisum sativum
CAA98172.1	Z73944	Lotus japonicus
CAA90082.1	Z49902	Pisum sativum
CAA98176.1	Z73948	Lotus japonicus
CAA04701.1	AJ001367	Daucus carota
AAF65510.1	AF108883	Capsicum annuum
AAA80680.1	U38466	Lycopersicon esculentum
CAA98164.1	Z73936	Lotus japonicus
CAA98175.1	Z73947	Lotus japonicus
AAD10389.1	U35026	Petunia x hybrida

SEQ ID NO. 577

BAA08366.2	D49367	Lithospermum erythrorhizon
CAC36095.1	X69955	Glycine max
AAF91308.1	AF239685	Rubus idaeus
AAC24504.1	AF041050	Populus tremuloides
BAA08365.1	D49366	Lithospermum erythrorhizon
AAB18638.1	U50846	Nicotiana tabacum
AAC39366.1	AF008184	Populus x generosa
AAF91309.1	AF239686	Rubus idaeus
AAF37732.1	AF052221	Lolium perenne
CAA36850.1	X52623	Oryza sativa
AAB18637.1	U50845	Nicotiana tabacum
AAA33842.1	M62755	Solanum tuberosum

AAG43823.1	AF212317	Capsicum annuum
AAD40664.1	AF150686	Solanum tuberosum
AAF91310.1	AF239687	Rubus idaeus
BAA07828.1	D43773	Nicotiana tabacum
AAC39365.1	AF008183	Populus x generosa
AAC24503.1	AF041049	Populus tremuloides
CAA31696.1	X13324	Petroselinum crispum
CAA31697.1	X13325	Petroselinum crispum
AAF37733.1	AF052222	Lolium perenne
AAF37734.1	AF052223	Lolium perenne
AAB42383.1	U39405	Pinus taeda
AAB42382.1	U39404	Pinus taeda
AAA92669.1	U12013	Pinus taeda
AAA92668.1	U12012	Pinus taeda
AAD40665.1	AF150687	Solanum tuberosum
AAF73997.2	AF144504	Picea smithiana
AAF73995.2	AF144502	Pinus armandii
AAF73998.2	AF144505	Cathaya argyrophylla
AAF73994.2	AF144501	Pinus armandii
AAF73996.2	AF144503	Pinus armandii
CAA49575.1	X69954	Glycine max
AAF74016.2	AF144523	Nothotsuga longibracteata
AAF74004.2	AF144511	Pseudotsuga sinensis
AAF74022.2	AF144529	Cedrus atlantica
AAF74019.2	AF144526	Tsuga canadensis
AAF74018.2	AF144525	Tsuga canadensis
AAF74001.2	AF144508	Pseudotsuga menziesii
AAF74002.2	AF144509	Pseudotsuga sinensis
CAB97359.1	AJ278455	Juglans nigra
AAF74003.2	AF144510	Pseudotsuga sinensis
AAF73993.2	AF144500	Pinus banksiana
AAF73999.2	AF144506	Pseudotsuga menziesii
AAF73992.1	AF144499	Pinus banksiana
AAF74007.2	AF144514	Abies firma
AAA64913.1	U23787	Sorghum bicolor
AAF74000.2	AF144507	Pseudotsuga menziesii

SEQ ID NO. 578

BAA02305.2	D12921	Triticum aestivum
AAF06696.1	AF031487	Nicotiana tabacum
CAA40102.1	X56782	Triticum aestivum
AAB68661.1	U90214	Nicotiana tabacum
AAD34570.1	AF143442	Lycopersicon esculentum
BAA87835.1	AP000815	Oryza sativa
AAB31249.1	S73826	Solanum tuberosum
AAB31250.2	S73827	Solanum tuberosum
CAA57894.1	X82544	Solanum tuberosum
AAB31251.2	S73828	Solanum tuberosum
BAA06486.1	D30809	Triticum aestivum
AAC24123.1	AF067187	Cichorium intybus
BAA06487.1	D30810	Triticum aestivum
BAA02303.2	D12919	Triticum aestivum

SEQ ID NO. 580

CAA64152.1	X94375	Pimpinella brachycarpa
CAA64221.1	X94449	Pimpinella brachycarpa
CAA64491.1	X95193	Pimpinella brachycarpa
CAA63222.1	X92489	Glycine max
BAA93463.1	AB028075	Physcomitrella patens
AAA74017.1	U30475	Glycine max
BAB18169.1	AB042767	Zinnia elegans
BAA93462.1	AB028074	Physcomitrella patens
BAA93464.1	AB028076	Physcomitrella patens
BAA93465.1	AB028077	Physcomitrella patens
BAA93466.1	AB028078	Physcomitrella patens
BAB18171.1	AB042769	Zinnia elegans
CAA64417.1	X94947	Lycopersicon esculentum
BAA93461.1	AB028073	Physcomitrella patens
BAA93468.1	AB028080	Physcomitrella patens
BAA93467.1	AB028079	Physcomitrella patens

SEQ ID NO. 581

CAA91162.1	Z54351	Spinacia oleracea
AAD33936.1	AF144684	Chloroplast Pisum sativum
AAC05019.1	AF039304	Chloroplast Zea mays
AAB96657.1	AF039305	Chloroplast Zea mays

SEQ ID NO. 582

AAF16526.1	AF191301	Medicago sativa

SEQ ID NO. 583

BAA92986.1	AP001550	Oryza sativa

AAF19807.1	AF180356	Brassica oleracea
AAF19403.1	AF203481	Lycopersicon esculentum
AAF19402.1	AF203480	Lycopersicon esculentum
BAA05648.1	D26601	Nicotiana tabacum
CAA73068.1	Y12465	Sorghum bicolor
BAA34675.1	AB011670	Triticum aestivum
BAA13440.1	D87707	Ipomoea batatas
AAF23900.1	AF194413	Oryza sativa
AAF23901.2	AF194414	Oryza sativa
AAD17800.1	AF090835	Mesembryanthemum crystallinum
CAA73067.1	Y12464	Sorghum bicolor
BAA12715.1	D85039	Zea mays
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF21062.1	AF216527	Dunaliella tertiolecta
AAB80693.1	U69174	Glycine max
CAA39936.1	X56599	Daucus carota
AAB47181.1	S82324	Zea mays
BAA12691.1	D84507	Zea mays
AAG01179.1	AF289237	Zea mays
CAA58750.1	X83869	Daucus carota
BAA12692.1	D84508	Zea mays
CAA57157.1	X81394	Oryza sativa
AAD23582.1	AF128443	Glycine max
BAA19553.1	D64036	Oryza sativa
CAA65244.1	X95997	Solanum tuberosum
CAA07481.1	AJ007366	Zea mays
AAG46110.1	AC073166	Oryza sativa
CAA65500.1	X96723	Medicago sativa
AAA69507.1	U28376	Zea mays
AAD28192.2	AF115406	Solanum tuberosum
BAA22410.1	D38452	Zea mays
CAA71142.1	Y10036	Cucumis sativus
AAG36872.1	AF239819	Zea mays
AAC04324.1	U73937	Nicotiana tabacum
BAA02698.1	D13436	Oryza sativa
BAA83689.1	AB011968	Oryza sativa
CAA72362.1	Y11649	Zea mays
CAA43659.1	X61387	Zea mays
BAA05649.1	D26602	Nicotiana tabacum

SEQ ID NO. 584

AAB80919.1	AF020787	Oryza sativa

SEQ ID NO. 590

AAC09422.1	M68929	Mitochondrion Marchantia polymorpha

SEQ ID NO. 603

AAD02328.1	AF044573	Brassica oleracea
AAC49651.1	U68461	Striga asiatica
AAC49652.1	U68462	Striga asiatica
AAF40438.1	AF234528	Avena nuda
BAA89214.1	AB032361	Mimosa pudica
AAC31886.1	AF059484	Gossypium hirsutum
CAA39280.1	X55751	Solanum tuberosum
CAA45149.1	X63603	Nicotiana tabacum
AAF71265.1	AF246715	Phalaenopsis sp. 'True Lady'
CAA33874.1	X15865	Oryza sativa
CAA39278.1	X55749	Solanum tuberosum
AAD41039.1	AF112538	Malva pusilla
AAG10041.1	AF288226	Setaria italica
AAF03692.1	AF172094	Picea rubens
AAD03741.1	AF111812	Brassica napus
CAA47899.1	X67666	Pisum sativum
AAF82805.1	AF282624	Helianthus annuus
CAA48609.1	X68649	Pisum sativum
AAF31643.1	AF143208	Vigna radiata
CAA39281.1	X55752	Solanum tuberosum
CAA34356.1	X16280	Oryza sativa
CAA55923.1	X79378	Sorghum bicolor
AAF71264.1	AF246714	Phalaenopsis sp. 'True Lady'
AAB38512.1	U81047	Pisum sativum
AAB38511.1	U81046	Pisum sativum
AAB18642.1	U76191	Pisum sativum
AAB18641.1	U76190	Pisum sativum
CAA62028.1	X90378	Pisum sativum
CAA39279.1	X55750	Solanum tuberosum
AAC64127.1	AF091809	Anemia phyllitidis
AAC16054.1	AF061019	Coleochaete scutata
AAB38514.1	U81049	Pisum sativum
AAB18644.1	U76193	Pisum sativum
AAC16055.1	AF061020	Mesostigma viride

AAC64128.1	AF091810	Anemia phyllitidis
AAA33433.1	J01238	Zea mays
AAC05272.1	AF049106	Glycine max
CAA33873.1	X15864	Oryza sativa
AAF87302.1	AF281323	Magnolia denudata
BAA09450.1	D50839	Chlamydomonas reinhardtii
BAA09449.1	D50838	Chlamydomonas reinhardtii
AAC16053.1	AF061018	Scherffelia dubia
AAA33940.1	J01297	Glycine max
CAA23728.1	V00450	Glycine max
AAA34243.1	M33963	Volvox carteri
BAA25911.1	AB013098	Nannochloris bacillaris
AAD48335.1	AF090969	Selaginella apoda
AAD48336.1	AF090970	Cosmarium botrytis
AAC64129.1	AF091811	Psilotum nudum
CAA39276.1	X55746	Solanum tuberosum

SEQ ID NO. 606

AAB88009.1	AF035414	Brassica napus
AAB88134.1	AF034618	Spinacia oleracea
CAA47948.1	X67711	Oryza sativa
CAB72129.1	AJ249330	Cucumis sativus
CAB72130.1	AJ249331	Cucumis sativus
CAA37971.1	X54030	Lycopersicon esculentum
AAF34134.1	AF161180	Malus x domestica
AAB88133.1	AF034617	Spinacia oleracea
AAB88132.1	AF034616	Spinacia oleracea
AAB97316.1	AF033852	Spinacia oleracea
AAB42159.1	L41253	Lycopersicon esculentum
CAA42685.1	X60088	Daucus carota
CAA30018.1	X06932	Petunia x hybrida
CAA43711.1	X61491	Spinacia oleracea
CAA37970.1	X54029	Lycopersicon esculentum
AAB99745.1	AF005993	Triticum aestivum
CAA67867.1	X99515	Pisum sativum
CAA44620.1	X62799	Glycine max
AAB00730.1	M76725	Chlamydomonas reinhardtii
AAA34139.1	L08830	Lycopersicon esculentum
CAB72128.1	AJ249329	Cucumis sativus
AAA21808.1	L23551	Spinacia oleracea
AAB86942.1	AF031241	Glycine max
CAA44820.1	X63106	Nicotiana tabacum
BAA34919.1	AB012716	Salix gilgiana
AAB65162.1	AF002667	Solanum commersonii
CAA47345.1	X66874	Phaseolus vulgaris
AAB91473.1	AF035458	Spinacia oleracea
AAB96660.1	AF039084	Spinacia oleracea
AAB91472.1	AF035457	Spinacia oleracea

SEQ ID NO. 607

AAB05641.1	U41385	Ricinus communis
AAD28260.1	AF131223	Datisca glomerata
CAA77575.1	Z11499	Medicago sativa
CAC21228.1	AJ277377	Triticum turgidum subsp. d
CAC21230.1	AJ277379	Triticum turgidum subsp. d
AAA19660.1	U11496	Triticum aestivum
BAB18780.1	AB047268	Cucumis sativus
CAC21229.1	AJ277378	Triticum turgidum subsp. durum
CAC21231.1	AJ277380	Triticum turgidum subsp. durum
BAA92322.1	AB039278	Oryza sativa
AAD55566.1	AF110784	Volvox carteri f. nagariensis
AAD02069.1	AF036939	Chlamydomonas reinhardtii
AAC49896.1	AF027727	Chlamydomonas reinhardtii
CAA72092.1	Y11209	Nicotiana tabacum

SEQ ID NO. 608

AAB72047.1	AF006489	Gossypium hirsutum
CAA05979.1	AJ003197	Lupinus albus
CAA44054.1	X62123	Solanum tuberosum
AAB49700.1	U89839	Lycopersicon esculentum
CAA40782.1	X57557	Solanum tuberosum
BAA02161.1	D12637	Oryza sativa
CAA41812.1	X59086	Zea mays
CAA40781.1	X57556	Zea mays
CAA33743.1	X15712	Zea mays
CAA33742.1	X15711	Zea mays
CAA65119.1	X95863	Triticum turgidum
CAA26600.1	X02842	Zea mays
CAA65120.1	X95864	Triticum turgidum
CAA46311.1	X65194	Chlamydomonas reinhardtii
AAA33027.1	M76669	Chlorella kessleri
AAB72048.1	AF006490	Gossypium hirsutum

BAA08104.1	D45074	Panicum miliaceum
BAA08103.1	D45073	Panicum miliaceum
BAA08105.1	D45075	Panicum miliaceum

SEQ ID NO. 609

CAA29056.1	X05512	Spinacia oleracea
AAA20823.1	M87435	Zea mays
AAB81994.1	AF026400	Onobrychis viciifolia
BAA96362.1	AB043962	Bruguiera gymnorhiza
AAB40980.1	U22330	Volvox carteri

SEQ ID NO. 610

CAA46507.1	X65540	Plastid Triticum aestivum
CAA52439.1	X74418	Chlamydomonas reinhardtii
BAA94305.1	AB035313	Chlamydomonas sp. W80
CAA74960.1	Y14608	Chlamydomonas reinhardtii
CAA61409.1	X89006	Saccharum hybrid cultivar H65-7052
BAA25422.1	AB007193	Oryza sativa
AAF23509.1	AF218845	Porteresia coarctata
AAG31813.1	AF317553	Beta vulgaris
AAA32915.1	M80597	Beta vulgaris
AAA82750.1	U20179	Brassica napus
AAD12243.1	AF081796	Brassica napus
CAA48719.1	X68826	Pisum sativum
AAD25541.1	AF134051	Solanum tuberosum
CAA43860.1	X61690	Spinacia oleracea
CAB39759.1	AJ133598	Plastid Pisum sativum
CAA37908.1	X53957	Triticum aestivum
BAA25423.1	AB007194	Oryza sativa
CAB46084.1	AJ243392	Pisum sativum
AAD28755.1	AF130251	Musa acuminata
CAA54265.1	X76946	Solanum tuberosum

SEQ ID NO. 611

AAB65163.1	AF002692	Solanum commersonii
CAA55039.1	X78203	Hyoscyamus muticus
BAA01394.1	D10524	Nicotiana tabacum
AAA33930.1	M84968	Silene vulgaris
CAA96431.1	Z71749	Nicotiana plumbaginifolia
AAA33931.1	M84969	Silene vulgaris
AAF61392.1	AF133894	Persea americana
CAB38119.1	AJ010296	Zea mays
CAB38118.1	AJ010295	Zea mays
AAG34814.1	AF243379	Glycine max
AAG34812.1	AF243377	Glycine max
CAA09190.1	AJ010451	Alopecurus myosuroides
CAA09193.1	AJ010454	Alopecurus myosuroides
AAG34811.1	AF243376	Glycine max
CAA09192.1	AJ010453	Alopecurus myosuroides
CAA09191.1	AJ010452	Alopecurus myosuroides
AAD56395.1	AF184059	Triticum aestivum
CAA68993.1	Y07721	Petunia x hybrida
CAA39487.1	X56012	Triticum aestivum
AAC64007.1	AF062403	Oryza sativa
AAG34817.1	AF244674	Zea mays
AAA20585.1	U12679	Zea mays
CAA56047.1	X79515	Zea mays
AAA33470.1	M16901	Zea mays
AAA33469.1	M16902	Zea mays
AAG34821.1	AF244678	Zea mays
AAG34820.1	AF244677	Zea mays
CAA39480.1	X56004	Triticum aestivum
AAG34823.1	AF244680	Zea mays
AAG34818.1	AF244675	Zea mays
AAG34822.1	AF244679	Zea mays
AAG34816.1	AF244673	Zea mays
CAA05354.1	AJ002380	Oryza sativa
CAB66333.1	AJ279691	Betula pendula
CAA05355.1	AJ002381	Oryza sativa

SEQ ID NO. 612

AAC19396.1	AF069318	Mesembryanthemum crystallinum
AAD28640.1	AF068686	Glycine max
CAA07683.1	AJ007789	Nicotiana tabacum
BAA92518.1	AP001383	Oryza sativa
BAA90346.1	AP001080	Oryza sativa
AAC12646.1	AF055296	Zantedeschia aethiopica

SEQ ID NO. 615

CAB56544.1	X51608	Triticum aestivum
CAA41020.1	X57952	Triticum aestivum

CAA72118.1	Y11248	Pisum sativum
CAA30499.1	X07654	Spinacia oleracea
AAA34036.1	M21338	Spinacia oleracea
AAA33034.1	M73707	Mesembryanthemum crystallinum
AAA33090.1	M36123	Chlamydomonas reinhardtii
AAF36402.1	AF228914	Chlamydomonas reinhardtii
AAD55057.1	AF173671	Beta vulgaris

SEQ ID NO. 616

CAA05365.1	AJ002391	Solanum tuberosum
AAB61215.1	AF002226	Nicotiana tabacum
AAC50019.1	U39747	Ipomoea nil
CAA41220.1	X58282	Zea mays
BAA19156.1	AB000637	Canavalia gladiata
AAC78104.1	AF093632	Oryza sativa
CAA77641.1	Z11540	Triticum aestivum
CAA90679.1	Z50799	Hordeum vulgare
CAB44297.1	AJ006708	Zea mays

SEQ ID NO. 617

AAA91049.1	L31937	Brassica rapa
AAC97524.1	U12150	Glycine max
AAB17095.1	U72942	Oryza sativa
BAA85411.1	AP000615	Oryza sativa
AAC00503.1	AF044059	Oryza sativa
AAG17880.1	AF293407	Phaseolus coccineus
AAG38520.1	AF283535	Citrus x paradisi
CAA78359.1	Z13956	Glycine max

SEQ ID NO. 618

AAA91049.1	L31937	Brassica rapa
AAC97524.1	U12150	Glycine max
AAC00503.1	AF044059	Oryza sativa
AAB17095.1	U72942	Oryza sativa
BAA85411.1	AP000615	Oryza sativa
AAG17880.1	AF293407	Phaseolus coccineus
AAG38520.1	AF283535	Citrus x paradisi
CAA78359.1	Z13956	Glycine max

SEQ ID NO. 619

AAF89209.1	AF279252	Vigna radiata
AAB17070.1	U54770	Lycopersicon esculentum
AAK00946.1	AF318211	Taxus cuspidata
AAG41777.1	AF212991	Cucurbita maxima
AAK11616.1	AF326277	Hordeum vulgare
AAF20011.1	AF216313	Helianthus annuus
CAA50647.1	X71656	Solanum melongena
AAF27282.1	AF122821	Capsicum annuum
AAB94593.1	AF022464	Glycine max
BAA13076.1	D86351	Glycine max
AAA19701.1	L24438	Thlaspi arvense
AAC48987.1	U09610	Berberis stolonifera
BAB12433.1	AB025030	Coptis japonica
CAB56503.1	AJ238612	Catharanthus roseus
CAA50648.1	X71657	Solanum melongena
AAC39452.1	AF014800	Eschscholzia californica
AAD38930.1	AF135485	Glycine max
AAD44150.1	AF124815	Mentha spicata
AAC39453.1	AF014801	Eschscholzia californica
BAA12159.1	D83968	Glycine max
AAF05621.1	AF191772	Papaver somniferum
AAB94587.1	AF022458	Glycine max
CAA04116.1	AJ000477	Helianthus tuberosus
CAA04117.1	AJ000478	Helianthus tuberosus
CAB43505.1	AJ239051	Cicer arietinum
BAA93632.1	AB024931	Lotus japonicus
BAA76380.1	AB023636	Glycyrrhiza echinata

SEQ ID NO. 621

AAB01376.1	M96549	Lycopersicon esculentum
AAA33748.1	M99431	Ipomoea nil
CAA77978.1	Z11920	Oryza sativa
AAD30456.1	AF123259	Lycopersicon esculentum
AAD11549.1	U55859	Triticum aestivum
AAB26482.2	S59780	Zea mays
AAA16785.1	L14594	Catharanthus roseus
BAA90487.1	AB037681	Oryza sativa
CAA44877.1	X63195	Nicotiana tabacum
CAA82945.1	Z30243	Secale cereale
AAF31705.1	AF221856	Euphorbia esula
AAC32131.1	AF051230	Picea mariana
AAD11550.1	U55860	Triticum aestivum

CAA78738.1	Z15018	Oryza sativa

SEQ ID NO. 622

AAA19708.1	L10634	Zea mays
AAD10489.1	U76746	Triticum aestivum
AAD20178.1	AF059287	Eleusine indica
AAK09229.1	AC084320	Oryza sativa
BAA02505.1	D13224	Oryza sativa
BAA06382.1	D30717	Oryza sativa
AAD20180.1	AF059289	Eleusine indica
CAA55912.1	X79367	Oryza sativa
CAA38613.1	X54844	Pisum sativum
AAD10490.1	U76895	Triticum aestivum
CAA48929.1	X69185	Anemia phyllitidis
BAA82637.1	D63136	Zinnia elegans
CAA49736.1	X70184	Lupinus albus
AAA20186.1	L10633	Zea mays
BAA06381.1	D30716	Oryza sativa
CAA55022.1	X78143	Oryza sativa
CAA70891.1	Y09741	Hordeum vulgare
AAB03267.1	U47660	Lupinus albus
AAD10488.1	U76745	Triticum aestivum
AAA34010.1	M21297	Glycine max
BAA82638.1	D63137	Zinnia elegans
AAB64308.1	U63927	Daucus carota
CAA52720.1	X74656	Zea mays
AAD20181.1	AF059290	Eleusine indica
AAD20179.1	AF059288	Eleusine indica
AAD10487.1	U76744	Triticum aestivum
CAA67056.1	X98406	Cicer arietinum
AAD10492.1	U76896	Triticum aestivum
CAA52718.1	X74654	Zea mays
CAA37060.1	X52878	Zea mays
AAA19709.1	L10636	Zea mays
CAA83853.1	Z33402	Solanum tuberosum
CAA83847.1	Z33382	Solanum tuberosum
CAA37061.1	X52879	Zea mays
AAA19707.1	L10635	Zea mays
CAA52719.1	X74655	Zea mays
AAA33102.1	K03281	Chlamydomonas reinhardtii
AAA33101.1	M10064	Chlamydomonas reinhardtii
AAA99439.1	L24547	Volvox carteri
CAA31334.1	X12855	Volvox carteri
AAA33804.1	M33371	Polytomella agilis
AAA33803.1	M33373	Polytomella agilis
AAB03892.1	M33372	Polytomella agilis
AAB60936.1	AF001379	Chlamydomonas incerta
CAA38614.1	X54845	Pisum sativum
AAD10493.1	U76897	Triticum aestivum
BAA82639.1	D63138	Zinnia elegans
CAA38615.1	X54846	Pisum sativum

SEQ ID NO. 624

BAA78764.1	AB023482	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAK21965.1	AY028699	Brassica napus
CAB51834.1	00069	Oryza sativa
AAG03090.1	AC073405	Oryza sativa
AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max
AAC61805.1	U28007	Lycopersicon esculentum
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAC27894.1	AF023164	Zea mays
AAG33377.1	AF290411	Oryza meyeriana
AAB09771.1	U67422	Zea mays
BAA94529.2	AP001800	Oryza sativa
AAC27895.1	AF023165	Zea mays
CAA73134.1	Y12531	Brassica oleracea
BAA94516.1	AP001800	Oryza sativa
AAK11566.1	AF318490	Lycopersicon hirsutum
AAF34428.1	AF172282	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
BAA94517.1	AP001800	Oryza sativa

SEQ ID NO. 626

AAD10241.1	AF020716	Triticum aestivum
CAB06653.1	Z85984	Oryza sativa

AAG48835.1	AC084218	Oryza sativa
AAD10242.1	AF020717	Triticum aestivum
SEQ ID NO. 628		
BAA90375.1	AP001081	Oryza sativa
BAB03361.1	AP002486	Oryza sativa
CAA62901.1	X91787	Lupinus luteus
SEQ ID NO. 629		
BAA96875.1	AB045121	Oryza sativa
BAA78746.1	AB023482	Oryza sativa
AAG43550.1	AF211532	Nicotiana tabacum
BAA90357.1	AP001080	Oryza sativa
BAA77204.1	AB026262	Cicer arietinum
BAA90806.1	AP001168	Oryza sativa
SEQ ID NO. 630		
AAD50592.1	AF093752	Triticum aestivum
AAG22095.1	AF308658	Typha latifolia
SEQ ID NO. 632		
AAF21901.1	AF109392	Brassica napus
SEQ ID NO. 633		
CAB82852.1	Z30329	Mesembryanthemum crystallinum
BAB18105.1	AB042715	Chlamydomonas reinhardtii
BAB18104.1	AB042714	Chlamydomonas reinhardtii
BAA83689.1	AB011968	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
CAA73067.1	Y12464	Sorghum bicolor
AAF22219.1	AF141378	Zea mays
BAA96628.1	AP002482	Oryza sativa
CAA89202.1	Z49233	Chlamydomonas eugametos
CAA73068.1	Y12465	Sorghum bicolor
BAA34675.1	AB011670	Triticum aestivum
AAF06969.1	AF162661	Kalanchoe fedtschenkoi
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
BAA90814.1	AP001168	Oryza sativa
AAB62693.1	AF004947	Oryza sativa
AAF21062.1	AF216527	Dunaliella tertiolecta
CAA71142.1	Y10036	Cucumis sativus
CAA39936.1	X56599	Daucus carota
CAA08995.1	AJ010091	Brassica napus
BAA05649.1	D26602	Nicotiana tabacum
AAF19403.1	AF203481	Lycopersicon esculentum
AAC25423.1	AF072908	Nicotiana tabacum
AAF19402.1	AF203480	Lycopersicon esculentum
CAA65244.1	X95997	Solanum tuberosum
CAA57898.1	X82548	Hordeum vulgare
AAF19401.1	AF203479	Glycine max
AAD23582.1	AF128443	Glycine max
AAF34436.1	AF172282	Oryza sativa
BAA05648.1	D26601	Nicotiana tabacum
SEQ ID NO. 634		
AAF73075.1	AF268595	Hordeum vulgare
SEQ ID NO. 635		
CAB85467.1	AJ250316	Brassica juncea
BAA22441.1	D63954	Zea mays
BAA11475.1	D79979	Nicotiana tabacum
AAA70334.1	U25817	Sesamum indicum
AAB39387.1	U59477	Perilla frutescens
CAA07638.1	AJ007739	Solanum tuberosum
AAF27933.1	AF222989	Capsicum annuum
AAB72241.1	U75745	Petroselinum crispum
AAA61776.1	L22965	Chloroplast Glycine soja
AAF12821.1	AF200717	Vernicia fordii
AAA86690.1	U17063	Limnanthes douglasii
AAD13527.1	AF061027	Vernicia fordii
BAA22442.1	D84409	Zea mays
BAA22440.1	D63953	Zea mays
BAA07785.2	D43688	Triticum aestivum
AAA61774.1	L22963	Chloroplast Brassica napus
AAC98967.1	AF047172	Vernicia fordii
CAB45155.1	AJ011004	Vernicia fordii
AAC16443.1	AF020204	Pelargonium x hortorum
AAA61775.1	L22962	Brassica napus
AAA61777.1	L22964	Chloroplast Glycine soja
AAA32994.1	L01418	Brassica napus
AAD15744.1	AF047039	Perilla frutescens
BAA28358.1	D84678	Triticum aestivum

BAA05515.1	D26509	Nicotiana tabacum
BAA11397.1	D78506	Oryza sativa
BAB18135.1	AB051215	Glycine max
BAA22439.1	D63952	Zea mays
BAA11396.1	D78505	Oryza sativa
CAB71341.1	AJ250664	Hordeum vulgare
AAD48897.1	AF083613	Dunaliella salina
AAF80560.1	AF192486	Sesamum indicum
CAB64256.1	AJ245938	Calendula officinalis
AAB80696.1	U86072	Petroselinum crispum

SEQ ID NO. 636

AAB16830.1	U49388	Zea mays
AAB16829.1	U49387	Triticum aestivum

SEQ ID NO. 638

AAA19701.1	L24438	Thlaspi arvense
AAA32913.1	M32885	Persea americana
AAC39318.1	AF029858	Sorghum bicolor
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
AAB94589.1	AF022460	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
CAA70576.1	Y09424	Nepeta racemosa
AAB94588.1	AF022459	Glycine max
CAA50312.1	X70981	Solanum melongena
AAB94584.1	AF022157	Glycine max
AAD47832.1	AF166332	Nicotiana tabacum
AAF27282.1	AF122821	Capsicum annuum
CAA83941.1	Z33875	Mentha x piperita
CAB56503.1	AJ238612	Catharanthus roseus
CAA50645.1	X71654	Solanum melongena
BAA03635.1	D14990	Solanum melongena
AAD44151.1	AF124816	Mentha x piperita
AAD44150.1	AF124815	Mentha spicata
AAD44152.1	AF124817	Mentha x piperita
CAC27827.1	AJ295719	Catharanthus roseus
AAB94587.1	AF022458	Glycine max
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
AAG14963.1	AF214009	Brassica napus
CAA57425.1	X81831	Zea mays
CAA72196.1	Y11368	Zea mays
AAG44132.1	AF218296	Pisum sativum
AAG14962.1	AF214008	Brassica napus
AAG14961.1	AF214007	Brassica napus
AAD56282.1	AF155332	Petunia x hybrida

SEQ ID NO. 639

BAB20580.1	AB042267	Zea mays
BAB20579.1	AB042261	Zea mays
BAB20581.1	AB042268	Zea mays
AAK14395.1	AF339732	Dianthus caryophyllus
BAA85113.1	AB031012	Zea mays
BAA82873.1	AB024291	Zea mays
BAA85112.1	AB031011	Zea mays
BAA75253.1	AB004882	Zea mays
BAB17300.1	AB042260	Zea mays
BAB20582.1	AB042269	Zea mays
BAB41137.1	AB060130	Zea mays

SEQ ID NO. 640

AAG43550.1	AF211532	Nicotiana tabacum
BAA78746.1	AB023482	Oryza sativa
BAA96875.1	AB045121	Oryza sativa
BAA90357.1	AP001080	Oryza sativa
BAA77204.1	AB026262	Cicer arietinum
BAA90806.1	AP001168	Oryza sativa

SEQ ID NO. 642

AAD39991.1	AF150084	Malus x domestica
AAD39992.1	AF150085	Brassica rapa

SEQ ID NO. 644

CAA47099.1	X66469	Medicago sativa
AAB41548.1	L07042	Medicago sativa
CAA58761.1	X83880	Nicotiana tabacum
CAA50036.1	X70703	Pisum sativum
BAA74734.1	AB016802	Zea mays
AAF81420.1	AF247136	Capsicum annuum
AAB58396.1	U94192	Nicotiana tabacum
AAF65766.1	AF242308	Euphorbia esula

AAF73236.1	AF153061	Pisum sativum
CAA57721.1	X82270	Medicago sativa
CAA73323.1	Y12785	Petroselinum crispum
BAA09600.1	D61377	Nicotiana tabacum
AAD37790.1	AF149424	Ipomoea batatas
CAA56314.1	X79993	Avena sativa
AAF81419.1	AF247135	Capsicum annuum
AAC28850.1	AF079318	Triticum aestivum
AAK01710.1	AF332873	Oryza sativa
AAG40579.1	AF216315	Oryza sativa
CAC13967.1	AJ250311	Oryza sativa
BAA74733.1	AB016801	Zea mays
BAB32406.1	AB055515	Nicotiana tabacum
CAA58760.1	X83879	Nicotiana tabacum
CAA57719.1	X82268	Medicago sativa
CAB37188.1	AJ224336	Medicago sativa
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAA49592.1	X69971	Nicotiana tabacum
AAF73257.1	AF154329	Pisum sativum
CAA58466.1	X83440	Petunia x hybrida
AAF61238.1	AF241166	Oryza sativa
AAG40581.1	AF216317	Oryza sativa.
AAG40580.1	AF216316	Oryza sativa
CAB61889.1	AJ251330	Oryza sativa
AAF23902.1	AF194415	Oryza sativa
AAD52659.1	AF177392	Oryza sativa
AAF23903.1	AF194416	Oryza sativa
AAD28617.1	AF129087	Medicago sativa
CAB61750.1	AJ275316	Cicer arietinum
AAD51717.1	AF174291	Ipomoea batatas
AAB57843.1	U96716	Selaginella lepidophylla
BAA33152.1	AB008187	Pisum sativum
CAA76701.1	Y17226	Lycopersicon esculentum
CAA66233.1	X97637	Antirrhinum majus
CAA71242.1	Y10160	Chenopodium rubrum

SEQ ID NO. 646

AAB37756.1	L46702	Solanum tuberosum
AAC49393.1	U52078	Nicotiana tabacum
AAG13460.1	AF223412	Zea mays
BAB03437.1	AP002817	Oryza sativa
BAB40709.1	AB003037	Nicotiana tabacum
BAB40702.1	AB053091	Nicotiana tabacum
CAA55326.1	X78589	Chlamydomonas reinhardtii
BAB19066.1	AP002744	Oryza sativa
BAB40710.1	AB003038	Nicotiana tabacum
AAG13527.1	AC068924	Oryza sativa
AAF78897.1	AF210816	Oryza sativa subsp. japoni
BAB40707.1	AB053096	Nicotiana tabacum
BAB40700.1	AB053089	Nicotiana tabacum
BAB40701.1	AB053090	Nicotiana tabacum
BAB40704.1	AB053093	Nicotiana tabacum
BAB40705.1	AB053094	Nicotiana tabacum
BAB40706.1	AB053095	Nicotiana tabacum
BAB40708.1	AB053097	Nicotiana tabacum
BAB40703.1	AB053092	Nicotiana tabacum

SEQ ID NO. 647

BAA78764.1	AB023482	Oryza sativa
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
CAB51834.1	00069	Oryza sativa
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAG25966.1	AF302082	Nicotiana tabacum
AAC61805.1	U28007	Lycopersicon esculentum
AAB09771.1	U67422	Zea mays
AAC27894.1	AF023164	Zea mays
AAB61708.1	U93048	Daucus carota
AAF91336.1	AF249317	Glycine max
AAF91337.1	AF249318	Glycine max
AAG33377.1	AF290411	Oryza meyeriana
AAC27895.1	AF023165	Zea mays
AAK11566.1	AF318490	Lycopersicon hirsutum
CAA97692.1	Z73295	Catharanthus roseus
AAF34428.1	AF172282	Oryza sativa
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium

AAK11567.1	AF318491	Lycopersicon hirsutum
AAB47421.1	U59316	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
AAF66615.1	AF142596	Nicotiana tabacum
BAA92954.1	AP001551	Oryza sativa
BAA92953.1	AP001551	Oryza sativa

SEQ ID NO. 649

AAD03741.1	AF111812	Brassica napus
AAD41039.1	AF112538	Malva pusilla
AAG10041.1	AF288226	Setaria italica
BAA89214.1	AB032361	Mimosa pudica
AAF03692.1	AF172094	Picea rubens
AAF82805.1	AF282624	Helianthus annuus
AAF71265.1	AF246715	Phalaenopsis sp. 'True Lady'
AAC31886.1	AF059484	Gossypium hirsutum
CAA39280.1	X55751	Solanum tuberosum
AAC49652.1	U68462	Striga asiatica
AAC49651.1	U68461	Striga asiatica
AAF31643.1	AF143208	Vigna radiata
CAA47899.1	X67666	Pisum sativum
CAA45149.1	X63603	Nicotiana tabacum
CAA39281.1	X55752	Solanum tuberosum
CAA48609.1	X68649	Pisum sativum
CAA39278.1	X55749	Solanum tuberosum
AAF71264.1	AF246714	Phalaenopsis sp. 'True Lady'
AAB38512.1	U81047	Pisum sativum
AAB38511.1	U81046	Pisum sativum
AAB18642.1	U76191	Pisum sativum
AAB18641.1	U76190	Pisum sativum
CAA62028.1	X90378	Pisum sativum
AAC64127.1	AF091809	Anemia phyllitidis
CAA33874.1	X15865	Oryza sativa
AAF40438.1	AF234528	Avena nuda
AAC64128.1	AF091810	Anemia phyllitidis
CAA55923.1	X79378	Sorghum bicolor
AAC16054.1	AF061019	Coleochaete scutata
CAA34356.1	X16280	Oryza sativa
CAA39279.1	X55750	Solanum tuberosum
AAC16053.1	AF061018	Scherffelia dubia
AAF87302.1	AF281323	Magnolia denudata
AAD02328.1	AF044573	Brassica oleracea
AAB38514.1	U81049	Pisum sativum
AAB18644.1	U76193	Pisum sativum
AAC05272.1	AF049106	Glycine max
CAA33873.1	X15864	Oryza sativa
AAC16055.1	AF061020	Mesostigma viride
AAA33940.1	J01297	Glycine max
BAA09450.1	D50839	Chlamydomonas reinhardtii
BAA09449.1	D50838	Chlamydomonas reinhardtii
AAC64126.1	AF091808	Anemia phyllitidis
AAA33433.1	J01238	Zea mays
CAA23728.1	V00450	Glycine max
CAA33871.1	X15862	Oryza sativa
AAA34243.1	M33963	Volvox carteri
AAD48335.1	AF090969	Selaginella apoda
AAD48334.1	AF090968	Selaginella apoda
CAA39276.1	X55746	Solanum tuberosum

SEQ ID NO. 650

BAA33803.1	AB018412	Populus nigra
CAA88841.1	Z48977	Nicotiana tabacum
AAC26785.1	AF073473	Solanum tuberosum
CAA51931.1	X73528	Triticum aestivum
CAA33303.1	X15233	Triticum aestivum
BAA33802.1	AB018411	Populus nigra
CAA48479.1	X68430	Spinacia oleracea
AAF85975.1	AF275639	Pisum sativum
CAA33302.1	X15232	Triticum aestivum
BAA33801.1	AB018410	Populus nigra
CAA88840.1	Z48976	Nicotiana tabacum
AAD55564.1	AF110782	Volvox carteri f. nagariensis
AAA70082.1	U14912	Chlamydomonas reinhardtii
BAA21478.1	AB005551	Robinia pseudoacacia
AAC32142.1	AF051241	Picea mariana
AAA86837.1	U44801	Avena sativa

SEQ ID NO. 654

CAC15504.1	AJ297917	Lycopersicon esculentum
CAA66236.1	X97640	Antirrhinum majus
BAA90814.1	AP001168	Oryza sativa
AAF19401.1	AF203479	Glycine max

BAA96628.1	AP002482	Oryza sativa
AAD23582.1	AF128443	Glycine max
BAA05649.1	D26602	Nicotiana tabacum
AAF05112.1	AF158091	Mesembryanthemum crystallinum
CAA65244.1	X95997	Solanum tuberosum
CAA86286.1	Z38126	Malus x domestica
CAA71142.1	Y10036	Cucumis sativus
CAA78961.1	Z17313	Malus x domestica
CAA89202.1	Z49233	Chlamydomonas eugametos
CAA57898.1	X82548	Hordeum vulgare
AAF21062.1	AF216527	Dunaliella tertiolecta
BAA19573.1	AB002109	Oryza sativa
CAC08564.1	AJ295939	Medicago sativa
CAA73068.1	Y12465	Sorghum bicolor
CAA73067.1	Y12464	Sorghum bicolor
CAA08997.1	AJ010093	Brassica napus
CAA48473.1	X68410	Medicago sativa
CAA10288.1	AJ131048	Cicer arietinum
AAB88537.1	AF035944	Fragaria x ananassa
AAG60195.1	AC084763	Oryza sativa
BAA13608.1	D88399	Oryza sativa
BAB40983.1	AB059621	Oryza sativa
BAA92214.1	AP001278	Oryza sativa
AAD37166.1	AF132743	Oryza sativa
CAA11861.1	AJ224164	Petunia x hybrida
CAA58595.1	X83620	Petunia x hybrida
AAF23900.1	AF194413	Oryza sativa
AAB66608.1	AF012889	Zea mays
AAB05457.1	U55768	Oryza sativa

SEQ ID NO. 655

AAA32913.1	M32885	Persea americana
AAC39318.1	AF029858	Sorghum bicolor
AAA19701.1	L24438	Thlaspi arvense
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
AAB94588.1	AF022459	Glycine max
AAB94589.1	AF022460	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
AAF27282.1	AF122821	Capsicum annuum
AAB94584.1	AF022157	Glycine max

CAB56503.1	AJ238612	Catharanthus roseus
AAD47832.1	AF166332	Nicotiana tabacum
CAA50645.1	X71654	Solanum melongena
BAA03635.1	D14990	Solanum melongena
CAA50312.1	X70981	Solanum melongena
AAG44132.1	AF218296	Pisum sativum
AAD44151.1	AF124816	Mentha x piperita
CAA70576.1	Y09424	Nepeta racemosa
CAA65580.1	X96784	Nicotiana tabacum
AAD44150.1	AF124815	Mentha spicata
AAD44152.1	AF124817	Mentha x piperita
CAA83941.1	Z33875	Mentha x piperita
CAA64635.1	X95342	Nicotiana tabacum
CAA57423.1	X81829	Zea mays
CAA72208.1	Y11404	Zea mays
AAG14963.1	AF214009	Brassica napus
AAG14962.1	AF214008	Brassica napus
AAG14961.1	AF214007	Brassica napus
AAC32274.1	AF081575	Petunia x hybrida

SEQ ID NO. 657

BAB21153.1	AP002899	Oryza sativa
BAA94219.1	AP001633	Oryza sativa
AAC49181.1	U39289	Brassica napus
BAA94236.1	AP001633	Oryza sativa
BAA94228.1	AP001633	Oryza sativa
BAA94224.1	AP001633	Oryza sativa
BAA94215.1	AP001633	Oryza sativa
AAC49182.1	U39319	Brassica napus

SEQ ID NO. 667

AAF91323.1	AF244889	Glycine max
CAC20842.1	AJ250467	Pinus sylvestris
AAB36558.1	U77888	Ipomoea nil
AAF91322.1	AF244888	Glycine max
AAF91324.1	AF244890	Glycine max
AAC36318.1	AF053127	Malus x domestica
AAF59906.1	AF197947	Glycine max
AAF59905.1	AF197946	Glycine max
BAA83373.1	AP000391	Oryza sativa
BAA84787.1	AP000559	Oryza sativa

AAF34426.1	AF172282	Oryza sativa
AAB82755.1	U72725	Oryza longistaminata
AAC49123.1	U37133	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata
BAA88636.1	AB029327	Nicotiana tabacum
AAG52992.1	U77888	Ipomoea nil
AAB82756.1	U72724	Oryza sativa
AAB82753.1	U72726	Oryza longistaminata
AAB61708.1	U93048	Daucus carota

SEQ ID NO. 668

CAA05268.1	AJ002235	Lycopersicon hirsutum
CAA05276.1	AJ002236	Lycopersicon pimpinellifolium
CAA05274.1	AJ002236	Lycopersicon pimpinellifolium
CAA05279.1	AJ002237	Lycopersicon esculentum
AAA65235.1	U15936	Lycopersicon pimpinellifolium
AAC78593.1	AF053995	Lycopersicon esculentum
AAC78596.1	AF053998	Lycopersicon esculentum
AAC78591.1	AF053993	Lycopersicon esculentum
AAC78594.1	AF053996	Lycopersicon pimpinellifolium
AAC78592.1	AF053994	Lycopersicon esculentum
AAC78595.1	AF053997	Lycopersicon esculentum
BAA96776.1	AP002521	Oryza sativa
BAB08215.1	AP002539	Oryza sativa
CAB55409.1	AL117265	Oryza sativa
AAD50430.1	AF166121	Hordeum vulgare

SEQ ID NO. 669

AAC36318.1	AF053127	Malus x domestica
AAF59906.1	AF197947	Glycine max
AAF59905.1	AF197946	Glycine max
AAF91323.1	AF244889	Glycine max
AAF91322.1	AF244888	Glycine max
AAF91324.1	AF244890	Glycine max
CAA61510.1	X89226	Oryza sativa
CAC20842.1	AJ250467	Pinus sylvestris
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
AAB36558.1	U77888	Ipomoea nil
AAF34426.1	AF172282	Oryza sativa
AAB82755.1	U72725	Oryza longistaminata
AAC80225.1	U72723	Oryza longistaminata
AAC49123.1	U37133	Oryza sativa
AAB82756.1	U72724	Oryza sativa
BAA88636.1	AB029327	Nicotiana tabacum
AAG52992.1	U77888	Ipomoea nil
AAB82753.1	U72726	Oryza longistaminata
AAB61708.1	U93048	Daucus carota

SEQ ID NO. 670

CAA71762.1	Y10804	Nicotiana tabacum
AAA34266.1	M90664	Triticum aestivum
AAA34265.1	M90663	Triticum aestivum
AAA34308.1	M55604	Triticum aestivum
CAC12987.1	AJ299395	Cicer arietinum
AAK26440.1	AF357838	Solanum tuberosum
CAA09619.1	AJ011418	Lycopersicon esculentum
AAC32140.1	AF051239	Picea mariana

SEQ ID NO. 672

AAB61708.1	U93048	Daucus carota
AAK21965.1	AY028699	Brassica napus
BAA83373.1	AP000391	Oryza sativa
AAA33915.1	L27821	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
AAG03090.1	AC073405	Oryza sativa
AAD21872.1	AF078082	Phaseolus vulgaris
BAA92954.1	AP001551	Oryza sativa
BAA94510.1	AB041504	Populus nigra
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA92953.1	AP001551	Oryza sativa
BAA82556.1	AB030083	Populus nigra
AAC23542.1	U20948	Ipomoea trifida
CAA97692.1	Z73295	Catharanthus roseus
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
CAB51834.1	00069	Oryza sativa
AAB93834.1	U82481	Zea mays
AAF34428.1	AF172282	Oryza sativa
BAA94516.1	AP001800	Oryza sativa
CAA67145.1	X98520	Brassica oleracea

CAA73134.1	Y12531	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
AAF66615.1	AF142596	Nicotiana tabacum
AAB47422.1	U59318	Lycopersicon esculentum
AAF76314.1	AF220603	Lycopersicon esculentum
AAB47424.1	U59317	Lycopersicon pimpinellifolium

SEQ ID NO. 673

CAA56175.1	X79779	Solanum tuberosum
CAB62555.1	AJ249962	Daucus carota
AAF81251.1	AF267755	Mesembryanthemum crystallinum

SEQ ID NO. 674

CAA73214.1	Y12674	Brassica napus
CAA69899.1	Y08607	Nicotiana tabacum
CAA11862.1	AJ224165	Petunia x hybrida
CAA11860.1	AJ224163	Nicotiana tabacum
CAA05329.1	AJ002315	Nicotiana tabacum
CAA11861.1	AJ224164	Petunia x hybrida
CAC08564.1	AJ295939	Medicago sativa
CAA05328.1	AJ002314	Nicotiana tabacum
CAA58595.1	X83620	Petunia x hybrida
CAA58594.1	X83619	Petunia x hybrida
CAA54803.1	X77763	Nicotiana tabacum
BAB40983.1	AB059621	Oryza sativa
BAA92214.1	AP001278	Oryza sativa
CAA48474.1	X68411	Medicago sativa
CAA48472.1	X68409	Medicago sativa
CAA48473.1	X68410	Medicago sativa
CAA67554.1	X99100	Trifolium repens
CAA73848.1	Y13437	Oryza sativa
CAA10288.1	AJ131048	Cicer arietinum
CAA72330.1	Y11591	Ricinus communis
CAA72291.1	Y11527	Oryza sativa
AAF23902.1	AF194415	Oryza sativa
AAD52659.1	AF177392	Oryza sativa
CAA57721.1	X82270	Medicago sativa
AAF73236.1	AF153061	Pisum sativum
AAB41548.1	L07042	Medicago sativa
CAA47099.1	X66469	Medicago sativa
CAC13967.1	AJ250311	Oryza sativa
CAA56314.1	X79993	Avena sativa
CAC15504.1	AJ297917	Lycopersicon esculentum
AAK01710.1	AF332873	Oryza sativa
AAG40579.1	AF216315	Oryza sativa
CAA50036.1	X70703	Pisum sativum
CAA58761.1	X83880	Nicotiana tabacum
AAF65766.1	AF242308	Euphorbia esula
AAD37790.1	AF149424	Ipomoea batatas
CAA58760.1	X83879	Nicotiana tabacum
AAB58396.1	U94192	Nicotiana tabacum
AAF81420.1	AF247136	Capsicum annuum
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAB37188.1	AJ224336	Medicago sativa
BAA09600.1	D61377	Nicotiana tabacum
AAC28850.1	AF079318	Triticum aestivum
CAA73323.1	Y12785	Petroselinum crispum
AAD28617.1	AF129087	Medicago sativa

SEQ ID NO. 675

AAF34134.1	AF161180	Malus x domestica
CAA47948.1	X67711	Oryza sativa
CAA42685.1	X60088	Daucus carota
AAB88134.1	AF034618	Spinacia oleracea
CAA37971.1	X54030	Lycopersicon esculentum
CAB72129.1	AJ249330	Cucumis sativus
CAB72130.1	AJ249331	Cucumis sativus
AAB88133.1	AF034617	Spinacia oleracea
AAB88132.1	AF034616	Spinacia oleracea
AAB97316.1	AF033852	Spinacia oleracea
CAA30018.1	X06932	Petunia x hybrida
AAB88009.1	AF035414	Brassica napus
CAA43711.1	X61491	Spinacia oleracea
CAA37970.1	X54029	Lycopersicon esculentum
AAB99745.1	AF005993	Triticum aestivum
CAA67867.1	X99515	Pisum sativum
CAA44620.1	X62799	Glycine max
AAB00730.1	M76725	Chlamydomonas reinhardtii
CAB72128.1	AJ249329	Cucumis sativus
AAA34139.1	L08830	Lycopersicon esculentum
CAA44820.1	X63106	Nicotiana tabacum
BAA34919.1	AB012716	Salix gilgiana

AAB65162.1	AF002667	Solanum commersonii
CAA47345.1	X66874	Phaseolus vulgaris
AAB91472.1	AF035457	Spinacia oleracea
AAB91473.1	AF035458	Spinacia oleracea
AAB96660.1	AF039084	Spinacia oleracea

SEQ ID NO. 676

AAF78062.1	AF266760	Vicia faba
BAA32777.1	AB012044	Raphanus sativus
CAA64895.1	X95639	Brassica oleracea
BAA92258.1	AB030695	Raphanus sativus
CAA64896.1	X95640	Brassica oleracea
BAA92259.1	AB030696	Raphanus sativus
AAF80556.1	AF188843	Vitis vinifera
AAD29676.1	AF131201	Zea mays
CAA11896.1	AJ224327	Oryza sativa
AAK26755.1	AF326488	Zea mays
AAK26754.1	AF326487	Zea mays
CAA04652.1	AJ001292	Craterostigma plantagineum
AAF80557.1	AF188844	Vitis vinifera
AAB81601.1	AF024511	Nicotiana tabacum
CAA54233.1	X76911	Hordeum vulgare
CAA52068.1	X73848	Lycopersicon esculentum
BAB40142.1	AB058679	Pyrus communis
CAC33802.1	AJ271796	Zea mays
AAK26756.1	AF326489	Zea mays
AAB67870.1	U60149	Beta vulgaris
AAB82140.1	AF022737	Oryza sativa
CAA11025.1	AJ222973	Lupinus albus
CAB46350.1	Y18311	Solanum tuberosum

SEQ ID NO. 677

BAA90487.1	AB037681	Oryza sativa
CAA67191.1	X98582	Triticum aestivum
AAD11549.1	U55859	Triticum aestivum
AAD30456.1	AF123259	Lycopersicon esculentum

SEQ ID NO. 678

AAK29453.1	AF352250	Lathyrus sativus
AAK29452.1	AF352249	Lathyrus sativus
AAC41651.1	L29456	Nicotiana tabacum
CAA29123.1	X05636	Pisum sativum
CAA73171.1	Y12599	Apium graveolens
BAA88671.1	AB029614	Nicotiana tabacum
AAK29450.1	AF352247	Pisum sativum
AAK29449.1	AF352246	Pisum sativum
AAK29451.1	AF352248	Pisum sativum
AAK29456.1	AF352253	Lens culinaris
AAK29454.1	AF352251	Lens culinaris
CAA12232.1	AJ224933	Lycopersicon esculentum
AAK29455.1	AF352252	Lens culinaris
AAA50578.1	U03391	Lycopersicon esculentum
AAF27930.1	AF222804	Euphorbia esula
AAD41007.1	AF107024	Triticum aestivum
CAA40362.1	X57077	Zea mays
BAA87331.1	AB012694	Lilium longiflorum
AAB86857.1	AF031547	Fritillaria agrestis
CAA07233.1	AJ006767	Cicer arietinum
AAA50303.1	L34578	Pisum sativum
AAD41005.1	AF107022	Triticum aestivum
AAA74723.1	L07946	Volvox carteri
CAA77867.1	Z11842	Lycopersicon esculentum
AAB03076.1	U01890	Lycopersicon pennellii
AAF64525.1	AF253416	Lycopersicon chilense

SEQ ID NO. 680

AAB88134.1	AF034618	Spinacia oleracea
AAF34134.1	AF161180	Malus x domestica
AAB99745.1	AF005993	Triticum aestivum
AAA21808.1	L23551	Spinacia oleracea
AAA34139.1	L08830	Lycopersicon esculentum
AAB86942.1	AF031241	Glycine max
AAK21920.1	AF338252	Glycine max
AAB91473.1	AF035458	Spinacia oleracea
AAB96660.1	AF039084	Spinacia oleracea
AAB91472.1	AF035457	Spinacia oleracea

SEQ ID NO. 681

CAA71801.1	Y10848	Brassica juncea
AAB71230.1	AF017983	Lycopersicon esculentum
CAA06613.1	AJ005587	Brassica juncea
AAG13459.1	AF128453	Glycine max

CAA64808.1	X95563	Brassica juncea

SEQ ID NO. 682

CAA09881.1	AJ011939	Trifolium repens
CAA62228.1	X90695	Medicago sativa
AAB41812.1	L36158	Medicago sativa
CAA71495.1	Y10469	Spinacia oleracea
BAA77387.1	AB024437	Scutellaria baicalensis
AAA98491.1	L36981	Petroselinum crispum
CAA62226.1	X90693	Medicago sativa
CAB94692.1	AJ242742	Ipomoea batatas
CAA62227.1	X90694	Medicago sativa
AAD11481.1	U51191	Glycine max
CAC21393.1	AJ401276	Zea mays
AAF63024.1	AF244921	Spinacia oleracea
CAB67121.1	Y19023	Lycopersicon esculentum
CAA50597.1	X71593	Lycopersicon esculentum
BAA01950.1	D11337	Vigna angularis
AAD11483.1	U51193	Glycine max
AAD11482.1	U51192	Glycine max
AAD37376.1	AF145350	Glycine max
AAB41811.1	L36157	Medicago sativa
AAC49818.1	AF014467	Oryza sativa
AAC98519.1	AF007211	Glycine max
CAA46916.1	X66125	Oryza sativa
CAA80502.1	Z22920	Spirodela polyrrhiza
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAD37430.1	AF149280	Phaseolus vulgaris
BAA96643.1	AP002482	Oryza sativa
AAD11484.1	U51194	Glycine max
BAA03911.1	D16442	Oryza sativa
CAA71490.1	Y10464	Spinacia oleracea
CAA39486.1	X56011	Triticum aestivum
AAF63027.1	AF244924	Spinacia oleracea
AAC49821.1	AF014470	Oryza sativa
CAA59485.1	X85228	Triticum aestivum
BAA06335.1	D30653	Populus kitakamiensis
CAA59487.1	X85230	Triticum aestivum
AAD37427.1	AF149277	Phaseolus vulgaris
CAA62597.1	X91172	Raphanus sativus
CAA62225.1	X90692	Medicago sativa
AAA65636.1	L13653	Lycopersicon esculentum
AAF65464.2	AF247700	Oryza sativa
BAA01877.1	D11102	Populus kitakamiensis
BAA07664.1	D42065	Nicotiana tabacum
AAA32973.1	M73234	Hordeum vulgare
CAA71488.1	Y10462	Spinacia oleracea
BAA07663.1	D42064	Nicotiana tabacum

SEQ ID NO. 683

BAA04511.1	D17587	Oryza sativa
BAA01757.1	D10985	Oryza sativa
CAA70817.1	Y09604	Hordeum vulgare
AAD42963.2	AF141384	Matricaria chamomilla
CAB71127.1	AJ271659	Cicer arietinum
CAA92216.1	Z68130	Pisum sativum
AAA92064.1	U49741	Vigna radiata
BAA94235.1	AP001633	Oryza sativa
AAA92062.1	U49382	Vigna radiata
CAB59202.1	X78878	Hordeum vulgare
BAB19126.1	AP002839	Oryza sativa
BAB08188.1	AP002539	Oryza sativa
AAF64227.1	AF248647	Lycopersicon pennellii
AAF44708.1	AF242849	Lycopersicon esculentum
CAA70815.1	Y09602	Hordeum vulgare
CAA70816.1	Y09603	Hordeum vulgare
AAD01264.1	AF006079	Solanum berthaultii
CAA55478.1	X78877	Hordeum vulgare
AAD01265.1	AF006080	Solanum berthaultii
AAD01263.1	AF006078	Solanum berthaultii
BAA04510.1	D17586	Oryza sativa
AAD22150.1	AF061282	Sorghum bicolor
AAA32940.1	J03897	Hordeum vulgare
AAD22151.1	AF061282	Sorghum bicolor
AAD22164.1	AF061282	Sorghum bicolor
CAB58992.1	X78876	Hordeum vulgare

SEQ ID NO. 684

AAB97311.1	AF008597	Catharanthus roseus
AAC49827.1	U71605	Catharanthus roseus
AAC49826.1	U71604	Catharanthus roseus

CAA54557.1	X77368	Solanum melongena
AAC95363.1	AF104925	Solanum chacoense
CAA55628.1	X78994	Medicago sativa
BAA95828.1	AP002069	Oryza sativa
BAA21897.1	D83041	Ipomoea nil
CAA43027.1	X60512	Petunia x hybrida
BAA37127.1	AB012203	Lactuca sativa
AAC49929.1	AF022142	Petunia x hybrida
CAA49353.1	X69664	Malus sp.

SEQ ID NO. 685

CAA04511.1	AJ001061	Vitis vinifera
CAA70777.1	Y09590	Vitis vinifera
AAB06594.1	U38651	Medicago truncatula
CAA47324.1	X66856	Nicotiana tabacum
BAB19864.1	AB052885	Oryza sativa
BAB19863.1	AB052884	Oryza sativa
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA09419.1	AJ010942	Lycopersicon esculentum
CAB06079.1	Z83829	Picea abies
BAB19862.1	AB052883	Oryza sativa
CAA53192.1	X75440	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri
CAA68813.1	Y07520	Chlorella kessleri
CAB52688.1	AJ132223	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris
CAB52690.1	AJ132225	Lycopersicon esculentum
AAG43998.1	AF215837	Apium graveolens var. dulce
AAF74567.1	AF215853	Solanum tuberosum
AAF74566.1	AF215852	Nicotiana tabacum
AAF74568.1	AF215854	Zea mays
AAF74565.1	AF215851	Spinacia oleracea

SEQ ID NO. 686

AAB86939.1	AF030387	Oryza sativa
AAC03022.1	AF045033	Zea mays
AAB86937.1	AF030385	Zea mays

SEQ ID NO. 690

AAF67002.1	AF147726	Zea mays
AAB51150.1	U91996	Picea abies

SEQ ID NO. 695

AAF29773.1	AF159229	Gossypium hirsutum
AAF22517.1	AF118924	Papaver somniferum
AAF22518.1	AF118925	Papaver somniferum
AAF22519.1	AF118926	Papaver somniferum
AAG34795.1	AF243360	Glycine max
AAG34839.1	AF244696	Zea mays
AAG34842.1	AF244699	Zea mays
AAG34830.1	AF244687	Zea mays
AAG34846.1	AF244703	Zea mays
CAA09188.1	AJ010449	Alopecurus myosuroides
AAD10129.1	AF004358	Aegilops tauschii
AAG34850.1	AF244707	Zea mays
AAG34835.1	AF244692	Zea mays
AAG34848.1	AF244705	Zea mays
CAA09187.1	AJ010448	Alopecurus myosuroides
CAA09189.1	AJ010450	Alopecurus myosuroides
AAG34845.1	AF244702	Zea mays
AAG34797.1	AF243362	Glycine max
AAG34838.1	AF244695	Zea mays
AAG34834.1	AF244691	Zea mays
AAG34809.1	AF243374	Glycine max
AAG34829.1	AF244686	Zea mays
AAG34798.1	AF243363	Glycine max
AAG34837.1	AF244694	Zea mays
AAG34849.1	AF244706	Zea mays
AAG34803.1	AF243368	Glycine max
AAG34833.1	AF244690	Zea mays
AAG34801.1	AF243366	Glycine max
AAG34841.1	AF244698	Zea mays
AAG34844.1	AF244701	Zea mays
AAG34836.1	AF244693	Zea mays
AAG34802.1	AF243367	Glycine max
AAC32118.1	AF051214	Picea mariana
AAG34796.1	AF243361	Glycine max
AAG34843.1	AF244700	Zea mays
AAF64450.1	AF239928	Euphorbia esula
AAG34831.1	AF244688	Zea mays
AAG34847.1	AF244704	Zea mays
AAG34840.1	AF244697	Zea mays

SEQ ID NO. 696

AAK27801.1	AC022457	Oryza sativa
AAC78102.1	AF093630	Oryza sativa

SEQ ID NO. 697

AAF89209.1	AF279252	Vigna radiata
AAB17070.1	U54770	Lycopersicon esculentum
AAG41777.1	AF212991	Cucurbita maxima
AAK00946.1	AF318211	Taxus cuspidata
AAK11616.1	AF326277	Hordeum vulgare
AAF20011.1	AF216313	Helianthus annuus
BAB40322.1	AB036772	Triticum aestivum
AAF45142.1	AF195818	Glycine max
AAF34533.1	AF195812	Pisum sativum
AAD44150.1	AF124815	Mentha spicata
AAF34538.1	AF195817	Beta vulgaris
AAF34536.1	AF195815	Trifolium repens
AAF27282.1	AF122821	Capsicum annuum
AAF34525.1	AF195804	Lens culinaris
AAD38929.1	AF135484	Glycine max
AAB94593.1	AF022464	Glycine max
AAF34527.1	AF195806	Vigna radiata
CAA70575.1	Y09423	Nepeta racemosa
AAF34530.1	AF195809	Vigna radiata
AAF34535.1	AF195814	Trifolium repens
AAF34532.1	AF195811	Trifolium pratense
AAF34529.1	AF195808	Vigna radiata
AAD44151.1	AF124816	Mentha x piperita
AAF34531.1	AF195810	Trifolium pratense
BAA76380.1	AB023636	Glycyrrhiza echinata
AAF45143.1	AF195819	Glycine max
AAF34528.1	AF195807	Vigna radiata
AAB94591.1	AF022462	Glycine max
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
AAF34534.1	AF195813	Lupinus albus
CAB56742.1	AJ249800	Cicer arietinum
AAF34526.1	AF195805	Lens culinaris

SEQ ID NO. 699

BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95705.1	AB042644	Oryza sativa
BAA95704.1	AB042643	Oryza sativa
AAG48833.1	AC084218	Oryza sativa

SEQ ID NO. 701

AAB62580.1	U63298	Pisum sativum
AAC49665.1	U83707	Lycopersicon esculentum

SEQ ID NO. 704

AAA33443.1	L15390	Zea mays
BAA13232.1	D87042	Zea mays
AAB49984.1	U90262	Cucurbita pepo
BAA12338.1	D84408	Zea mays
AAB70706.1	U82087	Tortula ruralis
CAA07481.1	AJ007366	Zea mays
AAB80692.1	U69173	Glycine max
AAC49405.1	U08140	Vigna radiata
BAA85396.1	AP000615	Oryza sativa
CAA57156.1	X81393	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
BAA81749.1	AB017515	Marchantia polymorpha
BAA81751.1	AB017517	Marchantia polymorpha
BAA81750.1	AB017516	Marchantia polymorpha
BAA81748.1	AB017515	Marchantia polymorpha
CAA57157.1	X81394	Oryza sativa
AAC25423.1	AF072908	Nicotiana tabacum
BAA12715.1	D85039	Zea mays
CAA65500.1	X96723	Medicago sativa
AAA69507.1	U28376	Zea mays
AAB80693.1	U69174	Glycine max
BAA02698.1	D13436	Oryza sativa
AAD17800.1	AF090835	Mesembryanthemum crystallinum
AAG46110.1	AC073166	Oryza sativa
AAD28192.2	AF115406	Solanum tuberosum
BAA13440.1	D87707	Ipomoea batatas
AAA61682.1	L27484	Zea mays

CAA39936.1	X56599	Daucus carota
AAK26164.1	AY027885	Cucumis sativus
AAB88537.1	AF035944	Fragaria x ananassa
AAF21062.1	AF216527	Dunaliella tertiolecta
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF23900.1	AF194413	Oryza sativa
AAF23901.2	AF194414	Oryza sativa
AAC78558.1	AF030879	Solanum tuberosum
CAB46228.1	Y18055	Arachis hypogaea
AAC32116.1	AF051211	Picea mariana
CAA58750.1	X83869	Daucus carota
BAA12691.1	D84507	Zea mays
AAB47181.1	S82324	Zea mays
BAA22410.1	D38452	Zea mays
BAA12692.1	D84508	Zea mays
AAG01179.1	AF289237	Zea mays
AAC24961.1	AF009337	Tradescantia virginiana
BAA90814.1	AP001168	Oryza sativa
AAC49008.1	U24188	Lilium longiflorum
AAF19403.1	AF203481	Lycopersicon esculentum

SEQ ID NO. 705

BAA92697.1	AB039916	Vicia faba
CAC11129.1	AJ298829	Fagus sylvatica
AAD09953.1	AF107464	Hevea brasiliensis
BAA92698.1	AB039917	Vicia faba
AAC72838.1	AF097182	Oryza sativa
AAD41126.1	AF159061	Oryza sativa subsp. indica
AAA91806.1	U49113	Oryza sativa
CAA81126.1	Z26041	Helianthus annuus
CAB07806.1	Z93771	Nicotiana tabacum
AAD48068.1	AF173881	Oryza sativa subsp. indica
AAD22116.1	AF134552	Oryza sativa subsp. indica
CAB46506.1	AJ007496	Nicotiana tabacum
CAB07807.1	Z93772	Nicotiana tabacum
CAA40687.1	X57439	Brassica napus
CAA49849.1	X70399	Medicago sativa
BAA92699.1	AB039918	Vicia faba
CAA07471.1	AJ007333	Catharanthus roseus
AAF86353.1	AF283668	Oryza sativa subsp. indica
CAA81395.1	Z26654	Acetabularia cliftonii
CAA87385.1	Z47076	Malus x domestica
CAA07470.1	AJ007332	Catharanthus roseus
CAA05491.1	AJ002485	Medicago sativa
CAA82263.1	Z28627	Acetabularia cliftonii
CAA56766.1	X80788	Medicago sativa subsp. x v
AAD38856.1	AF156101	Chlamydomonas reinhardtii
CAB07803.1	Z93768	Nicotiana tabacum
CAA88254.1	Z48221	Phaseolus vulgaris
AAA33545.1	M60215	Zea mays
BAA92244.1	AB038648	Vicia faba
CAB07804.1	Z93769	Nicotiana tabacum
CAA05493.1	AJ002487	Medicago sativa
CAA82264.1	Z28632	Acetabularia cliftonii
CAA45119.1	X63558	Brassica oleracea
CAA05492.1	AJ002486	Medicago sativa
AAA74625.1	U31773	Oryza sativa
CAB07805.1	Z93770	Nicotiana tabacum
CAA05494.1	AJ002488	Medicago sativa
CAA40686.1	X57438	Brassica napus
CAA87386.1	Z47077	Malus x domestica
CAA87387.1	Z47078	Malus x domestica
BAA92334.1	AB038787	Vicia faba
CAC11128.1	AJ298828	Fagus sylvatica
BAA92335.1	AB038788	Vicia faba
CAC09574.1	AJ298986	Fagus sylvatica
BAA92337.1	AB038790	Vicia faba
BAA92336.1	AB038789	Vicia faba
BAA92338.1	AB038791	Vicia faba
AAG29592.1	AF196285	Medicago sativa subsp. x varia

SEQ ID NO. 706

CAA10104.1	AJ012656	Prunus persica
CAA10103.1	AJ012655	Prunus persica
CAA10102.1	AJ012654	Prunus persica
CAA10101.1	AJ012653	Prunus persica
CAA04565.1	AJ001161	Hordeum vulgare
CAA57636.1	X82124	Zea mays

SEQ ID NO. 710

AAF17236.1	AF178976	Zea mays
AAC26856.1	AF069952	Enteromorpha intestinalis

SEQ ID NO. 711

BAA94228.1	AP001633	Oryza sativa
BAA94224.1	AP001633	Oryza sativa
BAA94219.1	AP001633	Oryza sativa
BAA94236.1	AP001633	Oryza sativa
BAA94215.1	AP001633	Oryza sativa
AAC49181.1	U39289	Brassica napus
AAC49182.1	U39319	Brassica napus
BAB21153.1	AP002899	Oryza sativa

SEQ ID NO. 712

AAC49373.1	U31462	Lactuca sativa
CAB59211.1	AJ250433	Spinacia oleracea
AAC50031.1	U34817	Nicotiana tabacum
AAF97601.2	AF288196	Oryza sativa subsp. indica

SEQ ID NO. 713

AAB39556.1	U64789	Lycopersicon esculentum

SEQ ID NO. 715

BAA36554.1	AB011796	Citrus unshiu
AAF64168.1	AF240764	Eustoma grandiflorum
CAA80264.1	Z22543	Petunia x hybrida
CAA63092.1	X92178	Solanum tuberosum
AAD26261.1	AF119095	Malus x domestica

SEQ ID NO. 716

AAK14395.1	AF339732	Dianthus caryophyllus
BAB20581.1	AB042268	Zea mays
BAB20580.1	AB042267	Zea mays
BAB20579.1	AB042261	Zea mays
BAA85113.1	AB031012	Zea mays
BAA82873.1	AB024291	Zea mays
BAB17300.1	AB042260	Zea mays
BAA75253.1	AB004882	Zea mays
BAA85112.1	AB031011	Zea mays
BAB20582.1	AB042269	Zea mays
BAB41137.1	AB060130	Zea mays

SEQ ID NO. 717

AAK27688.1	AF347614	Lycopersicon esculentum
AAG41419.1	AF309643	Solanum tuberosum
AAK27687.1	AF347613	Lycopersicon esculentum
AAA97952.1	U52867	Hordeum vulgare
CAA57711.1	X82256	Stylosanthes hamata
CAA65291.1	X96431	Hordeum vulgare
CAA57710.1	X82255	Stylosanthes hamata
AAK35215.1	AF355602	Zea mays
CAA65536.1	X96761	Sporobolus stapfianus
CAA57831.1	X82454	Stylosanthes hamata
CAA11413.1	AJ223495	Brassica juncea
AAB94543.1	AF016306	Zea mays

SEQ ID NO. 718

AAC25922.1	U78947	Malus x domestica
AAD51422.1	U78949	Malus x domestica
AAF13262.1	AF198176	Dendrobium grex Madame Thong-In
AAF13260.1	AF198174	Dendrobium grex Madame Thong-In
AAB50187.1	U49734	Sorghum bicolor

SEQ ID NO. 719

AAA91063.1	M88254	Hevea brasiliensis

SEQ ID NO. 723

CAC33000.1	AJ272523	Solanum tuberosum
CAC33003.1	AJ272526	Solanum tuberosum
CAC33002.1	AJ272525	Solanum tuberosum
CAC33001.1	AJ272524	Solanum tuberosum
CAC32999.1	AJ272522	Solanum tuberosum
AAD44338.1	AF160197	Glycine max

SEQ ID NO. 724

AAD18052.1	AF124161	Nicotiana plumbaginifolia
AAD18053.1	AF124162	Nicotiana plumbaginifolia

SEQ ID NO. 729

CAA48155.1	X68017	Capsicum annuum
AAF33237.1	AF220218	Citrus unshiu
BAB18514.1	AB037975	Citrus unshiu
CAC27383.1	AJ308385	Helianthus annuus
CAC19567.1	AJ304825	Helianthus annuus

AAD38051.2	AF152892	Citrus x paradisi
CAA85775.1	Z37543	Cucumis melo
AAA34153.1	M84744	Lycopersicon esculentum
CAA55391.1	X78814	Narcissus pseudonarcissus
AAG10427.1	AF251015	Tagetes erecta
CAA42969.1	X60441	Lycopersicon esculentum
CAA47625.1	X67144	Lycopersicon esculentum
AAB60314.1	U32636	Zea mays
AAA34187.1	L23424	Lycopersicon esculentum
BAA84763.1	AB032797	Daucus carota
AAF82616.1	AF158024	Tagetes erecta
AAK15621.1	AF305430	Haematococcus pluvialis
AAB51287.1	U91900	Dunaliella bardawil
CAA47624.1	X67143	Lycopersicon esculentum

SEQ ID NO. 730

AAC04324.1	U73937	Nicotiana tabacum
AAF40430.1	AF234652	Mesembryanthemum crystallinum
AAA33479.1	M60526	Zea mays
AAA92823.1	U18365	Brassica napus
BAA19553.1	D64036	Oryza sativa
CAA66233.1	X97637	Antirrhinum majus
AAG01534.1	AF289467	Nicotiana tabacum
AAF73236.1	AF153061	Pisum sativum
CAA76700.1	Y17225	Lycopersicon esculentum
CAA57721.1	X82270	Medicago sativa
CAA50038.1	X70707	Medicago sativa
BAA21673.1	AB006033	Allium cepa
CAC15503.1	AJ297916	Lycopersicon esculentum
BAA33152.1	AB008187	Pisum sativum
AAF81419.1	AF247135	Capsicum annuum
AAG01533.1	AF289466	Nicotiana tabacum
CAA76701.1	Y17226	Lycopersicon esculentum
AAG01532.1	AF289465	Nicotiana tabacum
CAA58760.1	X83879	Nicotiana tabacum
CAA71242.1	Y10160	Chenopodium rubrum
CAA57719.1	X82268	Medicago sativa
CAA41172.1	X58194	Oryza sativa
AAC41680.1	L34206	Petroselinum crispum
AAK01710.1	AF332873	Oryza sativa
AAG40579.1	AF216315	Oryza sativa
CAA56314.1	X79993	Avena sativa
CAC13967.1	AJ250311	Oryza sativa
AAD28617.1	AF129087	Medicago sativa
CAA73997.1	Y13646	Petunia x hybrida
AAG36872.1	AF239819	Zea mays
AAD37790.1	AF149424	Ipomoea batatas
AAC28850.1	AF079318	Triticum aestivum
CAA73323.1	Y12785	Petroselinum crispum
AAD30506.1	AF129886	Vigna radiata
CAA43659.1	X61387	Zea mays
AAF76187.1	AF271237	Zea mays
CAA72290.1	Y11526	Zea mays

SEQ ID NO. 732

CAA96385.1	Z71703	Beta vulgaris
BAA33152.1	AB008187	Pisum sativum
AAA92823.1	U18365	Brassica napus
AAG01534.1	AF289467	Nicotiana tabacum
CAA66233.1	X97637	Antirrhinum majus
AAC41680.1	L34206	Petroselinum crispum
CAA50038.1	X70707	Medicago sativa
CAA76701.1	Y17226	Lycopersicon esculentum
CAA61581.1	X89400	Vigna unguiculata
CAA99991.1	Z75661	Sesbania rostrata
AAA34241.1	M99497	Vigna aconitifolia
CAA76700.1	Y17225	Lycopersicon esculentum
CAA71242.1	Y10160	Chenopodium rubrum
BAA21673.1	AB006033	Allium cepa
AAB41817.1	M58365	Medicago sativa
AAA33479.1	M60526	Zea mays
CAA73997.1	Y13646	Petunia x hybrida
BAA19553.1	D64036	Oryza sativa
CAA66234.1	X97638	Antirrhinum majus
AAD30506.1	AF129886	Vigna radiata
CAA41172.1	X58194	Oryza sativa
AAD08721.1	AF038570	Dunaliella tertiolecta
AAG01533.1	AF289466	Nicotiana tabacum
CAC15504.1	AJ297917	Lycopersicon esculentum
CAC15503.1	AJ297916	Lycopersicon esculentum
AAG01532.1	AF289465	Nicotiana tabacum
CAC17703.1	AJ278885	Chenopodium rubrum

CAA66236.1	X97640	Antirrhinum majus
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAA66235.1	X97639	Antirrhinum majus
CAA47099.1	X66469	Medicago sativa
AAB41548.1	L07042	Medicago sativa
BAA09600.1	D61377	Nicotiana tabacum

SEQ ID NO. 735

AAD16139.1	AF096299	Nicotiana tabacum
CAA88326.1	Z48429	Avena fatua
AAC49527.1	U48831	Petroselinum crispum
AAC49529.1	U58540	Petroselinum crispum
AAC37515.1	L44134	Cucumis sativus
AAD16138.1	AF096298	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
BAA77358.1	AB020023	Nicotiana tabacum
CAA88331.1	Z48431	Avena fatua
CAB66338.1	AJ279697	Betula pendula
AAF61863.1	AF193770	Nicotiana tabacum
AAF61864.1	AF193771	Nicotiana tabacum
AAD27591.1	AF121354	Petroselinum crispum
BAA87069.1	AB035271	Matricaria chamomilla

SEQ ID NO. 737

CAA06216.1	AJ004916	Prunus avium
AAB69322.2	AF012866	Petroselinum crispum
AAB69323.1	AF012867	Petroselinum crispum

SEQ ID NO. 738

AAG16628.1	AY007545	Brassica napus
AAF91336.1	AF249317	Glycine max
BAA82394.1	AP000367	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum
AAF91337.1	AF249318	Glycine max
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAK21965.1	AY028699	Brassica napus
BAA78764.1	AB023482	Oryza sativa
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
AAG03090.1	AC073405	Oryza sativa
AAF91322.1	AF244888	Glycine max
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
AAB09771.1	U67422	Zea mays
CAC20842.1	AJ250467	Pinus sylvestris
AAF59906.1	AF197947	Glycine max
AAG25966.1	AF302082	Nicotiana tabacum
AAF59905.1	AF197946	Glycine max
AAB61708.1	U93048	Daucus carota
BAA94516.1	AP001800	Oryza sativa
CAB51834.1	00069	Oryza sativa
AAB36558.1	U77888	Ipomoea nil
AAG52994.1	U77888	Ipomoea nil
AAF66615.1	AF142596	Nicotiana tabacum

SEQ ID NO. 739

AAB80804.1	U90341	Pinus radiata
CAA62921.1	X91811	Oryza sativa
BAA29039.1	AB015430	Humulus lupulus
BAA36224.1	AB004905	Ipomoea purpurea
BAA20387.1	AB001826	Ipomoea purpurea
AAG30295.1	AF315345	Hypericum androsaemum
CAA71904.1	Y11022	Betula pendula
BAA87922.1	AB022682	Psilotum nudum
BAA87336.1	AB027533	Ipomoea nil
BAA21787.1	AB001818	Ipomoea nil
CAA32737.1	X14597	Petunia x hybrida
CAA10641.1	AJ132323	Casuarina glauca
BAA90327.1	AB037388	Ipomoea batatas
AAA33951.1	L03352	Glycine max
BAA90330.1	AB037391	Ipomoea batatas
BAA75310.1	AB023791	Ipomoea batatas
BAA31259.1	AB015872	Vitis vinifera
BAA90331.1	AB037392	Ipomoea batatas
CAA53583.1	X75969	Vitis vinifera
BAA21789.1	AB001827	Ipomoea purpurea
BAA21788.1	AB001819	Ipomoea nil
BAA87338.1	AB027535	Ipomoea nil
BAA87337.1	AB027534	Ipomoea purpurea
BAA90328.1	AB037389	Ipomoea batatas
BAA05641.1	D26594	Camellia sinensis

BAA90332.1	AB037393	Ipomoea batatas
CAC19808.1	AJ304877	Humulus lupulus
AAB72091.1	AF020709	Vitis vinifera
CAA91930.1	Z67988	Callistephus chinensis
BAA90329.1	AB037390	Ipomoea batatas
AAB36038.1	S80857	Petunia x hybrida
CAA10511.1	AJ131813	Catharanthus roseus
CAA32731.1	X14591	Petunia x hybrida
AAK15174.1	AF292367	Rubus idaeus
CAA38456.1	X54644	Glycine max
CAA46590.1	X65636	Glycine max
CAA37909.1	X53958	Glycine max
AAB01004.1	L07647	Glycine max
BAA90486.1	AB037680	Ipomoea batatas
AAB05239.1	U47738	Solanum tuberosum

SEQ ID NO. 740

CAA62476.1	X90990	Solanum tuberosum
AAF66637.1	AF143505	Lycopersicon esculentum
CAA66616.1	X97980	Solanum berthaultii
BAA96593.1	AP002481	Oryza sativa
CAA82993.1	Z30332	Spinacia oleracea
CAA82994.1	Z30333	Mesembryanthemum crystallinum
AAA50304.1	M92989	Pisum sativum
CAA82992.1	Z30331	Mesembryanthemum crystallinum
CAB82852.1	Z30329	Mesembryanthemum crystallinum
BAB03409.1	AP002816	Oryza sativa
CAA82991.1	Z30330	Spinacia oleracea
CAA50374.1	X71057	Nicotiana tabacum
AAD37166.1	AF132743	Oryza sativa
BAA83689.1	AB011968	Oryza sativa
AAF97501.1	AF199021	Chlamydomonas reinhardtii
CAA73068.1	Y12465	Sorghum bicolor
AAA34002.1	M67449	Glycine max
AAF19403.1	AF203481	Lycopersicon esculentum
CAA73067.1	Y12464	Sorghum bicolor
BAA83688.1	AB011967	Oryza sativa
AAB93863.1	U89682	Lycopersicon esculentum
AAD50588.1	AF089102	Salvia columbariae
AAB93860.1	U89679	Lycopersicon esculentum

SEQ ID NO. 742

AAK27968.1	AF242372	Ipomoea batatas
AAD53012.1	AF089849	Brassica napus
AAD53011.1	AF089848	Brassica napus
AAD28477.1	AF133839	Sandersonia aurantiaca
AAC35211.1	U12637	Hemerocallis hybrid cultiv
CAB09699.1	Z97023	Hordeum vulgare
CAB09697.1	Z97021	Hordeum vulgare
CAB17074.1	Z99952	Phaseolus vulgaris
AAD10337.1	U94591	Hordeum vulgare
CAA56844.1	X80876	Oryza sativa
BAA83472.1	AB004648	Oryza sativa
AAB68374.1	U52970	Phaseolus vulgaris
CAA12118.1	AJ224766	Phaseolus vulgaris
AAA85036.1	U19384	Hordeum vulgare
AAC62396.1	AF050756	Ricinus communis
AAC49455.1	U41902	Pseudotsuga menziesii
AAA85035.1	U19359	Hordeum vulgare
CAA84378.1	Z34895	Vicia sativa
CAA05894.1	AJ003137	Lycopersicon esculentum
AAD48496.1	AF172856	Lycopersicon esculentum
BAA22545.1	D38533	Ananas comosus
BAA22544.1	D38532	Ananas comosus
BAA22543.1	D38531	Ananas comosus
AAB37233.1	U34747	Phalaenopsis sp. SM9108
CAB16317.1	Z99173	Nicotiana tabacum
CAA08860.1	AJ009829	Ananas comosus
AAB88263.1	AF019147	Zea mays
BAA88898.1	AB020961	Zea mays
CAA08861.1	AJ009830	Ananas comosus
CAA05487.1	AJ002477	Ananas comosus
AAA79915.1	U17135	Dianthus caryophyllus
CAA53377.1	X75749	Vicia sativa
CAB53515.1	AJ245924	Solanum tuberosum
CAB17076.1	Z99954	Phaseolus vulgaris

SEQ ID NO. 743

BAA96853.1	AB045113	Enteromorpha compressa

SEQ ID NO. 746

CAA33980.1	X15901	Plastid Oryza sativa

SEQ ID NO. 748

CAA33924.1	X15901	Plastid Oryza sativa

SEQ ID NO. 749

AAD13389.1	AF088912	Petunia x hybrida
AAC32144.1	AF051244	Picea mariana
AAC32112.1	AF051207	Picea mariana
AAF67144.1	AF230646	Tortula ruralis
CAA04690.1	AJ001346	Quercus suber
CAA70083.1	Y08859	Nicotiana plumbaginifolia
AAA86368.1	U21746	Brassica napus

SEQ ID NO. 750

AAC97381.1	AF111029	Zea mays
CAA58669.1	X83694	Chlamydomonas reinhardtii
BAA78586.1	AU066514	Chlamydomonas sp. HS-5

SEQ ID NO. 751

AAA86952.1	U10046	Pisum sativum
AAA86950.1	U10044	Pisum sativum
CAA50035.1	X70702	Pisum sativum
AAA86951.1	U10045	Pisum sativum
BAA96367.1	AB043975	Panax ginseng
CAB57298.1	Z30162	Solanum tuberosum
CAA48289.1	X68202	Pyrobotrys stellata
AAA86949.1	U10043	Pisum sativum

SEQ ID NO. 752

AAB97143.1	U93168	Prunus armeniaca
AAC84136.1	AF101423	Cichorium intybus
CAA64626.1	X95314	Chlamydomonas reinhardtii

SEQ ID NO. 753

AAA57159.1	L27107	Nicotiana tabacum
AAA86953.1	U10047	Pisum sativum

SEQ ID NO. 754

BAB21002.1	AB054123	Oryza sativa

SEQ ID NO. 756

CAA65749.1	X97022	Brassica oleracea
AAF66242.1	AF243180	Lycopersicon esculentum
AAD10251.1	AF031195	Triticum aestivum
CAA80963.1	Z25471	Pisum sativum
AAC32448.1	U76296	Spinacia oleracea
CAA10134.1	AJ012693	Cicer arietinum
AAF66243.1	AF243181	Lycopersicon esculentum
CAB65280.1	AJ248323	Medicago sativa subsp. x v
AAC64163.1	AF093537	Zea mays

SEQ ID NO. 757

AAA92677.1	U13736	Pisum sativum
CAA66159.1	X97558	Capsicum annuum
CAA09302.1	AJ010645	Capsicum annuum
AAA34144.1	M67472	Lycopersicon esculentum
CAA62150.1	X90560	Physcomitrella patens
AAB46588.1	U83402	Capsicum annuum
BAA87825.1	AP000815	Oryza sativa
AAF65511.1	AF108889	Capsicum annuum
AAA85157.1	U20297	Solanum tuberosum
AAA85156.1	U20296	Solanum tuberosum
AAA62351.1	U20295	Solanum tuberosum
AAA85155.1	U20294	Solanum tuberosum
AAA33900.1	L18914	Oryza sativa
CAA78288.1	Z12828	Oryza sativa
AAC49583.1	U48692	Triticum aestivum
AAC49582.1	U48691	Triticum aestivum
CAA61980.1	X89890	Bidens pilosa
CAA67054.1	X98404	Capsicum annuum
AAA33083.1	M20729	Chlamydomonas reinhardtii
AAG11418.1	AF292108	Prunus avium
AAF33852.1	AF231026	Oryza sativa
AAA92681.1	U13882	Pisum sativum
AAA33706.1	M80836	Petunia x hybrida
AAA33705.1	M80831	Petunia x hybrida
AAA98933.1	U37936	Oryza sativa
CAA43143.1	X60738	Malus x domestica
CAA78301.1	Z12839	Lilium longiflorum
CAA42423.1	X59751	Daucus carota
AAF73157.1	AF150059	Brassica napus
AAA19571.1	U10150	Brassica napus

AAA87347.1	M88307	Brassica juncea
AAG27432.1	AF295637	Elaeis guineensis
BAA94697.1	AB041712	Chara corallina
BAA94696.1	AB041711	Chara corallina
BAA96536.1	AB044286	Chara corallina
AAC18355.1	AF064456	Oryza sativa subsp. indica
AAA34237.1	L20691	Vigna radiata
CAA52602.1	X74490	Zea mays
CAA54583.1	X77397	Zea mays
AAC49585.1	U49103	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49587.1	U49105	Triticum aestivum
AAC49580.1	U48689	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum

SEQ ID NO. 760

BAA06405.1	D30744	Zea mays
CAC20908.1	AJ131825	Scherffelia dubia

SEQ ID NO. 761

CAB60277.1	AJ002586	Solanum tuberosum
CAA72107.1	Y11220	Solanum tuberosum
BAA92172.1	AB024733	Symplocarpus renifolius
BAB40658.1	AB049998	Oryza sativa
BAA92173.1	AB024734	Symplocarpus renifolius
BAB16385.1	AB042429	Triticum aestivum
BAB16384.1	AB042428	Triticum aestivum
BAB40657.1	AB049997	Oryza sativa

SEQ ID NO. 762

AAF01764.2	AF184277	Glycine max
BAA21017.1	D26578	Daucus carota
AAD37697.1	AF145728	Oryza sativa
CAB67118.1	Y17306	Lycopersicon esculentum
AAF01765.1	AF184278	Glycine max
BAA05624.1	D26575	Daucus carota
BAA93466.1	AB028078	Physcomitrella patens
BAA93465.1	AB028077	Physcomitrella patens
BAA93464.1	AB028076	Physcomitrella patens
BAA05622.1	D26573	Daucus carota
BAA05625.1	D26576	Daucus carota
BAA05623.1	D26574	Daucus carota
AAD37698.1	AF145729	Oryza sativa
BAA93461.1	AB028073	Physcomitrella patens
BAA93467.1	AB028079	Physcomitrella patens
BAA93468.1	AB028080	Physcomitrella patens
BAA93460.1	AB028072	Physcomitrella patens
AAD37699.1	AF145730	Oryza sativa
CAA06717.1	AJ005820	Craterostigma plantagineum
BAA93463.1	AB028075	Physcomitrella patens
CAA65456.2	X96681	Oryza sativa
AAF19980.1	AF211193	Oryza sativa
AAK31270.1	AC079890	Oryza sativa
CAA06728.1	AJ005833	Craterostigma plantagineum
AAD37696.1	AF145727	Oryza sativa

SEQ ID NO. 765

BAA92738.1	AP001389	Oryza sativa
CAC27142.1	AJ132537	Picea abies
BAA23724.1	AB009086	Chlamydomonas sp. W80
CAA10989.1	AJ222784	Hordeum vulgare

SEQ ID NO. 766

CAA32185.1	X14020	Pisum sativum
AAA34114.1	M87839	Nicotiana tabacum
AAA34086.1	M87838	Nicotiana tabacum
AAA34042.1	M58522	Spinacia oleracea

SEQ ID NO. 767

AAA80638.1	U23784	Nicotiana glutinosa
BAA96368.1	AB043976	Panax ginseng
AAF42953.1	AF237624	Perilla frutescens
AAC32133.1	AF051232	Picea mariana
CAA47044.1	X66413	Chlamydomonas reinhardtii
BAA78583.1	AU066500	Chlamydomonas sp. HS-5

SEQ ID NO. 769

BAA23815.1	D67043	Oryza sativa
CAA45022.1	X63428	Panicum miliaceum
BAA04993.1	D25323	Panicum miliaceum
AAA98603.1	L40579	Glycine max
CAA45024.1	X63430	Panicum miliaceum

CAA45023.1	X63429	Panicum miliaceum
AAA33134.1	M92660	Daucus carota
BAA04992.1	D25322	Panicum miliaceum
CAA43779.1	X61577	Medicago sativa
AAB46610.1	L25334	Medicago sativa
AAA33408.1	M92094	Lupinus angustifolius
AAA50160.1	L23875	Lupinus angustifolius
BAA03504.1	D14673	Oryza sativa
CAA63894.1	X94184	Lotus japonicus
AAC50014.1	AF034210	Glycine max
AAC50015.1	AF034210	Glycine max
AAB46611.1	L25335	Medicago sativa
AAA33942.1	L09702	Glycine max
AAB26677.2	S60967	Chloroplast Glycine max
AAC12674.1	AF029898	Lotus corniculatus
CAA42430.1	X59761	Lupinus angustifolius
BAA08106.1	D45076	Panicum miliaceum
AAB68396.1	U89494	Canavalia lineata
CAA04697.1	AJ001360	Plastid Canavalia lineata
BAA23814.1	D67042	Oryza sativa

SEQ ID NO. 770

CAB62555.1	AJ249962	Daucus carota
CAA68912.1	Y07632	Zea mays
CAA65254.1	X96390	Lycopersicon esculentum
CAA56175.1	X79779	Solanum tuberosum
AAF36832.1	AF207745	Triticum aestivum
CAB54856.1	AJ132686	Zea mays
AAD16278.1	AF099095	Samanea saman
CAA71598.1	Y10579	Vicia faba
CAC05489.1	AJ271447	Populus tremula x Populus tremuloides
BAA96150.1	AP002092	Oryza sativa
BAA96192.1	AP002093	Oryza sativa
BAA84085.1	AB032074	Nicotiana paniculata
CAA12645.1	AJ225805	Egeria densa
AAD39492.1	AF145272	Samanea saman
CAC10514.1	AJ299019	Samanea saman
CAC05488.1	AJ271446	Populus tremula x Populus tremuloides
AAF81251.1	AF267755	Mesembryanthemum crystallinum
CAA70894.1	Y09747	Zea mays
CAA70895.1	Y09748	Hordeum vulgare
CAA70896.1	Y09749	Vicia faba
CAA70899.1	Y09752	Secale cereale
CAA70900.1	Y09753	Secale cereale
CAA70897.1	Y09750	Plantago major
AAF33669.1	AF079871	Nicotiana tabacum
AAF33670.1	AF079872	Nicotiana tabacum

SEQ ID NO. 772

AAD33959.1	AF145976	Pisum sativum

SEQ ID NO. 774

CAA98183.1	Z73955	Lotus japonicus
CAA54506.1	X77301	Glycine max
BAA02108.1	D12540	Pisum sativum
AAD48018.1	AF165095	Gossypium hirsutum
CAA98186.1	Z73958	Lotus japonicus
AAD48019.1	AF165096	Gossypium hirsutum
AAB47558.1	U87143	Mesembryanthemum crystallinum
CAA54507.1	X77302	Glycine max
BAA02114.1	D12546	Pisum sativum
CAA98181.1	Z73953	Lotus japonicus
BAA02113.1	D12545	Pisum sativum
BAA06701.1	D31905	Zea mays
BAA02904.1	D13758	Oryza sativa
AAK15703.1	AF327517	Oryza sativa
AAB97114.1	U58853	Glycine max
CAA98180.1	Z73952	Lotus japonicus
CAA89049.1	Z49190	Beta vulgaris
CAA98177.1	Z73949	Lotus japonicus
BAA02112.1	D12544	Pisum sativum
BAA02437.1	D13152	Oryza sativa
CAA98179.1	Z73951	Lotus japonicus
BAA02110.1	D12542	Pisum sativum
BAA02111.1	D12543	Pisum sativum
CAA41966.1	X59276	Oryza sativa
CAA98184.1	Z73956	Lotus japonicus
CAA95859.1	Z71276	Mangifera indica
CAA55865.1	X79278	Medicago sativa
BAA02109.1	D12541	Pisum sativum

BAA84640.1	AB007911	Pisum sativum
CAA98178.1	Z73950	Lotus japonicus
BAA06702.1	D31906	Zea mays
CAA67153.1	X98540	Fagus sylvatica
CAA98182.1	Z73954	Lotus japonicus
AAA34253.1	L08130	Volvox carteri
AAB28535.1	S66160	Oryza sativa
AAB97115.1	U58854	Glycine max
AAA61831.1	L35845	Oryza sativa

SEQ ID NO. 775

CAA47962.1	X67733	Zea mays
AAF34428.1	AF172282	Oryza sativa
BAA94517.1	AP001800	Oryza sativa
BAA94516.1	AP001800	Oryza sativa
AAA33915.1	L27821	Oryza sativa
BAA94529.2	AP001800	Oryza sativa
BAA92954.1	AP001551	Oryza sativa
BAA92953.1	AP001551	Oryza sativa
AAC27489.1	AF077130	Oryza sativa
AAC02535.1	AF044260	Oryza sativa
AAF78021.1	AF238477	Oryza sativa
AAD46916.1	AF164020	Oryza sativa
AAF68398.1	AF237568	Oryza sativa
AAD46420.1	AF100771	Hordeum vulgare
AAC49629.1	U51330	Triticum aestivum
AAC01746.1	AF044489	Oryza sativa
BAB39437.1	AP003338	Oryza sativa
AAF78019.1	AF238475	Oryza sativa
AAF78044.1	AF248493	Oryza sativa
AAF78018.1	AF238474	Oryza sativa
AAD46917.1	AF164021	Oryza sativa
AAF78016.1	AF238472	Oryza sativa
AAD44031.1	AF085166	Hordeum vulgare
AAK21965.1	AY028699	Brassica napus
AAD43962.1	U78762	Triticum aestivum

SEQ ID NO. 776

AAB95118.1	U71244	Brassica rapa

SEQ ID NO. 777

BAA09645.1	D63331	Nicotiana tabacum
BAA11770.1	D83078	Nicotiana tabacum
BAA77679.1	AB027054	Oryza sativa

SEQ ID NO. 778

CAA62261.1	X90727	Brassica napus
AAF80463.1	AF162283	Glycine max
AAB67836.1	U40666	Glycine max
AAG44776.1	AF271796	Glycine max
AAG44765.1	AF271071	Chloroplast Glycine max
CAA62265.1	X90731	Brassica napus
CAA62264.1	X90730	Brassica napus
CAA62266.1	X90732	Brassica napus
CAA62263.1	X90729	Brassica napus
CAA62262.1	X90728	Brassica napus

SEQ ID NO. 779

CAA47056.1	X66428	Hordeum vulgare
AAC26197.1	AF052429	Zea mays
AAK06774.1	AF323725	Chlamydomonas reinhardtii
AAD55563.1	AF110781	Volvox carteri f. nagariensis

SEQ ID NO. 781

BAA25753.1	AB012932	Vigna radiata
BAA75232.1	AB018526	Ipomoea nil

SEQ ID NO. 783

AAD11482.1	U51192	Glycine max
AAD11481.1	U51191	Glycine max
AAA65636.1	L13653	Lycopersicon esculentum
AAA65637.1	L13654	Lycopersicon esculentum
CAA76374.2	Y16776	Spinacia oleracea
BAA03644.1	D14997	Oryza sativa
CAA80502.1	Z22920	Spirodela polyrrhiza
BAA07664.1	D42065	Nicotiana tabacum
BAA07663.1	D42064	Nicotiana tabacum
AAF63024.1	AF244921	Spinacia oleracea
BAA77387.1	AB024437	Scutellaria baicalensis
AAA32676.1	M37637	Arachis hypogaea
CAC21393.1	AJ401276	Zea mays
CAA64413.1	X94943	Lycopersicon esculentum

AAD11483.1	U51193	Glycine max
AAD11484.1	U51194	Glycine max
AAB67737.1	L77080	Stylosanthes humilis
CAA62226.1	X90693	Medicago sativa
AAD37429.2	AF149279	Phaseolus vulgaris
BAA82307.1	AB027753	Nicotiana tabacum
AAD37375.1	AF145349	Glycine max
CAB94692.1	AJ242742	Ipomoea batatas
AAD37427.1	AF149277	Phaseolus vulgaris
AAD37430.1	AF149280	Phaseolus vulgaris
BAA92500.1	AP001383	Oryza sativa
CAA71492.1	Y10466	Spinacia oleracea
CAB67121.1	Y19023	Lycopersicon esculentum
CAA50597.1	X71593	Lycopersicon esculentum
AAB97734.1	AF014502	Glycine max
CAA71494.1	Y10468	Spinacia oleracea
CAC21391.1	AJ401274	Zea mays
AAB41811.1	L36157	Medicago sativa
AAC98519.1	AF007211	Glycine max
AAF63027.1	AF244924	Spinacia oleracea
CAA62615.1	X91232	Mercurialis annua
CAA62227.1	X90694	Medicago sativa
BAA94962.1	AB042103	Asparagus officinalis
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA01950.1	D11337	Vigna angularis
CAA62597.1	X91172	Raphanus sativus
AAC49820.1	AF014469	Oryza sativa
BAA90365.1	AP001081	Oryza sativa
AAF65464.2	AF247700	Oryza sativa
BAA89584.1	AP001073	Oryza sativa
CAA09881.1	AJ011939	Trifolium repens

SEQ ID NO. 784

AAD25300.1	AF088276	Lycopersicon esculentum
CAA63704.1	X93301	Oryza sativa
AAD24966.1	AF109150	Lycopersicon esculentum
AAD25225.1	AF088279	Potamogeton crispus

SEQ ID NO. 785

CAA57913.1	X82577	Brassica napus
AAB38784.1	U72154	Brassica nigra
AAF03675.1	AF149311	Rauvolfia serpentina
BAA11831.1	D83177	Costus speciosus
AAF34650.1	AF221526	Prunus serotina
AAA91166.1	U39228	Prunus avium
CAA64442.1	X94986	Manihot esculenta
AAB22162.1	S35175	Manihot esculenta
AAF04007.1	AF163097	Dalbergia cochinchinensis
AAF28800.1	AF112888	Catharanthus roseus
BAA78708.1	AB003089	Polygonum tinctorium
AAG25897.1	AF170087	Cucurbita pepo
AAC69619.1	AF072736	Pinus contorta
AAB71381.1	U95298	Manihot esculenta
AAD09850.1	U44087	Zea mays
CAA52293.1	X74217	Zea mays
AAD10503.1	U33816	Zea mays
AAA65946.1	U25157	Zea mays
AAB03266.1	U44773	Zea mays
CAA40057.1	X56733	Trifolium repens
AAD02839.1	AF082991	Avena sativa
CAA40058.1	X56734	Trifolium repens
AAC49177.1	U33817	Sorghum bicolor
CAA55196.1	X78433	Avena sativa
AAG00614.1	AF293849	Secale cereale
AAK07429.1	AF321287	Musa acuminata
AAA87339.1	L41869	Hordeum vulgare
CAA79989.2	Z21977	Brassica napus
CAC08209.1	AJ005950	Cicer arietinum
AAA84906.1	U28047	Oryza sativa

SEQ ID NO. 786

BAA13232.1	D87042	Zea mays
BAA12338.1	D84408	Zea mays
AAB49984.1	U90262	Cucurbita pepo
CAA07481.1	AJ007366	Zea mays
AAB70706.1	U82087	Tortula ruralis
AAB80692.1	U69173	Glycine max
AAC49405.1	U08140	Vigna radiata
BAA81749.1	AB017515	Marchantia polymorpha
BAA81751.1	AB017517	Marchantia polymorpha
BAA81750.1	AB017516	Marchantia polymorpha

BAA81748.1	AB017515	Marchantia polymorpha
AAA33443.1	L15390	Zea mays
CAA57156.1	X81393	Oryza sativa
BAA85396.1	AP000615	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
AAA61682.1	L27484	Zea mays
AAC25423.1	AF072908	Nicotiana tabacum
AAG46110.1	AC073166	Oryza sativa
BAA02698.1	D13436	Oryza sativa
BAA13440.1	D87707	Ipomoea batatas
AAB80693.1	U69174	Glycine max
AAD17800.1	AF090835	Mesembryanthemum crystallinum
CAA65500.1	X96723	Medicago sativa
CAA57157.1	X81394	Oryza sativa
CAA39936.1	X56599	Daucus carota
BAA12715.1	D85039	Zea mays
AAA69507.1	U28376	Zea mays
AAD28192.2	AF115406	Solanum tuberosum
AAK26164.1	AY027885	Cucumis sativus
AAF21062.1	AF216527	Dunaliella tertiolecta
AAB88537.1	AF035944	Fragaria x ananassa
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF23900.1	AF194413	Oryza sativa
AAF23901.2	AF194414	Oryza sativa
AAC78558.1	AF030879	Solanum tuberosum
AAC32116.1	AF051211	Picea mariana
CAB46228.1	Y18055	Arachis hypogaea
CAA58750.1	X83869	Daucus carota
AAB47181.1	S82324	Zea mays
BAA12691.1	D84507	Zea mays
BAA22410.1	D38452	Zea mays
BAA12692.1	D84508	Zea mays
AAG01179.1	AF289237	Zea mays
AAC24961.1	AF009337	Tradescantia virginiana
BAA90814.1	AP001168	Oryza sativa
AAC49008.1	U24188	Lilium longiflorum
AAF21450.1	U38446	Nicotiana tabacum

SEQ ID NO. 787

CAA63954.1	X94289	Solanum tuberosum
AAF33824.1	AF223573	Nicotiana tabacum
AAF33823.1	AF223351	Nicotiana tabacum
CAA75546.1	Y15253	Pisum sativum
CAA63893.1	X94183	Solanum tuberosum
AAB03258.1	U41474	Glycine max
AAA74441.1	U25027	Glycine max
CAA65127.1	X95877	Nicotiana rustica
CAA72681.1	Y11931	Nicotiana rustica
CAA63777.1	X93564	Solanum tuberosum
AAD26119.1	AF108123	Brassica napus
AAB03259.1	U41475	Glycine max
AAB03257.1	U41473	Glycine max
AAB41107.1	U85250	Vigna unguiculata
CAC13988.1	AJ291467	Digitaria sanguinalis
AAK01711.1	AF332874	Oryza sativa

SEQ ID NO. 788

AAF34428.1	AF172282	Oryza sativa
BAA94516.1	AP001800	Oryza sativa
BAA94517.1	AP001800	Oryza sativa
AAC23542.1	U20948	Ipomoea trifida
BAA94529.2	AP001800	Oryza sativa
AAA33915.1	L27821	Oryza sativa
CAA73133.1	Y12530	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
AAA33008.1	M97667	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
BAA92836.1	AB032473	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
BAA92837.1	AB032474	Brassica oleracea
BAA07577.2	D38564	Brassica rapa
AAA33000.1	M76647	Brassica oleracea
BAA92954.1	AP001551	Oryza sativa
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
AAA62232.1	U00443	Brassica napus
CAA47962.1	X67733	Zea mays
CAA79355.1	Z18921	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
CAB41879.1	Y18260	Brassica oleracea
AAD46420.1	AF100771	Hordeum vulgare

BAA92953.1	AP001551	Oryza sativa
BAB39437.1	AP003338	Oryza sativa
AAF78019.1	AF238475	Oryza sativa
AAF43400.1	AF230507	Oryza sativa subsp. japonica

SEQ ID NO. 789

CAA99990.1	Z75660	Sesbania rostrata
CAA44632.1	X62820	Glycine max
CAA53728.1	X76122	Antirrhinum majus
AAC61889.1	U24194	Lupinus luteus
AAF88072.1	AF287306	Cicer arietinum
AAD31790.1	AF126107	Lupinus luteus
BAA20411.1	D86386	Catharanthus roseus
AAC61888.1	U24193	Lupinus luteus
AAD31789.1	AF126106	Lupinus luteus
AAC24245.1	U44857	Lupinus luteus
AAD31791.1	AF126108	Lupinus luteus
BAA20425.1	D89635	Nicotiana tabacum
CAA71243.1	Y10161	Chenopodium rubrum
CAA53729.1	X76123	Antirrhinum majus
CAB58998.1	AJ250315	Petunia x hybrida
AAC41681.1	L34207	Petroselinum crispum
CAB81558.1	Z37978	Nicotiana tabacum
CAA81232.1	Z26331	Glycine max
BAA09467.1	D50871	Glycine max
AAC24244.1	U24192	Lupinus luteus
AAD31788.1	AF126105	Lupinus luteus
CAB46644.1	AJ243454	Lycopersicon esculentum
CAA44188.1	X62303	Glycine max
AAA20239.1	U10079	Zea mays
AAA20238.1	U10078	Zea mays
BAB00651.1	AP002804	Oryza sativa
AAB72021.1	U66608	Zea mays
AAB72020.1	U66607	Zea mays
BAA33154.1	AB008189	Pisum sativum
AAB72019.1	U66662	Zea mays
BAA86629.1	AB024987	Oryza sativa
CAA57556.1	X82036	Oryza sativa
AAA20236.1	U10076	Zea mays
CAA55272.1	X78504	Medicago sativa
CAA48675.1	X68741	Medicago sativa
AAC32126.1	AF051225	Picea mariana
CAB46645.1	AJ243455	Lycopersicon esculentum
AAD11475.2	U52520	Pisum sativum
CAA57555.1	X82035	Oryza sativa
CAB60839.1	AJ011108	Lycopersicon esculentum
CAB46642.1	AJ243452	Lycopersicon esculentum
BAA11560.1	D82349	Adiantum capillus-veneris
AAA20237.1	U10077	Zea mays
BAA09465.1	D50869	Glycine max
BAA09466.1	D50870	Glycine max

SEQ ID NO. 790

AAC24504.1	AF041050	Populus tremuloides
CAC36095.1	X69955	Glycine max
AAF37732.1	AF052221	Lolium perenne
BAA08366.2	D49367	Lithospermum erythrorhizon
AAG43823.1	AF212317	Capsicum annuum
AAF91308.1	AF239685	Rubus idaeus
AAF37733.1	AF052222	Lolium perenne
CAA31697.1	X13325	Petroselinum crispum
CAA31696.1	X13324	Petroselinum crispum
AAF37734.1	AF052223	Lolium perenne
AAC24503.1	AF041049	Populus tremuloides
AAF91309.1	AF239686	Rubus idaeus
AAC39366.1	AF008184	Populus x generosa
AAC39365.1	AF008183	Populus x generosa
AAB18637.1	U50845	Nicotiana tabacum
AAB18638.1	U50846	Nicotiana tabacum
BAA07828.1	D43773	Nicotiana tabacum
AAA33842.1	M62755	Solanum tuberosum
AAF91310.1	AF239687	Rubus idaeus
AAD40664.1	AF150686	Solanum tuberosum
AAB42383.1	U39405	Pinus taeda
AAB42382.1	U39404	Pinus taeda
AAA92669.1	U12013	Pinus taeda
AAA92668.1	U12012	Pinus taeda
BAA08365.1	D49366	Lithospermum erythrorhizon
CAA36850.1	X52623	Oryza sativa
AAF73997.2	AF144504	Picea smithiana
AAF73995.2	AF144502	Pinus armandii
AAF73994.2	AF144501	Pinus armandii

AAF73998.2	AF144505	Cathaya argyrophylla
AAD40665.1	AF150687	Solanum tuberosum
AAF73996.2	AF144503	Pinus armandii
CAA49575.1	X69954	Glycine max
AAF74004.2	AF144511	Pseudotsuga sinensis
AAF74016.2	AF144523	Nothotsuga longibracteata
AAF74001.2	AF144508	Pseudotsuga menziesii
AAF74002.2	AF144509	Pseudotsuga sinensis
AAF74019.2	AF144526	Tsuga canadensis
AAF74018.2	AF144525	Tsuga canadensis
AAF74003.2	AF144510	Pseudotsuga sinensis
AAF73999.2	AF144506	Pseudotsuga menziesii
AAF74022.2	AF144529	Cedrus atlantica
AAF73993.2	AF144500	Pinus banksiana
AAF73992.1	AF144499	Pinus banksiana
AAF74007.2	AF144514	Abies firma
AAA64913.1	U23787	Sorghum bicolor
CAB97359.1	AJ278455	Juglans nigra
AAF74000.2	AF144507	Pseudotsuga menziesii

SEQ ID NO. 791

AAB09756.1	U31097	Glycine max

SEQ ID NO. 795

AAG43998.1	AF215837	Apium graveolens var. dulce
CAA47324.1	X66856	Nicotiana tabacum
AAB06594.1	U38651	Medicago truncatula
BAB19864.1	AB052885	Oryza sativa
CAA53192.1	X75440	Chlorella kessleri
AAF74565.1	AF215851	Spinacia oleracea
CAA68813.1	Y07520	Chlorella kessleri
CAA04511.1	AJ001061	Vitis vinifera
CAB07812.1	Z93775	Vicia faba
CAA39036.1	X55349	Chlorella kessleri
AAF74567.1	AF215853	Solanum tuberosum
AAF74566.1	AF215852	Nicotiana tabacum
AAF74568.1	AF215854	Zea mays
AAA79761.1	L08196	Ricinus communis
BAB19863.1	AB052884	Oryza sativa
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA70777.1	Y09590	Vitis vinifera
CAA09419.1	AJ010942	Lycopersicon esculentum
CAB06079.1	Z83829	Picea abies
BAB19862.1	AB052883	Oryza sativa
BAA85398.1	AP000615	Oryza sativa
AAD55054.1	AF173655	Beta vulgaris
CAB52688.1	AJ132223	Lycopersicon esculentum
CAB52690.1	AJ132225	Lycopersicon esculentum

SEQ ID NO. 796

CAA58994.1	X84208	Sinapis alba
CAA76116.1	Y16190	Sinapis alba

SEQ ID NO. 799

AAB61708.1	U93048	Daucus carota
AAG52992.1	U77888	Ipomoea nil
BAA84787.1	AP000559	Oryza sativa
CAC20842.1	AJ250467	Pinus sylvestris
AAB36558.1	U77888	Ipomoea nil
AAK21965.1	AY028699	Brassica napus
CAA61510.1	X89226	Oryza sativa
AAF59906.1	AF197947	Glycine max
AAF59905.1	AF197946	Glycine max
AAG03090.1	AC073405	Oryza sativa
AAC36318.1	AF053127	Malus x domestica
AAA33915.1	L27821	Oryza sativa
AAG00510.1	AF285172	Phaseolus vulgaris
AAF34426.1	AF172282	Oryza sativa
AAD21872.1	AF078082	Phaseolus vulgaris
AAG52994.1	U77888	Ipomoea nil
BAA92954.1	AP001551	Oryza sativa
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA82556.1	AB030083	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAF34428.1	AF172282	Oryza sativa
BAA94529.2	AP001800	Oryza sativa
AAB82755.1	U72725	Oryza longistaminata
AAB93834.1	U82481	Zea mays

SEQ ID NO. 800

CAB38030.1	AJ010201	Glycine max

AAC19381.1	AF068844	Prunus persica

SEQ ID NO. 801

CAB38030.1	AJ010201	Glycine max
AAC19381.1	AF068844	Prunus persica

SEQ ID NO. 802

CAA70968.1	Y09825	Solanum tuberosum
AAD16013.1	AF080542	Nepenthes alata
CAA07563.1	AJ007574	Ricinus communis
CAA10608.1	AJ132228	Ricinus communis
CAA70778.1	Y09591	Vicia faba
CAA70969.1	Y09826	Solanum tuberosum
AAD16014.1	AF080543	Nepenthes alata
CAA72006.1	Y11121	Ricinus communis
AAD16015.1	AF080544	Nepenthes alata
AAF15944.1	AF061434	Vicia faba
CAA92992.1	Z68759	Ricinus communis
AAF15945.1	AF061435	Vicia faba
AAF15946.1	AF061436	Vicia faba
AAB96830.1	U64823	Nicotiana sylvestris
AAB48944.1	U31932	Nicotiana sylvestris
BAA93437.1	AB022783	Oryza sativa
CAB42599.1	AJ238635	Chlorella protothecoides

SEQ ID NO. 803

CAA81210.1	Z26251	Helianthus tuberosus
AAB02721.1	U58629	Helianthus tuberosus
CAC27143.1	AJ132538	Picea abies
AAA79131.1	U10545	Chlamydomonas reinhardtii
CAA55406.1	X78851	Chlamydomonas reinhardtii
AAB40978.1	U22328	Volvox carteri
AAA33029.1	M25528	Mesembryanthemum crystallinum
CAA30978.1	X12446	Pisum sativum
BAA13417.1	D87547	Oryza sativa
AAA21758.1	U14956	Vicia faba
AAA34029.1	M86349	Spinacia oleracea
CAB71293.1	AJ250378	Capsicum annuum
CAA74359.1	Y14032	Nicotiana tabacum
BAA88236.1	AB035644	Zea mays
BAA88237.1	AB035645	Zea mays
BAA20365.1	AB004307	Nicotiana tabacum
BAA07479.1	D38445	Oryza sativa
BAA02248.1	D12815	Oryza sativa
BAA04232.1	D17410	Oryza sativa
BAA90642.1	AP001129	Oryza sativa
BAA85425.1	AP000616	Oryza sativa
BAA04616.1	D17790	Oryza sativa
AAB40034.1	U10418	Zea mays
CAA67796.1	X99419	Pisum sativum
AAK09367.1	AF321525	Pisum sativum
AAK09370.1	AF321528	Pisum sativum
AAK09369.1	AF321527	Pisum sativum
AAK09368.1	AF321526	Pisum sativum

SEQ ID NO. 804

BAA82107.1	AB022693	Nicotiana tabacum
AAC31956.1	AF080595	Pimpinella brachycarpa
AAC49527.1	U48831	Petroselinum crispum
AAD55974.1	AF121353	Petroselinum crispum
BAA77383.1	AB020590	Nicotiana tabacum
CAA88326.1	Z48429	Avena fatua
BAA86031.1	AB026890	Nicotiana tabacum
AAD16139.1	AF096299	Nicotiana tabacum
AAC37515.1	L44134	Cucumis sativus
AAF23898.1	AF193802	Oryza sativa
AAC49529.1	U58540	Petroselinum crispum
AAD16138.1	AF096298	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
BAB16432.1	AB041520	Nicotiana tabacum
BAA77358.1	AB020023	Nicotiana tabacum
CAA88331.1	Z48431	Avena fatua
AAG35658.1	AF204925	Petroselinum crispum
AAD27591.1	AF121354	Petroselinum crispum
AAG35659.1	AF204926	Petroselinum crispum
CAB66338.1	AJ279697	Betula pendula
AAF61864.1	AF193771	Nicotiana tabacum
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 806

CAB52689.1	AJ132224	Lycopersicon esculentum
CAA09419.1	AJ010942	Lycopersicon esculentum

CAB06079.1	Z83829	Picea abies
BAB19864.1	AB052885	Oryza sativa
CAA47324.1	X66856	Nicotiana tabacum
AAA79857.1	L08188	Ricinus communis
AAA79761.1	L08196	Ricinus communis
CAA04511.1	AJ001061	Vitis vinifera
AAB06594.1	U38651	Medicago truncatula
CAA70777.1	Y09590	Vitis vinifera
BAB19863.1	AB052884	Oryza sativa
BAA83554.1	AP000399	Oryza sativa
CAA53192.1	X75440	Chlorella kessleri
CAA68813.1	Y07520	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri
BAB19862.1	AB052883	Oryza sativa
CAB52690.1	AJ132225	Lycopersicon esculentum
CAB52688.1	AJ132223	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris
AAG43998.1	AF215837	Apium graveolens var. dulce
AAF74565.1	AF215851	Spinacia oleracea
AAF74568.1	AF215854	Zea mays
AAF74567.1	AF215853	Solanum tuberosum
AAF74566.1	AF215852	Nicotiana tabacum
AAD37424.1	AF149282	Phaseolus vulgaris
AAD45934.1	AF168773	Betula pendula

SEQ ID NO. 807

AAC17529.1	AF067185	Samanea saman
AAB18227.1	U73466	Mesembryanthemum crystallinum
BAA92260.1	AB030697	Raphanus sativus
BAA32778.1	AB012045	Raphanus sativus
BAA92261.1	AB030698	Raphanus sativus
AAD31846.1	AF133530	Mesembryanthemum crystallinum
AAC16545.1	AF062393	Oryza sativa
AAF65845.1	AF255795	Allium cepa
AAB67868.1	U60147	Beta vulgaris
CAB46351.1	Y18312	Solanum tuberosum
AAC32107.1	AF051202	Picea mariana
AAB67869.1	U60148	Beta vulgaris
AAA86991.1	U18403	Atriplex canescens
AAG30607.1	AF314656	Brassica oleracea
AAB18228.1	U73467	Mesembryanthemum crystallinum
AAG02208.1	AF290201	Solanum chacoense
AAA99274.1	L77969	Spinacia oleracea
CAB07783.1	Z93764	Picea abies
AAA68701.1	U26538	Mesembryanthemum crystalli
AAG23179.1	AF299050	Brassica oleracea
BAA92258.1	AB030695	Raphanus sativus
AAG23180.1	AF299051	Brassica oleracea
AAB61378.1	AF004293	Brassica rapa
BAA92259.1	AB030696	Raphanus sativus
CAB93959.1	AJ289701	Vicia faba
AAB09757.1	U26537	Mesembryanthemum crystalli
BAA32777.1	AB012044	Raphanus sativus

SEQ ID NO. 808

AAK21965.1	AY028699	Brassica napus
BAA92836.1	AB032473	Brassica oleracea
AAB61708.1	U93048	Daucus carota
BAA23676.1	AB000970	Brassica rapa
AAD21872.1	AF078082	Phaseolus vulgaris
CAB41878.1	Y18259	Brassica oleracea
AAA62232.1	U00443	Brassica napus
AAA33000.1	M76647	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
CAA73134.1	Y12531	Brassica oleracea
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
AAF66615.1	AF142596	Nicotiana tabacum
AAF76314.1	AF220603	Lycopersicon esculentum
AAK11568.1	AF318492	Lycopersicon hirsutum
CAA74662.1	Y14286	Brassica oleracea
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAB47422.1	U59318	Lycopersicon esculentum
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
BAA07576.1	D38563	Brassica rapa
AAG16628.1	AY007545	Brassica napus
CAA97692.1	Z73295	Catharanthus roseus
CAA79355.1	Z18921	Brassica oleracea

AAB93834.1	U82481	Zea mays
BAA92837.1	AB032474	Brassica oleracea
AAA33915.1	L27821	Oryza sativa

SEQ ID NO. 809

AAF19196.1	AF206320	Musa acuminata
AAF19195.1	AF206319	Musa acuminata
AAF63756.1	AF243475	Vitis vinifera
CAA70735.1	Y09541	Zinnia elegans
CAA63496.1	X92943	Musa acuminata
AAB71208.1	U63550	Fragaria x ananassa
AAA86241.1	U41472	Medicago sativa
CAA43414.1	X61102	Nicotiana tabacum
CAA47630.1	X67158	Nicotiana tabacum
CAA43413.1	X61101	Nicotiana tabacum
CAA47631.1	X67159	Nicotiana tabacum

SEQ ID NO. 810

AAG49551.1	AF264022	Poa secunda
CAA44598.1	X62724	Hordeum vulgare
AAB88619.1	AF034948	Zea mays
CAA44599.1	X62725	Hordeum vulgare

SEQ ID NO. 813

AAA34122.1	M84466	Nicotiana tabacum
BAA22948.1	AB008200	Nicotiana tabacum
AAA34176.1	M90692	Lycopersicon esculentum
AAF40224.1	AF237955	Rubus idaeus
CAA37129.1	X52953	Glycine max
CAA68036.1	X99705	Triticum aestivum
AAA33389.1	M29232	Ipomoea batatas
AAA34179.2	M83314	Lycopersicon esculentum
BAA21643.1	D30656	Populus kitakamiensis
AAB67733.1	U43338	Citrus limon
BAA95629.1	AB042520	Catharanthus roseus
BAA05643.1	D26596	Camellia sinensis
CAA73065.1	Y12461	Helianthus annuus
BAA24929.1	D83076	Lithospermum erythrorhizon
BAA24928.1	D83075	Lithospermum erythrorhizon
BAA00885.1	D10001	Pisum sativum
AAA84889.1	U39792	Pinus taeda
CAA61198.1	X87946	Oryza sativa
CAA41169.1	X58180	Medicago sativa
BAA00887.1	D10003	Pisum sativum
BAA00886.1	D10002	Pisum sativum
AAA17993.1	M91192	Trifolium subterraneum
AAA33805.1	L11747	Populus x generosa
AAC78457.1	AF036948	Prunus avium
BAA23367.1	D85850	Daucus carota
CAB42793.1	AJ238753	Citrus clementina x Citrus reticulata
AAA99500.1	L36822	Stylosanthes humilis
CAA55075.1	X78269	Nicotiana tabacum
BAA22963.1	D17467	Nicotiana tabacum
BAA22947.1	AB008199	Nicotiana tabacum
CAA57057.1	X81159	Petroselinum crispum
AAG49585.1	AF325496	Ipomoea nil
CAA57056.1	X81158	Petroselinum crispum
CAB42794.1	AJ238754	Citrus clementina x Citrus reticulata
CAA05251.1	AJ002221	Digitalis lanata
BAA07860.1	D43802	Populus kitakamiensis
CAB60719.1	AJ250836	Cicer arietinum
CAA68256.1	X99997	Bromheadia finlaysoniana
AAK15640.1	AF326116	Agastache rugosa
CAA34226.1	X16099	Oryza sativa subsp. japonica
AAF40223.1	AF237954	Rubus idaeus
BAA11459.1	D78640	Ipomoea batatas
BAA06337.1	D30657	Populus kitakamiensis
AAD45384.1	AF165998	Vigna unguiculata
CAA53733.1	X76130	Cucumis melo
AAA51873.1	U16130	Persea americana
BAB19128.1	AB041361	Dianthus caryophyllus
CAA34715.1	X16772	Petroselinum crispum
BAA07861.1	D43803	Populus kitakamiensis

SEQ ID NO. 814

AAC39318.1	AF029858	Sorghum bicolor
AAA19701.1	L24438	Thlaspi arvense
BAB40323.1	AB037244	Asparagus officinalis
AAA32913.1	M32885	Persea americana
BAB40324.1	AB037245	Asparagus officinalis

AAB94589.1	AF022460	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
AAF27282.1	AF122821	Capsicum annuum
AAB94584.1	AF022157	Glycine max
AAB94588.1	AF022459	Glycine max
AAD47832.1	AF166332	Nicotiana tabacum
CAA50312.1	X70981	Solanum melongena
BAA03635.1	D14990	Solanum melongena
CAA50645.1	X71654	Solanum melongena
CAA70576.1	Y09424	Nepeta racemosa
BAB40322.1	AB036772	Triticum aestivum
CAB56503.1	AJ238612	Catharanthus roseus
AAD44150.1	AF124815	Mentha spicata
CAA83941.1	Z33875	Mentha x piperita
AAD56282.1	AF155332	Petunia x hybrida
AAD44152.1	AF124817	Mentha x piperita
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
AAD44151.1	AF124816	Mentha x piperita
AAG44132.1	AF218296	Pisum sativum
AAG14963.1	AF214009	Brassica napus
CAA65580.1	X96784	Nicotiana tabacum
AAG14961.1	AF214007	Brassica napus
AAG14962.1	AF214008	Brassica napus
CAC27827.1	AJ295719	Catharanthus roseus
CAA64635.1	X95342	Nicotiana tabacum
AAB17562.1	U72654	Eustoma grandiflorum

SEQ ID NO. 816

AAD15818.1	AF061107	Zea mays
AAC28907.1	U18349	Phaseolus vulgaris
AAB00686.1	U18348	Phaseolus vulgaris
AAC49219.1	U39860	Oryza sativa
CAB92300.1	AJ251719	Zea mays
CAA07615.1	AJ007709	Gerbera hybrida
AAG25928.1	AF260919	Petunia x hybrida
AAG25927.1	AF260918	Petunia x hybrida
AAC39455.1	AF020545	Petunia x hybrida
AAC49217.1	U39861	Oryza rufipogon
AAC49216.1	U39865	Oryza officinalis
AAC49212.1	U39863	Oryza australiensis
AAC49214.1	U39862	Oryza longistaminata
AAC49213.1	U39864	Oryza eichingeri
AAC49220.1	U39866	Oryza sativa
AAC49218.1	U39867	Oryza rufipogon

SEQ ID NO. 818

CAA04644.1	AJ001270	Phaseolus vulgaris
AAD20634.1	AF126255	Anchusa officinalis
BAA92365.1	AB039746	Spirodela punctata
AAF19821.1	AF200825	Ipomoea batatas
CAA06921.1	AJ006224	Ipomoea batatas
AAF19822.1	AF200826	Ipomoea batatas
AAF19820.1	AF200824	Glycine max
CAA07280.1	AJ006870	Ipomoea batatas
BAA97038.1	AB029086	Tagetes patula
BAA97745.1	AB037887	Lupinus albus
BAA82130.1	AB023385	Lupinus albus
BAA82133.1	AB023388	Lycopersicon esculentum
BAA82131.1	AB023386	Glycine max
BAA82132.1	AB023387	Oryza sativa

SEQ ID NO. 819

AAF76898.1	AF274033	Atriplex hortensis
CAC12822.1	AJ299252	Nicotiana tabacum
AAF63205.1	AF245119	Mesembryanthemum crystallinum
BAA78738.1	AB023482	Oryza sativa
AAC24587.1	AF071893	Prunus armeniaca
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
BAB16083.1	AB036883	Oryza sativa
AAF23899.1	AF193803	Oryza sativa
BAA99376.1	AP002526	Oryza sativa
AAK01089.1	AF298231	Hordeum vulgare

SEQ ID NO. 820

AAF03236.1	AF180143	Glycine max
AAA34309.1	M28059	Triticum aestivum
AAB88617.1	AF034946	Zea mays
AAA34125.1	L23762	Lycopersicon esculentum
AAA64427.1	L29077	Pisum sativum
CAA51821.1	X73419	Lycopersicon esculentum

AAD51109.1	AF176040	Mesembryanthemum crystallinum
AAF73016.1	AF262934	Avicennia marina
AAD42941.1	AF091621	Catharanthus roseus
BAB40310.1	AB026055	Nicotiana tabacum
AAA34310.1	M62720	Triticum aestivum
BAB40311.1	AB026056	Nicotiana tabacum
AAB02168.1	U15971	Oryza sativa
CAA58111.1	X82938	Lycopersicon esculentum
AAA86089.1	U17250	Brassica oleracea
AAG23847.1	AY004247	Lycopersicon esculentum
BAA90392.1	AP001081	Oryza sativa
AAF22280.1	AF165420	Mesembryanthemum crystallinum
AAC12662.1	AF032468	Zea mays
CAA05772.1	AJ002959	Zea mays
AAB63513.1	AF008910	Prunus armeniaca
BAA21006.1	D17786	Oryza sativa
CAA10494.1	AJ131733	Pseudotsuga menziesii

SEQ ID NO. 821

AAF04624.1	AF098672	Brassica oleracea
AAB88615.1	AF034944	Zea mays
AAC67556.1	AF094774	Oryza sativa
AAC61599.1	AF091857	Pimpinella brachycarpa

SEQ ID NO. 822

CAB65313.1	AJ251365	Nicotiana plumbaginifolia

SEQ ID NO. 823

CAA07020.1	AJ006414	Lycopersicon esculentum
AAD02231.1	AF043108	Pisum sativum
CAB61629.1	AJ251298	Oryza sativa
BAA29033.1	AB015599	Coffea arabica
BAA24535.1	AB006692	Nicotiana sylvestris
AAD02232.1	AF043109	Pisum sativum

SEQ ID NO. 826

AAB57845.1	U96718	Selaginella lepidophylla

SEQ ID NO. 827

AAD10215.1	L32560	Chloroplast Pinus sylvestris
AAD10214.1	L32561	Chloroplast Pinus sylvestris
CAA04942.1	AJ001706	Pinus sylvestris
CAA06030.1	AJ003783	Marsilea quadrifolia
CAA55116.1	X78307	Craterostigma plantagineum
AAA33352.1	L26924	Ginkgo biloba
CAB39974.1	AJ133422	Nicotiana tabacum
CAA42901.1	X60343	Hordeum vulgare
AAA87880.1	U45858	Zea mays
AAA87578.1	U45855	Zea mays
CAA51676.1	X73151	Zea mays
AAA33779.1	L07501	Pinus sylvestris
AAB59010.1	U96623	Selaginella lepidophylla
CAA42902.1	X60344	Petroselinum crispum
CAA42905.1	X60347	Magnolia liliiflora
CAA51071.1	X72381	Physcomitrella patens
AAA82047.1	U31676	Oryza sativa
AAA33033.1	J05223	Mesembryanthemum crystallinum
AAA33031.1	M29956	Mesembryanthemum crystallinum
CAA51675.1	X73150	Pisum sativum
AAA33667.1	L07500	Pisum sativum
CAA42903.1	X60345	Ranunculus acris
AAA34077.1	M14419	Nicotiana tabacum
AAA03442.1	U02886	Atriplex nummularia
CAA42904.1	X60346	Petunia x hybrida
CAA42103.1	X59517	Antirrhinum majus
CAA53269.1	X75597	Atriplex nummularia
AAA89207.1	L26922	Taxus baccata
AAA87579.1	U45856	Zea mays
AAA87580.1	U45857	Zea mays
AAB07758.1	U17005	Solanum tuberosum
AAB54003.1	U97257	Lycopersicon esculentum
AAA32956.1	M36650	Hordeum vulgare
AAB51592.1	U93208	Lycopersicon esculentum
AAA33466.1	L13432	Zea mays
AAF64241.1	AF251217	Triticum aestivum
AAA33465.1	L13431	Zea mays
AAA34076.1	M14418	Nicotiana tabacum
AAA84543.1	M55147	Chloroplast Pisum sativum
BAA85402.1	AP000615	Oryza sativa
AAA86855.1	L27668	Chloroplast Chlamydomonas reinhardtii
CAA33455.1	X15408	Zea mays

SEQ ID NO. 828

AAK30205.1	AF349964	Daucus carota
AAB38974.1	U81318	Triticum aestivum
CAA81127.1	Z26042	Anemia phyllitidis
AAF66823.1	AF190655	Nicotiana tabacum
AAF66825.1	AF190657	Nicotiana tabacum
AAF63202.1	AF240679	Cucumis sativus
AAC39368.1	AF043297	Chlamydomonas reinhardtii
AAF66824.1	AF190656	Nicotiana tabacum
AAD37807.1	AF153689	Oryza sativa
AAB61594.1	AF003126	Mesembryanthemum crystallinum
CAC01238.1	AJ292768	Nicotiana plumbaginifolia
AAC49850.1	U90212	Nicotiana tabacum
CAC01237.1	AJ292767	Nicotiana plumbaginifolia
CAB75429.1	AJ272011	Nicotiana plumbaginifolia
AAA79045.1	U34742	Spinacia oleracea
CAA41023.1	X57955	Spinacia oleracea
CAA46234.1	X65118	Nicotiana plumbaginifolia
CAA46233.1	X65117	Nicotiana plumbaginifolia
CAA66479.1	X97905	Vicia faba
CAA06469.1	AJ005286	Hordeum vulgare
CAA11893.1	AJ224324	Hordeum vulgare
BAA22411.1	D38485	Triticum aestivum
CAA11894.1	AJ224325	Hordeum vulgare
AAA33486.1	M74566	Zea mays
CAA57551.1	X82030	Phaseolus vulgaris
AAA33039.1	L15080	Mesembryanthemum crystallinum
AAB71417.1	U81287	Pisum sativum

SEQ ID NO. 829

CAA44863.1	X63178	Zea mays
CAA77988.1	Z11931	Oryza sativa
CAA62918.1	X91808	Oryza sativa
AAC05719.1	AF008122	Eleusine indica
AAA16225.1	U05258	Zea mays
CAA44862.1	X63177	Zea mays
CAA67942.1	X99623	Hordeum vulgare
CAB77672.1	AJ133710	Miscanthus sinensis
CAB77671.1	AJ133709	Miscanthus sinensis
CAA47635.1	X67162	Prunus dulcis
CAA66075.1	X97446	Avena sativa
BAA03955.1	D16504	Chlorella vulgaris
CAB66336.1	AJ279695	Betula pendula
CAA10663.1	AJ132399	Hordeum vulgare
AAC05718.1	AF008121	Eleusine indica
AAA79910.1	U12589	Pisum sativum
CAA33734.1	X15704	Zea mays
CAA06618.1	AJ005598	Eleusine indica
AAC05717.1	AF008120	Eleusine indica
AAG02564.1	AY007250	Daucus carota
AAG16905.1	AF182523	Oryza sativa
CAA33733.1	X15704	Zea mays
AAD10486.1	U76558	Triticum aestivum
CAA69724.1	Y08490	Hordeum vulgare
CAA06619.1	AJ005599	Eleusine indica
CAA48927.1	X69183	Anemia phyllitidis
AAA99438.1	L24546	Volvox carteri
CAA31326.1	X12846	Volvox carteri
CAA62916.1	X91806	Oryza sativa
AAA33095.1	M11447	Chlamydomonas reinhardtii
BAB19779.1	AB052822	Nicotiana tabacum
AAB86649.1	AF032876	Chloromonas sp. ANT1
CAA62917.1	X91807	Oryza sativa
AAB86648.1	AF032877	Chloromonas sp. ANT3
AAA33098.1	M11448	Chlamydomonas reinhardtii
AAB08791.1	U40042	Hordeum vulgare
CAA44861.1	X63176	Zea mays
AAA33518.1	M60171	Zea mays
AAB84298.1	AF030548	Oryza sativa
BAA92148.1	AB038515	Chlorella ellipsoidea
AAB36609.1	U37794	Eucalyptus globulus subsp. bicostata
CAA48928.1	X69184	Anemia phyllitidis
AAD11425.1	AF097662	Mesembryanthemum crystallinum
CAB76917.1	AJ276012	Hordeum vulgare
CAA52158.1	X73980	Zea mays
CAA38613.1	X54844	Pisum sativum
AAB64308.1	U63927	Daucus carota
AAD20178.1	AF059287	Eleusine indica
BAA82638.1	D63137	Zinnia elegans

SEQ ID NO. 830

CAA62476.1	X90990	Solanum tuberosum
CAA66616.1	X97980	Solanum berthaultii
AAF66637.1	AF143505	Lycopersicon esculentum
BAA96593.1	AP002481	Oryza sativa
CAA82993.1	Z30332	Spinacia oleracea
CAA82994.1	Z30333	Mesembryanthemum crystallinum
AAA50304.1	M92989	Pisum sativum
CAA82992.1	Z30331	Mesembryanthemum crystallinum
CAA82991.1	Z30330	Spinacia oleracea
BAB03409.1	AP002816	Oryza sativa
CAB82852.1	Z30329	Mesembryanthemum crystallinum
AAD50584.1	AF089097	Salvia columbariae
AAD50585.1	AF089099	Salvia columbariae
AAD50586.1	AF089100	Salvia columbariae
AAB93859.1	U89678	Lycopersicon esculentum
CAA50374.1	X71057	Nicotiana tabacum
AAD50587.1	AF089101	Salvia columbariae
AAD50588.1	AF089102	Salvia columbariae
AAB93860.1	U89679	Lycopersicon esculentum
AAB93861.1	U89680	Lycopersicon esculentum
AAD50589.1	AF089103	Salvia columbariae
AAB93862.1	U89681	Lycopersicon esculentum
CAA46554.1	X65604	Hordeum vulgare
AAD37166.1	AF132743	Oryza sativa

SEQ ID NO. 832

CAA98160.1	Z73932	Lotus japonicus
BAA76422.1	AB024994	Cicer arietinum
BAA02116.1	D12548	Pisum sativum
CAA69701.1	Y08425	Nicotiana plumbaginifolia
AAA80678.1	U38464	Lycopersicon esculentum
BAA02118.1	D12550	Pisum sativum
AAB97115.1	U58854	Glycine max
CAA51011.1	X72212	Nicotiana tabacum
AAF65510.1	AF108883	Capsicum annuum
AAA80680.1	U38466	Lycopersicon esculentum
CAA98161.1	Z73933	Lotus japonicus
BAA02117.1	D12549	Pisum sativum
CAA98162.1	Z73934	Lotus japonicus
AAA50159.1	L27417	Glycine max
AAB28535.1	S66160	Oryza sativa
CAA98159.1	Z73931	Lotus japonicus
BAA02115.1	D12547	Pisum sativum
CAA66447.1	X97853	Lotus japonicus
AAD10389.1	U35026	Petunia x hybrida
AAA80679.1	U38465	Lycopersicon esculentum
CAA98176.1	Z73948	Lotus japonicus
CAA89021.1	Z49152	Beta vulgaris
CAA98172.1	Z73944	Lotus japonicus
CAA04701.1	AJ001367	Daucus carota
CAA90080.1	Z49900	Pisum sativum
AAD46405.1	AF096249	Lycopersicon esculentum
CAA98174.1	Z73946	Lotus japonicus
CAA90082.1	Z49902	Pisum sativum
CAA49600.1	X69980	Lycopersicon esculentum
CAA98175.1	Z73947	Lotus japonicus
CAA90081.1	Z49901	Pisum sativum
AAB17726.1	U38471	Brassica rapa
AAA34251.1	L08128	Volvox carteri
CAA98173.1	Z73945	Lotus japonicus
CAA89049.1	Z49190	Beta vulgaris
CAA98179.1	Z73951	Lotus japonicus
AAA34253.1	L08130	Volvox carteri
CAA98165.1	Z73937	Lotus japonicus
AAA63902.1	U22433	Zea mays
AAA90955.1	U32185	Glycine max

SEQ ID NO. 833

BAA76902.1	AB025968	Glycyrrhiza glabra
BAA23533.1	D89619	Pisum sativum
BAA33460.1	AB009029	Panax ginseng
AAG44096.1	AF216755	Abies magnifica
BAA85266.1	AB033334	Luffa cylindrica
BAA86931.1	AB025344	Olea europaea
CAA75588.1	Y15366	Medicago truncatula

SEQ ID NO. 834

CAB89179.1	AJ245479	Brassica napus subsp. napus
BAA92836.1	AB032473	Brassica oleracea
BAA92837.1	AB032474	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa

SEQ ID NO. 835

CAB43505.1	AJ239051	Cicer arietinum
BAA22422.1	AB001379	Glycyrrhiza echinata
BAA74465.1	AB022732	Glycyrrhiza echinata
CAA10067.1	AJ012581	Cicer arietinum
CAB41490.1	AJ238439	Cicer arietinum
BAA93634.1	AB025016	Lotus japonicus
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
CAA65580.1	X96784	Nicotiana tabacum
CAB56742.1	AJ249800	Cicer arietinum
AAA32913.1	M32885	Persea americana
BAA12159.1	D83968	Glycine max
AAD56282.1	AF155332	Petunia x hybrida
AAB94590.1	AF022461	Glycine max
CAA64635.1	X95342	Nicotiana tabacum
BAA13076.1	D86351	Glycine max
AAG44132.1	AF218296	Pisum sativum
AAG09208.1	AF175278	Pisum sativum
AAC49188.2	U29333	Pisum sativum
AAD38930.1	AF135485	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
CAA70576.1	Y09424	Nepeta racemosa
AAB94587.1	AF022458	Glycine max
AAC39454.1	AF014802	Eschscholzia californica
BAA92894.1	AB006790	Petunia x hybrida
BAA84072.1	AB028152	Torenia hybrida
CAB56743.1	AJ249801	Cicer arietinum
AAB17562.1	U72654	Eustoma grandiflorum
BAA74466.1	AB022733	Glycyrrhiza echinata
BAA22423.1	AB001380	Glycyrrhiza echinata

SEQ ID NO. 836

AAB28535.1	S66160	Oryza sativa

SEQ ID NO. 839

BAA12064.1	D83696	Nicotiana sylvestris
BAA05170.1	D26182	Nicotiana sylvestris
AAG23220.1	AF310215	Sorghum bicolor
AAC50020.1	AF005359	Nicotiana glutinosa
CAA40862.1	X57662	Sorghum bicolor
AAA75104.1	U32310	Triticum aestivum
BAA03741.1	D16204	Nicotiana sylvestris
CAA88558.1	Z48624	Hordeum vulgare
BAA03743.1	D16206	Nicotiana sylvestris
BAA03742.1	D16205	Nicotiana sylvestris
AAA59213.1	L31377	Sinapis alba
AAA59212.1	L31374	Sinapis alba
AAB63582.1	AF009004	Pelargonium x hortorum
AAB63581.1	AF009003	Pelargonium x hortorum
BAA92156.1	AB007819	Citrus unshiu
CAA11893.1	AJ224324	Hordeum vulgare
CAC01238.1	AJ292768	Nicotiana plumbaginifolia
AAD48471.1	AF169205	Glycine max
CAA05728.1	AJ002893	Oryza sativa
CAA05729.1	AJ002894	Oryza sativa
AAB88616.1	AF034945	Zea mays
AAC61787.1	AF031933	Euphorbia esula
AAK01176.1	AF315811	Triticum aestivum
AAC49850.1	U90212	Nicotiana tabacum
AAB07749.1	U49482	Hordeum vulgare
CAA40863.1	X57663	Sorghum bicolor
AAB63589.1	AF009411	Oryza sativa
AAC61786.1	AF036339	Euphorbia esula

SEQ ID NO. 842

CAA04385.1	AJ000885	Brassica napus
CAA06271.2	AJ004997	Lycopersicon esculentum
CAB46492.1	AJ243340	Lycopersicon esculentum
AAF62182.1	AF247164	Oryza sativa
AAF32410.1	AF230277	Triphysaria versicolor
AAC63088.1	U82123	Lycopersicon esculentum
AAD13632.1	AF059488	Lycopersicon esculentum
AAF35900.1	AF230331	Zinnia elegans
AAC33529.1	U93167	Prunus armeniaca
AAG13982.1	AF297521	Prunus avium
BAB19676.1	AB029083	Prunus persica
AAF35901.1	AF230332	Zinnia elegans
CAC19184.1	AJ291817	Cicer arietinum
AAF21101.1	AF159563	Fragaria x ananassa
AAC33530.1	AF038815	Prunus armeniaca

AAB37746.1	U30382	Cucumis sativus
AAD47901.1	AF085330	Pinus taeda
AAF32409.1	AF230276	Triphysaria versicolor
AAG13983.1	AF297522	Prunus avium
AAC39512.1	AF043284	Gossypium hirsutum
AAB40637.1	U64893	Pinus taeda
AAC96081.1	AF049354	Nicotiana tabacum
AAB40634.1	U64890	Pinus taeda
AAB40635.1	U64891	Pinus taeda
AAB40636.1	U64892	Pinus taeda
AAC64201.1	AF096776	Lycopersicon esculentum
CAB43197.1	AJ239068	Lycopersicon esculentum
AAB81662.1	U85246	Oryza sativa
AAD49956.1	AF167360	Rumex palustris
AAC96080.1	AF049353	Nicotiana tabacum
AAF17570.1	AF202119	Marsilea quadrifolia
AAF35902.1	AF230333	Zinnia elegans
AAG32921.1	AF184233	Lycopersicon esculentum
AAB38074.1	U30477	Oryza sativa
AAF32411.1	AF230278	Triphysaria versicolor
AAF17571.1	AF202120	Regnellidium diphyllum
AAF62181.1	AF247163	Oryza sativa
CAC19183.1	AJ291816	Cicer arietinum
AAD13633.1	AF059489	Lycopersicon esculentum
AAF62180.1	AF247162	Oryza sativa
BAB32732.1	AB049406	Eustoma grandiflorum
CAC06433.1	AJ276007	Festuca pratensis
AAG01875.1	AF291659	Striga asiatica
AAC96077.1	AF049350	Nicotiana tabacum
AAC96079.1	AF049352	Nicotiana tabacum
CAB65694.1	AJ270960	Lycopersicon esculentum
AAG32920.1	AF184232	Lycopersicon esculentum
AAC96078.1	AF049351	Nicotiana tabacum
AAG01873.1	AF291657	Striga asiatica

SEQ ID NO. 844

AAD19957.1	AF109156	Datisca glomerata

SEQ ID NO. 845

AAD19957.1	AF109156	Datisca glomerata

SEQ ID NO. 846

AAD46491.1	AF135014	Zea mays
BAA90623.1	AP001129	Oryza sativa
AAA52202.1	U16254	Zea mays
BAA77024.1	AB026124	Lithospermum erythrorhizon

SEQ ID NO. 848

CAC24691.1	AJ132363	Brassica juncea
AAG17172.1	AF190881	Populus tremula x Populus tremuloides
AAC39514.1	AF056027	Oryza sativa

SEQ ID NO. 849

AAG22044.1	AF305783	Pisum sativum
AAF00610.1	AF156781	Dolichos biflorus
AAG32959.1	AF207687	Glycine soja
AAG32960.1	AF207688	Glycine soja
AAF00609.1	AF156780	Lotus japonicus
AAD31285.1	AF139807	Dolichos biflorus
AAF00611.1	AF156782	Medicago sativa
BAB18896.1	AB038669	Pisum sativum
BAB18895.1	AB038668	Pisum sativum
BAB18894.1	AB038555	Pisum sativum
BAB18893.1	AB038554	Pisum sativum
BAB18900.1	AB027614	Pisum sativum
BAB40230.1	AB027613	Pisum sativum
BAB18890.1	AB023621	Pisum sativum
BAA75506.1	AB022319	Pisum sativum
BAA89275.1	AB027616	Pisum sativum
BAB40231.1	AB027615	Pisum sativum
AAB02720.1	U58597	Solanum tuberosum
BAB18891.1	AB030444	Pisum sativum
BAB18892.1	AB030445	Pisum sativum

SEQ ID NO. 857

AAG43988.1	AF215823	Zea mays
BAB19052.1	AB044537	Oryza sativa
AAF73828.1	AF162665	Oryza sativa
BAA96793.1	AB030939	Oryza sativa
BAA96794.1	AB037421	Oryza sativa
AAA34025.1	M31480	Spinacia oleracea

AAB41696.1	U69142	Spinacia oleracea
BAB18544.1	AB043540	Avicennia marina
CAA71003.1	Y09876	Nicotiana tabacum
CAA41377.1	X58463	Beta vulgaris
CAA49425.1	X69770	Atriplex hortensis
AAB70010.1	AF017150	Amaranthus hypochondriacus
CAA41376.1	X58462	Beta vulgaris
AAB58165.1	AF000132	Amaranthus hypochondriacus
BAA21098.1	AB001348	Oryza sativa
BAB18543.1	AB043539	Avicennia marina
AAC03055.1	AF045770	Oryza sativa
CAA53076.1	X75327	Pisum sativum
BAA05466.1	D26448	Hordeum vulgare
AAF08296.1	AF196292	Apium graveolens
AAB47571.1	U87848	Nicotiana plumbaginifolia
AAG43027.1	AF323586	Oryza sativa
AAB33843.1	S77096	Brassica napus
CAA53075.1	X75326	Zea mays

SEQ ID NO. 858

AAB41812.1	L36158	Medicago sativa
CAA71495.1	Y10469	Spinacia oleracea
CAA09881.1	AJ011939	Trifolium repens
CAA62228.1	X90695	Medicago sativa
AAA98491.1	L36981	Petroselinum crispum
AAB02926.1	U59284	Linum usitatissimum
BAA77387.1	AB024437	Scutellaria baicalensis
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
CAA71488.1	Y10462	Spinacia oleracea
BAA01950.1	D11337	Vigna angularis
BAA14143.1	D90115	Armoracia rusticana
CAA71490.1	Y10464	Spinacia oleracea
CAB94692.1	AJ242742	Ipomoea batatas
BAA92497.1	AP001383	Oryza sativa
AAC36707.1	AF078691	Manihot esculenta
BAA92422.1	AP001366	Oryza sativa
CAA62226.1	X90693	Medicago sativa
AAF63024.1	AF244921	Spinacia oleracea
AAA32676.1	M37637	Arachis hypogaea
BAA11853.1	D83225	Populus nigra
CAC21393.1	AJ401276	Zea mays
AAA65636.1	L13653	Lycopersicon esculentum
CAB67121.1	Y19023	Lycopersicon esculentum
CAA62227.1	X90694	Medicago sativa
CAA50597.1	X71593	Lycopersicon esculentum
AAD37376.1	AF145350	Glycine max
AAB67737.1	L77080	Stylosanthes humilis
CAA71489.1	Y10463	Spinacia oleracea
CAA71496.1	Y10470	Spinacia oleracea
CAA71494.1	Y10468	Spinacia oleracea
BAA06334.1	D30652	Populus kitakamiensis
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
BAA94962.1	AB042103	Asparagus officinalis
CAA80502.1	Z22920	Spirodela polyrrhiza
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
BAA11852.1	D83224	Populus nigra
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
BAA07241.1	D38051	Populus kitakamiensis
AAD11481.1	U51191	Glycine max
AAC98519.1	AF007211	Glycine max
AAA32973.1	M73234	Hordeum vulgare
AAB47602.1	L07554	Linum usitatissimum
AAB41810.1	L36156	Medicago sativa
AAF63027.1	AF244924	Spinacia oleracea
AAA34108.1	J02979	Nicotiana tabacum
AAD43561.1	AF155124	Gossypium hirsutum

SEQ ID NO. 859

CAA06339.1	AJ005082	Cyamopsis tetragonoloba
AAA86532.1	U31544	Pisum sativum
CAA06338.1	AJ005081	Cyamopsis tetragonoloba
CAC14890.1	AJ295156	Phragmites australis
CAB61752.1	AJ275318	Cicer arietinum
BAB40967.1	AB059568	Pisum sativum
AAB68605.1	U82433	Prunus armeniaca

SEQ ID NO. 860

AAF98390.1	AF287143	Brassica napus

BAA93039.1	AB033758	Citrus unshiu
AAF61647.1	AF190634	Nicotiana tabacum
BAA89009.1	AB027455	Petunia x hybrida
AAA59054.1	L34847	Zea mays
BAA36423.1	AB013598	Verbena x hybrida
BAA36421.1	AB013596	Perilla frutescens
AAF17077.1	AF199453	Sorghum bicolor
BAA36422.1	AB013597	Perilla frutescens
BAA83484.1	AB031274	Scutellaria baicalensis
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
AAD21086.1	AF127218	Forsythia x intermedia
CAB56231.1	Y18871	Dorotheanthus bellidiformis
BAA19659.1	AB002818	Perilla frutescens
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
BAA90787.1	AB038248	Ipomoea batatas
AAB86473.1	AF028237	Ipomoea purpurea
BAA12737.1	D85186	Gentiana triflora
BAA89008.1	AB027454	Petunia x hybrida

SEQ ID NO. 861

AAD10386.1	U72255	Oryza sativa
BAA89481.1	AB029462	Salix gilgiana
CAB85903.1	AJ251646	Pisum sativum
CAA49513.1	X69887	Brassica napus
AAA90953.1	U30323	Triticum aestivum
CAA82271.1	Z28697	Nicotiana tabacum
CAA30261.1	X07280	Nicotiana plumbaginifolia
AAA51643.1	M23120	Nicotiana plumbaginifolia
AAA34078.1	M63634	Nicotiana plumbaginifolia
AAB82772.2	AF001523	Musa acuminata
AAF08679.1	AF004838	Musa acuminata
AAD10383.1	U72252	Oryza sativa
AAD28732.1	AF112965	Triticum aestivum
AAA63539.1	M60402	Nicotiana tabacum
AAA63541.1	M59442	Nicotiana tabacum
AAA63540.1	M60403	Nicotiana tabacum
AAA32939.1	M62907	Hordeum vulgare
AAC14399.1	AF030771	Hordeum vulgare
AAA87456.1	U22147	Hevea brasiliensis
BAA77784.1	AB027429	Oryza sativa
BAA77785.1	AB027430	Oryza sativa
CAB91554.1	AJ277900	Vitis vinifera
AAD10381.1	U72250	Oryza sativa
AAA33946.1	M37753	Glycine max
AAD33881.1	AF141654	Nicotiana tabacum
AAB86541.1	AF030166	Oryza sativa
AAD10384.1	U72253	Oryza sativa
CAB38443.1	AJ133470	Hevea brasiliensis
AAB03501.1	U41323	Glycine max
AAA18928.1	U01901	Solanum tuberosum
AAA88794.1	U01900	Solanum tuberosum
AAC19114.1	AF067863	Solanum tuberosum
AAG24921.1	AF311749	Hevea brasiliensis
CAA03908.1	AJ000081	Citrus sinensis
CAA37289.1	X53129	Phaseolus vulgaris
CAA57255.1	X81560	Nicotiana tabacum

SEQ ID NO. 862

CAA08798.1	AJ009720	Solanum tuberosum
AAK28810.1	AF310964	Linum usitatissimum
AAA50763.1	U15605	Nicotiana glutinosa
AAK28812.1	AF310968	Linum usitatissimum
AAK28806.1	AF310960	Linum usitatissimum
AAK28811.1	AF310966	Linum usitatissimum
AAG09951.1	AF175388	Glycine max
AAK28809.1	AF310962	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum

AAK28805.1	AF310960	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
AAK28804.1	AF310959	Linum usitatissimum
CAC35321.1	AJ310150	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
AAG09953.1	AF175398	Glycine max
CAC35332.1	AJ310157	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35330.1	AJ310155	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35326.1	AJ310151	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
AAG09952.1	AF175389	Glycine max
AAG43546.1	AF211528	Nicotiana tabacum
AAD25967.1	AF093640	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25966.1	AF093639	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25965.1	AF093638	Linum usitatissimum
AAB47618.1	U73916	Linum usitatissimum
CAA08797.1	AJ009719	Solanum tuberosum
AAD25968.1	AF093641	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAA91022.1	U27081	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
AAG01052.1	AF175395	Glycine max

SEQ ID NO. 863

AAD25300.1	AF088276	Lycopersicon esculentum
CAA63704.1	X93301	Oryza sativa
AAD24966.1	AF109150	Lycopersicon esculentum
AAD25225.1	AF088279	Potamogeton crispus

SEQ ID NO. 864

AAC12662.1	AF032468	Zea mays
CAA05772.1	AJ002959	Zea mays
AAA34310.1	M62720	Triticum aestivum
AAF73016.1	AF262934	Avicennia marina
BAB40310.1	AB026055	Nicotiana tabacum
BAB40311.1	AB026056	Nicotiana tabacum
AAA34125.1	L23762	Lycopersicon esculentum
AAB88617.1	AF034946	Zea mays
CAA51821.1	X73419	Lycopersicon esculentum
AAD51109.1	AF176040	Mesembryanthemum crystallinum
AAA64427.1	L29077	Pisum sativum
AAD42941.1	AF091621	Catharanthus roseus
AAB02168.1	U15971	Oryza sativa
BAA90392.1	AP001081	Oryza sativa
AAB63513.1	AF008910	Prunus armeniaca
AAA86089.1	U17250	Brassica oleracea
CAA10494.1	AJ131733	Pseudotsuga menziesii
CAA58111.1	X82938	Lycopersicon esculentum
AAG23847.1	AY004247	Lycopersicon esculentum
AAF22280.1	AF165420	Mesembryanthemum crystallinum
AAA34309.1	M28059	Triticum aestivum
BAA21006.1	D17786	Oryza sativa
AAF03236.1	AF180143	Glycine max
AAC32141.1	AF051240	Picea mariana

SEQ ID NO. 865

CAA65735.1	X97012	Solanum tuberosum

SEQ ID NO. 866

CAA63056.1	X92075	Solanum tuberosum
AAF15291.1	AF201458	Medicago sativa
CAA43167.1	X60755	Cicer arietinum

SEQ ID NO. 867

AAD02558.1	AF049933	Petunia x hybrida

SEQ ID NO. 870

CAA55047.1	X78213	Parthenium argentatum
CAA60251.1	X86553	Zea mays
AAD11459.1	U62748	Zea mays
AAC49360.1	U29383	Zea mays
AAB71080.1	U62753	Zea mays
AAD11446.1	U62749	Zea mays
AAD11447.1	U62750	Zea mays
AAA91168.1	U40147	Zea mays
AAB71079.1	U62752	Zea mays
AAB71078.1	U62751	Zea mays
BAA92988.1	AP001550	Oryza sativa
CAA47042.1	X66411	Chlamydomonas reinhardtii
AAB63814.1	L46848	Glycine max

SEQ ID NO. 872

CAB40743.1	AJ011885	Solanum tuberosum
CAB40746.1	AJ011888	Solanum tuberosum
CAB40748.1	AJ011890	Solanum tuberosum
AAD30186.1	AF076679	Triticum aestivum
AAD30187.1	AF076680	Aegilops tauschii
BAA82348.1	AB029548	Phaseolus vulgaris
CAA56319.1	X80009	Pisum sativum
CAB40747.1	AJ011889	Solanum tuberosum
CAA03846.1	AJ000004	Solanum tuberosum
BAA03738.1	D16201	Oryza sativa
AAG27623.1	AF286319	Triticum aestivum
CAA72154.1	Y11282	Triticum aestivum
AAK26821.1	AF338431	Aegilops tauschii
AAK26822.1	AF338432	Triticum aestivum
AAC33764.1	AF072725	Zea mays
AAA18571.1	L08065	Zea mays
BAA82828.1	AB023498	Oryza sativa
AAC69753.1	AF064560	Hordeum vulgare
CAA56320.1	X80010	Pisum sativum
AAC69754.1	AF064561	Hordeum vulgare
AAC36471.1	AF072724	Zea mays
AAA82735.1	U17897	Zea mays
AAD50279.2	AF169833	Sorghum bicolor
BAA01854.1	D11081	Zea mays
CAA49463.1	X69805	Solanum tuberosum
CAA70038.1	Y08786	Solanum tuberosum
AAB17086.1	U66376	Triticum aestivum
AAB67316.1	U65948	Zea mays
BAB40334.1	AB042937	Ipomoea batatas
BAA01584.1	D10752	Oryza sativa
AAD28284.1	AF136268	Oryza sativa subsp. japoni
BAA01616.1	D10838	Oryza sativa
BAA01855.1	D11082	Oryza sativa
CAB40981.1	AJ237897	Triticum aestivum
CAB40979.1	AJ237897	Triticum aestivum
CAB40980.1	AJ237897	Triticum aestivum
AAG27622.1	AF286318	Triticum aestivum
CAA54308.1	X77012	Manihot esculenta
CAA72987.1	Y12320	Triticum aestivum
AAG27621.1	AF286317	Triticum aestivum
BAA82349.1	AB029549	Phaseolus vulgaris
AAB61925.1	AF002820	Triticum aestivum
CAB40749.1	AJ011891	Solanum tuberosum
CAB40745.1	AJ011887	Solanum tuberosum
CAB40744.1	AJ011886	Solanum tuberosum
BAA85762.1	AB028067	Nicotiana tabacum
CAA49371.1	X69713	Manihot esculenta
BAB40335.1	AB042940	Ipomoea batatas
CAA49370.1	X69712	Manihot esculenta
AAC72336.1	AF064563	Hordeum vulgare

SEQ ID NO. 873

AAA19571.1	U10150	Brassica napus
AAD10244.1	AF030032	Phaseolus vulgaris
AAA85157.1	U20297	Solanum tuberosum
AAA85156.1	U20296	Solanum tuberosum
AAA62351.1	U20295	Solanum tuberosum
AAA85155.1	U20294	Solanum tuberosum
AAA92681.1	U13882	Pisum sativum
CAA78301.1	Z12839	Lilium longiflorum
AAD10246.1	AF030034	Phaseolus vulgaris
AAC49587.1	U49105	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49585.1	U49103	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum

AAC49580.1	U48689	Triticum aestivum
AAC49579.1	U48688	Triticum aestivum
AAC49578.1	U48242	Triticum aestivum
CAA78287.1	Z12827	Oryza sativa
AAA33900.1	L18914	Oryza sativa
CAA78288.1	Z12828	Oryza sativa
AAA16320.1	L14071	Bryonia dioica
AAC49583.1	U48692	Triticum aestivum

SEQ ID NO. 874

AAD13031.1	AF097938	Populus tremula x Populus tremuloides
AAK18846.1	AC082645	Oryza sativa
CAB60127.1	AJ250769	Pisum sativum
AAC50049.1	U89342	Zea mays
AAC50048.1	U89341	Zea mays
CAB93681.1	AJ240054	Solanum tuberosum
AAB41895.1	U84888	Mesembryanthemum crystallinum
CAB60128.1	AJ250770	Pisum sativum
CAB93680.1	AJ240053	Solanum tuberosum
CAB60109.1	AJ250771	Brassica napus

SEQ ID NO. 875

CAA73848.1	Y13437	Oryza sativa
BAA92966.1	AP001551	Oryza sativa
CAA58594.1	X83619	Petunia x hybrida
BAA92214.1	AP001278	Oryza sativa
BAB40983.1	AB059621	Oryza sativa
CAA54803.1	X77763	Nicotiana tabacum
CAA48474.1	X68411	Medicago sativa
CAA48472.1	X68409	Medicago sativa
CAA48473.1	X68410	Medicago sativa
CAA69899.1	Y08607	Nicotiana tabacum
CAA11860.1	AJ224163	Nicotiana tabacum
CAA73214.1	Y12674	Brassica napus
CAA05329.1	AJ002315	Nicotiana tabacum
CAA11862.1	AJ224165	Petunia x hybrida
CAA58595.1	X83620	Petunia x hybrida
CAA11861.1	AJ224164	Petunia x hybrida
CAA05328.1	AJ002314	Nicotiana tabacum
CAC08564.1	AJ295939	Medicago sativa
CAA67554.1	X99100	Trifolium repens
CAA72330.1	Y11591	Ricinus communis
CAA10288.1	AJ131048	Cicer arietinum
CAA72291.1	Y11527	Oryza sativa
CAA58760.1	X83879	Nicotiana tabacum
CAB37188.1	AJ224336	Medicago sativa
AAF65766.1	AF242308	Euphorbia esula
CAA47099.1	X66469	Medicago sativa
AAB41548.1	L07042	Medicago sativa
AAD37790.1	AF149424	Ipomoea batatas
AAF23902.1	AF194415	Oryza sativa
CAA50036.1	X70703	Pisum sativum
CAC13967.1	AJ250311	Oryza sativa
BAA09600.1	D61377	Nicotiana tabacum
AAD52659.1	AF177392	Oryza sativa
AAK01710.1	AF332873	Oryza sativa
AAG40579.1	AF216315	Oryza sativa
CAA58761.1	X83880	Nicotiana tabacum
CAA56314.1	X79993	Avena sativa
AAF73236.1	AF153061	Pisum sativum
AAF23903.1	AF194416	Oryza sativa
CAA57721.1	X82270	Medicago sativa
CAA57719.1	X82268	Medicago sativa
CAC15504.1	AJ297917	Lycopersicon esculentum
CAA49592.1	X69971	Nicotiana tabacum
CAA73323.1	Y12785	Petroselinum crispum
AAF73257.1	AF154329	Pisum sativum
AAG40580.1	AF216316	Oryza sativa
AAA33479.1	M60526	Zea mays

SEQ ID NO. 876

AAG13131.1	AF193791	Fragaria x ananassa
AAB40530.1	U38199	Oryza sativa
BAB08208.1	AP002539	Oryza sativa
BAA96769.1	AP002521	Oryza sativa
AAA90948.1	U27350	Oryza sativa
AAG22488.1	AF195868	Vitis vinifera
CAA57447.1	X81854	Nicotiana tabacum
CAA42120.1	X59546	Zea mays
CAA35589.1	X17555	Zea mays
CAA91444.1	Z66543	Pisum sativum

CAA91445.1	Z66544	Pisum sativum
AAA68290.1	U07339	Oryza sativa
AAC49442.1	U26660	Oryza sativa
CAA57448.1	X81855	Nicotiana tabacum
AAA68289.1	U07338	Oryza sativa
CAB61763.1	AJ251246	Saccharum officinarum
CAA79819.1	Z21722	Zea mays
BAA03354.1	D14457	Zea mays
CAA63404.1	X92743	Oryza sativa
CAA79818.1	Z21721	Zea mays
BAA03353.1	D14456	Zea mays

SEQ ID NO. 878

AAC61805.1	U28007	Lycopersicon esculentum
AAF91336.1	AF249317	Glycine max
AAF91337.1	AF249318	Glycine max
AAC27894.1	AF023164	Zea mays
AAG16628.1	AY007545	Brassica napus
AAC27895.1	AF023165	Zea mays
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
AAG25966.1	AF302082	Nicotiana tabacum
BAA78764.1	AB023482	Oryza sativa
AAB09771.1	U67422	Zea mays
AAF66615.1	AF142596	Nicotiana tabacum
CAB51834.1	00069	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAK11566.1	AF318490	Lycopersicon hirsutum
AAK11567.1	AF318491	Lycopersicon hirsutum
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
AAC36318.1	AF053127	Malus x domestica
BAA92836.1	AB032473	Brassica oleracea
CAB51836.1	AJ243961	Oryza sativa

SEQ ID NO. 879

AAC61805.1	U28007	Lycopersicon esculentum
AAF91336.1	AF249317	Glycine max
AAF91337.1	AF249318	Glycine max
AAG16628.1	AY007545	Brassica napus
AAC27894.1	AF023164	Zea mays
AAC27895.1	AF023165	Zea mays
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAG25966.1	AF302082	Nicotiana tabacum
BAA78764.1	AB023482	Oryza sativa
AAB09771.1	U67422	Zea mays
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAF66615.1	AF142596	Nicotiana tabacum
CAA97692.1	Z73295	Catharanthus roseus
CAB51834.1	00069	Oryza sativa
AAB47421.1	U59316	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
CAB51836.1	AJ243961	Oryza sativa
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAK11566.1	AF318490	Lycopersicon hirsutum
AAC36318.1	AF053127	Malus x domestica
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
AAK11567.1	AF318491	Lycopersicon hirsutum

SEQ ID NO. 880

AAA80499.1	U20594	Lycopersicon esculentum
CAA54314.1	X77015	Solanum tuberosum
CAA48038.1	X67845	Solanum tuberosum
AAC49457.1	U50152	Lycopersicon esculentum
AAC49456.1	U50151	Lycopersicon esculentum
AAA80498.1	U20593	Lycopersicon esculentum

CAA68143.1	X99825	Petroselinum crispum
BAA90521.1	AB037678	Phaseolus vulgaris
SEQ ID NO. 881		
AAG17470.1	AF123609	Triticum aestivum
AAK31592.1	AY029178	Brassica rapa subsp. pekinensis
AAG33645.1	AF092917	Vicia sativa
AAD10204.1	AF030260	Vicia sativa
CAB41474.1	AJ238402	Catharanthus roseus
AAB94586.1	AF022457	Glycine max
AAD56282.1	AF155332	Petunia x hybrida
AAA32913.1	M32885	Persea americana
AAA17732.1	L19074	Catharanthus roseus
BAA12159.1	D83968	Glycine max
AAC32274.1	AF081575	Petunia x hybrida
AAG09208.1	AF175278	Pisum sativum
CAA50155.1	X70824	Solanum melongena
AAC49188.2	U29333	Pisum sativum
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
BAA13076.1	D86351	Glycine max
AAD03415.1	AF069494	Sinapis alba
AAG14961.1	AF214007	Brassica napus
AAB94590.1	AF022461	Glycine max
AAG14962.1	AF214008	Brassica napus
AAF27282.1	AF122821	Capsicum annuum
AAB94588.1	AF022459	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
BAA22422.1	AB001379	Glycyrrhiza echinata
SEQ ID NO. 882		
CAC09580.1	AJ298992	Fagus sylvatica
AAA34002.1	M67449	Glycine max
AAK11734.1	AY027437	Arachis hypogaea
CAA06334.1	AJ005077	Lycopersicon esculentum
AAG31141.1	AF305911	Oryza sativa
AAD46406.1	AF096250	Lycopersicon esculentum
AAG31142.1	AF305912	Hordeum vulgare
AAD10056.1	AF110518	Lycopersicon esculentum
AAD10057.1	AF110519	Lycopersicon esculentum
AAK30005.1	AY029067	Rosa hybrid cultivar
BAA06538.1	D31737	Nicotiana tabacum
AAF68398.1	AF237568	Oryza sativa
BAA94517.1	AP001800	Oryza sativa
AAF78044.1	AF248493	Oryza sativa
CAB51834.1	00069	Oryza sativa
AAF78021.1	AF238477	Oryza sativa
AAD46420.1	AF100771	Hordeum vulgare
AAD46917.1	AF164021	Oryza sativa
AAF78018.1	AF238474	Oryza sativa
AAC01746.1	AF044489	Oryza sativa
BAB39437.1	AP003338	Oryza sativa
AAF78019.1	AF238475	Oryza sativa
BAA05648.1	D26601	Nicotiana tabacum
SEQ ID NO. 883		
BAA83575.1	AP000399	Oryza sativa
SEQ ID NO. 884		
CAA67575.1	X99134	Lycopersicon esculentum
CAA78386.1	Z13996	Petunia x hybrida
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
BAA88222.1	AB028650	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
CAB43399.1	AJ006292	Antirrhinum majus
CAA66952.1	X98308	Lycopersicon esculentum
CAA67600.1	X99210	Lycopersicon esculentum
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays
CAA64614.1	X95296	Lycopersicon esculentum
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA64615.1	X95297	Lycopersicon esculentum
CAA75509.1	Y15219	Oryza sativa subsp. indica
SEQ ID NO. 888		
AAA50763.1	U15605	Nicotiana glutinosa
AAG43546.1	AF211528	Nicotiana tabacum
CAA08798.1	AJ009720	Solanum tuberosum
CAA08797.1	AJ009719	Solanum tuberosum

AAG09954.1	AF175399	Glycine max
AAG09951.1	AF175388	Glycine max
AAD25965.1	AF093638	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
AAA91022.1	U27081	Linum usitatissimum
CAC35330.1	AJ310155	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35326.1	AJ310151	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAD25966.1	AF093639	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
CAC35321.1	AJ310150	Linum usitatissimum
AAG01052.1	AF175395	Glycine max
AAG01051.1	AF175394	Glycine max
CAC35333.1	AJ310158	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
AAB47618.1	U73916	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
CAC35332.1	AJ310157	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
AAF61452.1	AF139523	Tagetes erecta
AAK28811.1	AF310966	Linum usitatissimum
AAK28806.1	AF310960	Linum usitatissimum
AAK28812.1	AF310968	Linum usitatissimum
AAK28810.1	AF310964	Linum usitatissimum
AAK28809.1	AF310962	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum

SEQ ID NO. 889

AAC18055.1	AF041848	Spinacia oleracea
AAC26113.1	AF073830	Solanum tuberosum
AAB64291.1	AF007582	Zea mays

SEQ ID NO. 891

CAB56569.1	AJ011622	Antirrhinum majus
CAB56570.1	AJ011623	Antirrhinum majus
CAB56568.1	AJ011621	Antirrhinum majus
AAB51071.1	U89496	Zea mays
CAA63113.1	X92369	Antirrhinum majus
CAA63061.1	X92079	Antirrhinum majus

SEQ ID NO. 892

CAB56570.1	AJ011623	Antirrhinum majus
CAB56569.1	AJ011622	Antirrhinum majus
CAA63061.1	X92079	Antirrhinum majus
CAB56568.1	AJ011621	Antirrhinum majus
CAA63113.1	X92369	Antirrhinum majus
AAB51071.1	U89496	Zea mays
AAB70119.1	U82230	Zea mays

SEQ ID NO. 893

CAA71800.1	Y10847	Brassica juncea
CAA71798.1	Y10845	Brassica juncea
AAC25635.1	AF044172	Solanum tuberosum
BAA01279.1	D10476	Spinacia oleracea
BAA02438.1	D13153	Triticum aestivum
CAA59798.1	X85803	Zea mays
AAD23907.1	AF073695	Oryza sativa
AAD23909.1	AF073697	Oryza sativa
AAC25636.1	AF044173	Solanum tuberosum
CAA06819.1	AJ006024	Cicer arietinum
CAA46086.1	X64874	Capsicum annuum
CAA71799.1	Y10846	Brassica juncea
AAA16973.1	L05184	Chloroplast Spinacia oleracea
AAD23908.1	AF073696	Oryza sativa
AAD23910.1	AF073698	Oryza sativa

SEQ ID NO. 896

AAA21758.1	U14956	Vicia faba
CAA30978.1	X12446	Pisum sativum
CAB71293.1	AJ250378	Capsicum annuum
AAA33029.1	M25528	Mesembryanthemum crystallinum
AAA34029.1	M86349	Spinacia oleracea
CAA74359.1	Y14032	Nicotiana tabacum
BAA88237.1	AB035645	Zea mays
BAA04616.1	D17790	Oryza sativa
BAA90642.1	AP001129	Oryza sativa
BAA85425.1	AP000616	Oryza sativa
BAA88236.1	AB035644	Zea mays
BAA13417.1	D87547	Oryza sativa
BAA07479.1	D38445	Oryza sativa
BAA02248.1	D12815	Oryza sativa
BAA04232.1	D17410	Oryza sativa
BAA20365.1	AB004307	Nicotiana tabacum
CAA67796.1	X99419	Pisum sativum
AAB40034.1	U10418	Zea mays
AAK09367.1	AF321525	Pisum sativum
AAK09370.1	AF321528	Pisum sativum
AAA79131.1	U10545	Chlamydomonas reinhardtii
AAK09369.1	AF321527	Pisum sativum
AAK09368.1	AF321526	Pisum sativum
AAB40978.1	U22328	Volvox carteri
CAA55406.1	X78851	Chlamydomonas reinhardtii
AAB59303.1	L15567	Pisum sativum
AAB59333.1	L15566	Pisum sativum
AAB59349.1	L15565	Pisum sativum
AAB59304.1	L15569	Pisum sativum
CAA45703.1	X64351	Spinacia oleracea
CAA49446.1	X69791	Catharanthus roseus
AAC05021.1	U67185	Papaver somniferum
CAA81209.1	Z26250	Helianthus tuberosus
AAA34240.1	L07843	Vigna radiata
AAK15259.1	AF302496	Populus x generosa
CAA89837.3	Z49767	Pseudotsuga menziesii
AAG17471.1	AF123610	Triticum aestivum
AAK15260.1	AF302497	Populus x generosa
AAB97737.1	AF024635	Petroselinum crispum
AAB97736.1	AF024634	Petroselinum crispum
AAC05022.1	U67186	Eschscholzia californica
CAC27143.1	AJ132538	Picea abies
AAC14746.1	AF057182	Pisum sativum
AAK15261.1	AF302498	Populus x generosa
CAA81210.1	Z26251	Helianthus tuberosus
CAA81211.1	Z26252	Vicia sativa
AAC14743.1	AF057179	Pisum sativum
AAC14745.1	AF057181	Pisum sativum

SEQ ID NO. 897

CAA50520.1	X71397	Spinacia oleracea
AAD55575.1	AF110793	Volvox carteri f. nagarien

SEQ ID NO. 898

AAD27880.2	AF139468	Vigna radiata
AAA33344.1	M83119	Flaveria trinervia
AAA68147.1	U08135	Hordeum vulgare
AAC78106.1	AF093634	Oryza sativa
AAF19787.1	AF162201	Chloroplast Lactuca sativa
AAD27871.1	AF135791	Chlamydomonas reinhardtii

SEQ ID NO. 899

CAA43841.1	X61664	Nicotiana sylvestris
AAC26196.1	AF052076	Zea mays
AAC78107.1	AF093635	Oryza sativa
CAA34218.1	X16092	Hordeum vulgare

SEQ ID NO. 900

BAA25432.1	AB000706	Raphanus sativus
AAB47752.1	U77952	Malus x domestica
CAA50259.1	X70902	Nicotiana tabacum
CAA88361.1	Z48451	Capsicum annuum
CAA09882.1	AJ011943	Lycopersicon esculentum
CAA50260.1	X70903	Nicotiana tabacum
CAA62956.1	X91839	Fragaria x ananassa
AAB28589.1	S66813	Zea mays
AAA33431.1	L08426	Zea mays
AAB25115.1	S53630	Zea mays
AAA33430.1	L08425	Zea mays
CAA40061.1	X56737	Zea mays

CAA34376.1	X16309	Zea mays
AAA33436.1	J04550	Zea mays
BAA25433.1	AB000707	Avena sativa
AAF37576.1	AF233229	Ceratodon purpureus
AAA33432.1	L08427	Zea mays

SEQ ID NO. 901

CAA98183.1	Z73955	Lotus japonicus
CAA54506.1	X77301	Glycine max
BAA02108.1	D12540	Pisum sativum
AAD48018.1	AF165095	Gossypium hirsutum
CAA98186.1	Z73958	Lotus japonicus
AAD48019.1	AF165096	Gossypium hirsutum
AAB47558.1	U87143	Mesembryanthemum crystallinum
CAA54507.1	X77302	Glycine max
BAA06701.1	D31905	Zea mays
BAA02904.1	D13758	Oryza sativa
AAK15703.1	AF327517	Oryza sativa
CAA89049.1	Z49190	Beta vulgaris
CAA98181.1	Z73953	Lotus japonicus
BAA02114.1	D12546	Pisum sativum
CAA98180.1	Z73952	Lotus japonicus
AAB97114.1	U58853	Glycine max
CAA98179.1	Z73951	Lotus japonicus
BAA02113.1	D12545	Pisum sativum
BAA02437.1	D13152	Oryza sativa
CAA98177.1	Z73949	Lotus japonicus
BAA02112.1	D12544	Pisum sativum
BAA02111.1	D12543	Pisum sativum
CAA98184.1	Z73956	Lotus japonicus
BAA02110.1	D12542	Pisum sativum
CAA41966.1	X59276	Oryza sativa
CAA95859.1	Z71276	Mangifera indica
BAA06702.1	D31906	Zea mays
CAA98178.1	Z73950	Lotus japonicus
BAA02109.1	D12541	Pisum sativum
BAA84640.1	AB007911	Pisum sativum
CAA67153.1	X98540	Fagus sylvatica
CAA55865.1	X79278	Medicago sativa
CAA98182.1	Z73954	Lotus japonicus
AAA34253.1	L08130	Volvox carteri
AAA63901.1	U22432	Zea mays
AAB97115.1	U58854	Glycine max
AAB28535.1	S66160	Oryza sativa

SEQ ID NO. 902

AAA50763.1	U15605	Nicotiana glutinosa
CAA08798.1	AJ009720	Solanum tuberosum
AAG09951.1	AF175388	Glycine max
AAK28809.1	AF310962	Linum usitatissimum
AAK28810.1	AF310964	Linum usitatissimum
AAK28804.1	AF310959	Linum usitatissimum
AAK28812.1	AF310968	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum
AAK28811.1	AF310966	Linum usitatissimum
AAK28806.1	AF310960	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
AAG43546.1	AF211528	Nicotiana tabacum
CAC35332.1	AJ310157	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
CAA08797.1	AJ009719	Solanum tuberosum
CAC35321.1	AJ310150	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
CAC35326.1	AJ310151	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
CAC35330.1	AJ310155	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAG09953.1	AF175398	Glycine max
AAD25966.1	AF093639	Linum usitatissimum
AAD25965.1	AF093638	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum

AAD25970.1	AF093643	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAB47618.1	U73916	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
AAG09952.1	AF175389	Glycine max
AAD25972.1	AF093645	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91022.1	U27081	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
AAG09954.1	AF175399	Glycine max

SEQ ID NO. 903

AAA34002.1	M67449	Glycine max
CAC09580.1	AJ298992	Fagus sylvatica
AAK11734.1	AY027437	Arachis hypogaea
CAA06334.1	AJ005077	Lycopersicon esculentum
AAD10057.1	AF110519	Lycopersicon esculentum
AAD10056.1	AF110518	Lycopersicon esculentum
AAD46406.1	AF096250	Lycopersicon esculentum
AAG31141.1	AF305911	Oryza sativa
AAG31142.1	AF305912	Hordeum vulgare
AAK30005.1	AY029067	Rosa hybrid cultivar
AAK21965.1	AY028699	Brassica napus
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
AAF91322.1	AF244888	Glycine max
AAK16409.1	AF320086	Zea mays
BAA06538.1	D31737	Nicotiana tabacum
BAA21132.1	D88193	Brassica rapa
BAA06285.1	D30049	Brassica rapa
CAA97692.1	Z73295	Catharanthus roseus
CAA08995.1	AJ010091	Brassica napus
CAB51834.1	00069	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAA62232.1	U00443	Brassica napus
AAC36318.1	AF053127	Malus x domestica
AAC23542.1	U20948	Ipomoea trifida
BAA23676.1	AB000970	Brassica rapa
BAA92836.1	AB032473	Brassica oleracea
AAA33915.1	L27821	Oryza sativa
BAA92837.1	AB032474	Brassica oleracea

SEQ ID NO. 904

AAF17077.1	AF199453	Sorghum bicolor
AAF61647.1	AF190634	Nicotiana tabacum
BAA89009.1	AB027455	Petunia x hybrida
AAF98390.1	AF287143	Brassica napus
AAD21086.1	AF127218	Forsythia x intermedia
BAA93039.1	AB033758	Citrus unshiu
BAA83484.1	AB031274	Scutellaria baicalensis
BAA12737.1	D85186	Gentiana triflora
CAA54612.1	X77462	Manihot esculenta
BAA19155.1	AB000623	Nicotiana tabacum
BAA89008.1	AB027454	Petunia x hybrida
BAA90787.1	AB038248	Ipomoea batatas
AAB36653.1	U32644	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAA30761.1	X07940	Zea mays
AAK16410.1	AF320086	Zea mays
CAA31855.1	X13500	Zea mays
BAA36421.1	AB013596	Perilla frutescens
AAB86473.1	AF028237	Ipomoea purpurea
CAA30760.1	X07937	Zea mays
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
AAD55985.1	AF165148	Petunia x hybrida
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
CAA59450.1	X85138	Lycopersicon esculentum
CAA54614.1	X77464	Manihot esculenta
AAB81682.1	AF000371	Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
CAA54558.1	X77369	Solanum melongena
BAB41026.1	AB047099	Vitis vinifera

BAB41020.1	AB047093	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAA19659.1	AB002818	Perilla frutescens

SEQ ID NO. 905

AAF43095.1	AF053769	Malus x domestica
AAD00252.1	U76408	Lycopersicon esculentum
CAB88029.1	AJ276389	Dendrobium grex Madame Thong-In
BAA31699.1	AB016000	Ipomoea nil
BAA31700.1	AB016001	Ipomoea nil
BAB18584.1	AB043956	Ceratopteris richardii
AAB41849.1	U65648	Solanum tuberosum
BAB18582.1	AB043954	Ceratopteris richardii
BAB18583.1	AB043955	Ceratopteris richardii
AAD09582.1	U76409	Lycopersicon esculentum
AAC33008.1	AF080104	Pisum sativum
AAG27464.1	AF308454	Medicago truncatula
BAA31698.1	AB015999	Ipomoea nil
AAF23753.2	AF193813	Brassica oleracea
AAD00251.1	U76407	Lycopersicon esculentum
AAC49917.1	AF000141	Lycopersicon esculentum
AAC32817.1	AF050180	Oryza sativa
AAB81079.1	AF022390	Hordeum vulgare
AAD00692.1	U90092	Picea mariana
AAC49918.1	AF000142	Lycopersicon esculentum
AAD13611.1	AF100455	Zea mays
AAC32818.1	AF050181	Oryza sativa

SEQ ID NO. 906

AAF17576.1	AF202182	Glycine max
AAB41550.1	U28213	Medicago sativa subsp. sativa
AAD17997.1	AF107404	Pisum sativum
CAA72420.1	Y11749	Vitis vinifera
CAA91922.1	Z67981	Callistephus chinensis
AAD54273.1	AF167556	Glycine max
CAA53578.1	X75964	Vitis vinifera
AAD56578.1	AF184271	Daucus carota
BAA12723.1	D85102	Rosa hybrid cultivar
AAC25960.1	AF029685	Fragaria x ananassa
BAA84940.1	AB018686	Camellia sinensis
BAA84939.1	AB018685	Camellia sinensis
AAD26204.1	AF117268	Malus x domestica
AAB20555.1	S69616	Hordeum vulgare
CAA78930.1	Z17221	Gerbera hybrida
BAB40789.1	AB058641	Lilium hybrid division I
AAD49343.1	AF169801	Lilium hybrid cv. 'Acapulc
CAA75997.1	Y16041	Zea mays
BAA36182.1	AB003495	Oryza sativa
BAA36183.1	AB003496	Oryza sativa
CAA91924.1	Z67983	Dianthus caryophyllus
CAA69253.1	Y07956	Oryza sativa
AAF60298.1	AF233639	Petunia x hybrida
CAA33544.1	X15537	Petunia x hybrida
AAG01030.1	AF291097	Dianthus gratianopolitanus
BAA19658.1	AB002817	Perilla frutescens
AAB94014.1	AF010283	Sorghum bicolor
BAA12736.1	D85185	Gentiana triflora
CAA75998.1	Y16042	Zea mays
CAA75996.1	Y16040	Zea mays
CAA70345.1	Y09127	Forsythia x intermedia
AAB94015.1	AF010283	Sorghum bicolor
CAA79154.1	Z18277	Lycopersicon esculentum
CAA33543.1	X15536	Antirrhinum majus
BAA74700.1	AB018438	Ipomoea purpurea
BAA34637.1	AB019243	Ipomoea batatas
AAB84048.1	AF028601	Ipomoea purpurea
BAA74699.1	AB018437	Ipomoea purpurea
BAA36406.1	AB011667	Ipomoea purpurea
BAA59333.1	AB006793	Ipomoea nil
BAA22072.1	AB006792	Ipomoea nil
BAB20075.1	AB012924	Torenia hybrida
AAB62873.1	AF007096	Bromheadia finlaysoniana
BAA36405.1	AB011667	Ipomoea purpurea

SEQ ID NO. 910

CAC00658.1	AJ292745	Petroselinum crispum
CAC00657.1	AJ292744	Petroselinum crispum
CAA74023.1	Y13676	Antirrhinum majus
CAA74022.1	Y13675	Antirrhinum majus
AAD55394.1	AF176641	Lycopersicon esculentum
BAA22204.1	D63951	Nicotiana tabacum
CAA71687.1	Y10685	Glycine max

AAK25822.1	AF350505	Phaseolus vulgaris
CAA41453.1	X58577	Petroselinum crispum
BAA11431.1	D78609	Oryza sativa
BAA36492.1	AB021736	Oryza sativa
AAK01953.1	AY026054	Phaseolus acutifolius
AAC37418.1	L34551	Oryza sativa
CAA70216.1	Y09013	Triticum aestivum
CAA71795.1	Y10834	Hordeum vulgare
AAB36514.1	U57389	Phaseolus vulgaris
CAA71768.1	Y10809	Petroselinum crispum
AAK14790.1	AY027510	Catharanthus roseus
CAC00656.1	AJ292743	Petroselinum crispum
CAA11499.1	AJ223624	Spinacia oleracea
CAA66477.1	X97903	Vicia faba

SEQ ID NO. 912

AAG09817.1	AF278698	Lolium perenne
CAA13176.1	AJ231134	Saccharum officinarum
CAA66707.1	X98083	Zea mays
CAA74071.1	Y13734	Zea mays
CAC07424.1	AJ295838	Populus balsamifera subsp. trichocarpa
CAA12276.1	AJ224986	Populus balsamifera subsp. trichocarpa
AAF43141.1	AF217958	Populus tremuloides
CAA56103.1	X79566	Eucalyptus gunnii
CAA66063.1	X97433	Eucalyptus gunnii
AAG16242.1	AF297877	Eucalyptus saligna
CAA75352.1	Y15069	Zea mays
AAD53967.1	AF033851	Vigna radiata
AAD49343.1	AF169801	Lilium hybrid cv. 'Acapulco'
CAA78930.1	Z17221	Gerbera hybrida
CAA72420.1	Y11749	Vitis vinifera
CAA91922.1	Z67981	Callistephus chinensis
AAD56579.1	AF184272	Daucus carota
BAB40789.1	AB058641	Lilium hybrid division I
BAA22072.1	AB006792	Ipomoea nil
AAD26204.1	AF117268	Malus x domestica
BAA59333.1	AB006793	Ipomoea nil
BAA74699.1	AB018437	Ipomoea purpurea
BAA36406.1	AB011667	Ipomoea purpurea
BAA84939.1	AB018685	Camellia sinensis
BAA74700.1	AB018438	Ipomoea purpurea
AAB84048.1	AF028601	Ipomoea purpurea
BAA84940.1	AB018686	Camellia sinensis
CAA53578.1	X75964	Vitis vinifera
BAA34637.1	AB019243	Ipomoea batatas
AAF17576.1	AF202182	Glycine max
AAD54273.1	AF167556	Glycine max
BAA36407.1	AB011667	Ipomoea purpurea
AAD56578.1	AF184271	Daucus carota
AAC25960.1	AF029685	Fragaria x ananassa
CAA75997.1	Y16041	Zea mays
AAB94014.1	AF010283	Sorghum bicolor
CAA75998.1	Y16042	Zea mays
CAA75996.1	Y16040	Zea mays

SEQ ID NO. 914

CAA57551.1	X82030	Phaseolus vulgaris
CAA66479.1	X97905	Vicia faba
CAC01237.1	AJ292767	Nicotiana plumbaginifolia
AAF66823.1	AF190655	Nicotiana tabacum
AAK30205.1	AF349964	Daucus carota
AAB38974.1	U81318	Triticum aestivum
CAA81127.1	Z26042	Anemia phyllitidis
AAA79045.1	U34742	Spinacia oleracea
AAC39368.1	AF043297	Chlamydomonas reinhardtii
AAF63202.1	AF240679	Cucumis sativus
CAA11894.1	AJ224325	Hordeum vulgare
AAF66825.1	AF190657	Nicotiana tabacum
CAA06469.1	AJ005286	Hordeum vulgare

SEQ ID NO. 915

CAC37011.1	AJ238318	Oryza sativa

SEQ ID NO. 918

CAA77595.1	Z11510	Pisum sativum

SEQ ID NO. 920

BAA33755.2	AB017480	Nicotiana tabacum
CAA62084.1	X90472	Capsicum annuum
AAK15322.1	AF332134	Chloroplast Medicago sativa

AAD17230.1	AF117339	Nicotiana tabacum
CAA09935.1	AJ012165	Capsicum annuum
BAB17624.1	AB033535	Oryza sativa
BAA13021.1	D86121	Spinacia oleracea
AAF27916.1	AF220199	Pinus taeda
BAB19880.1	AB052887	Oryza sativa
BAB17626.1	AB033537	Oryza sativa
BAB17625.1	AB033536	Oryza sativa
CAB55389.1	AL117264	Oryza sativa
AAB67835.1	U43398	Solanum tuberosum
AAF12877.1	AF205377	Chlamydomonas reinhardtii
AAF37267.1	AF220406	Vitis riparia
CAA06853.1	AJ006095	Cicer arietinum

SEQ ID NO. 926

AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAG16628.1	AY007545	Brassica napus
AAB61708.1	U93048	Daucus carota
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
BAA78764.1	AB023482	Oryza sativa
AAA33915.1	L27821	Oryza sativa
BAA94509.1	AB041503	Populus nigra
CAA73134.1	Y12531	Brassica oleracea
BAA94510.1	AB041504	Populus nigra
CAB51834.1	00069	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum
AAC23542.1	U20948	Ipomoea trifida
BAA92954.1	AP001551	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
AAF66615.1	AF142596	Nicotiana tabacum
AAB93834.1	U82481	Zea mays
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
AAF91337.1	AF249318	Glycine max
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
BAA23676.1	AB000970	Brassica rapa
AAK11568.1	AF318492	Lycopersicon hirsutum
AAF91336.1	AF249317	Glycine max

SEQ ID NO. 927

CAB51545.1	AJ243876	Lycopersicon esculentum

SEQ ID NO. 928

AAF80450.1	AF161719	Triticum aestivum
AAB72110.1	U79958	Pisum sativum
AAF22842.1	AF209910	Prunus dulcis
AAK31596.1	AY029172	Helianthus annuus
AAB72113.1	U79961	Zea mays
BAA92985.1	AP001550	Oryza sativa

SEQ ID NO. 929

AAK09431.1	AF324244	Phaseolus vulgaris
AAA18546.1	M94204	Nicotiana tabacum
AAF15312.1	AF145053	Oryza sativa
AAG32661.1	AF264877	Zea mays
AAK08141.1	AF234537	Pelargonium graveolens
AAD54821.1	AF137379	Chloroplast Nephroselmis olivacea
CAA74893.1	Y14561	Pisum sativum
AAF43860.1	AF166114	Chloroplast Mesostigma viride
CAA75382.1	Y15108	Glycine max

SEQ ID NO. 936

AAB38796.1	U73203	Nicotiana glutinosa
AAB69757.1	U75644	Lycopersicon esculentum
AAC49666.1	U83708	Lycopersicon esculentum

SEQ ID NO. 937

AAC24195.1	AF020425	Nicotiana tabacum
AAK18620.1	AF352732	Nicotiana tabacum
AAB40608.1	U54774	Nicotiana tabacum
AAA33710.1	L16977	Petunia x hybrida
AAA33709.1	L16797	Petunia x hybrida
AAC39483.1	AF020424	Nicotiana tabacum
BAB32870.1	AB056062	Oryza sativa
BAB32868.1	AB056060	Oryza sativa
BAB32871.1	AB056063	Oryza sativa

BAB32869.1	AB056061	Oryza sativa
CAA50719.1	X71900	Lycopersicon esculentum

SEQ ID NO. 938

AAF61647.1	AF190634	Nicotiana tabacum
AAA59054.1	L34847	Zea mays
BAA89009.1	AB027455	Petunia x hybrida
BAA36423.1	AB013598	Verbena x hybrida
AAF98390.1	AF287143	Brassica napus
BAA36421.1	AB013596	Perilla frutescens
BAA93039.1	AB033758	Citrus unshiu
BAA36422.1	AB013597	Perilla frutescens
BAA83484.1	AB031274	Scutellaria baicalensis
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAB36653.1	U32644	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
BAA89008.1	AB027454	Petunia x hybrida
AAF17077.1	AF199453	Sorghum bicolor
AAB81683.1	AF000372	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAA12737.1	D85186	Gentiana triflora
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
AAD21086.1	AF127218	Forsythia x intermedia
AAB81682.1	AF000371	Vitis vinifera
BAA19659.1	AB002818	Perilla frutescens
AAD04166.1	AF101972	Phaseolus lunatus
BAA90787.1	AB038248	Ipomoea batatas
AAB86473.1	AF028237	Ipomoea purpurea
CAA54614.1	X77464	Manihot esculenta

SEQ ID NO. 939

AAK28345.1	AF243040	Lycopersicon esculentum
AAK28346.1	AF243041	Zea mays
AAC12254.1	U58474	Lycopersicon esculentum
AAC12253.1	U58473	Lycopersicon esculentum
AAA33715.1	L27341	Petunia integrifolia
AAC36318.1	AF053127	Malus x domestica
AAB61708.1	U93048	Daucus carota
AAF91323.1	AF244889	Glycine max
AAG52992.1	U77888	Ipomoea nil
AAF91324.1	AF244890	Glycine max
AAF91322.1	AF244888	Glycine max
AAB36558.1	U77888	Ipomoea nil
AAF59906.1	AF197947	Glycine max
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
CAC20842.1	AJ250467	Pinus sylvestris
AAD27675.1	AF119222	Oryza sativa
AAG52994.1	U77888	Ipomoea nil
AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max
AAA33915.1	L27821	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum
AAG25966.1	AF302082	Nicotiana tabacum
BAA84787.1	AP000559	Oryza sativa
AAF59905.1	AF197946	Glycine max
BAA83373.1	AP000391	Oryza sativa

SEQ ID NO. 940

CAA06339.1	AJ005082	Cyamopsis tetragonoloba
AAA86532.1	U31544	Pisum sativum
CAA06338.1	AJ005081	Cyamopsis tetragonoloba
BAB40967.1	AB059568	Pisum sativum

SEQ ID NO. 941

AAB27811.1	S64617	Brassica napus
AAC34126.1	AF085197	Nicotiana tabacum
AAC27992.1	AF038875	Nicotiana tabacum
BAA76349.1	AB025029	Nicotiana tabacum
AAG24908.1	AF305075	Nicotiana benthamiana
CAA10108.1	AJ012662	Nicotiana tabacum
AAD19905.1	AF104412	Nicotiana tabacum
CAA76392.1	Y16796	Pisum sativum
CAA77062.1	Y18135	Nicotiana tabacum
BAA33151.1	AB008186	Pisum sativum
CAA37979.1	X54046	Oryza sativa
BAA94512.1	AB041506	Populus nigra

CAA38893.1	X55052	Catharanthus roseus
CAA55669.1	X79065	Zea mays
AAD10528.1	U87949	Zea mays
CAB56779.1	X62976	Daucus carota
CAA39239.1	X55706	Glycine max
AAB81177.2	AF012212	Tetraselmis chui
AAB87568.1	AF034201	Dunaliella tertiolecta
BAA01412.1	D10555	Daucus carota
BAA20971.1	D10556	Daucus carota
AAA33913.1	J04538	Oryza sativa

SEQ ID NO. 942

AAC12662.1	AF032468	Zea mays
CAA05772.1	AJ002959	Zea mays
AAA34310.1	M62720	Triticum aestivum
AAF73016.1	AF262934	Avicennia marina
BAB40310.1	AB026055	Nicotiana tabacum
BAB40311.1	AB026056	Nicotiana tabacum
AAB88617.1	AF034946	Zea mays
AAA64427.1	L29077	Pisum sativum
CAA51821.1	X73419	Lycopersicon esculentum
AAD51109.1	AF176040	Mesembryanthemum crystallinum
AAA34125.1	L23762	Lycopersicon esculentum
AAD42941.1	AF091621	Catharanthus roseus
BAA90392.1	AP001081	Oryza sativa
AAB02168.1	U15971	Oryza sativa
AAB63513.1	AF008910	Prunus armeniaca
AAA86089.1	U17250	Brassica oleracea
CAA58111.1	X82938	Lycopersicon esculentum
CAA10494.1	AJ131733	Pseudotsuga menziesii
AAG23847.1	AY004247	Lycopersicon esculentum
AAF22280.1	AF165420	Mesembryanthemum crystallinum
AAA34309.1	M28059	Triticum aestivum
AAC32141.1	AF051240	Picea mariana
BAA21006.1	D17786	Oryza sativa
AAF03236.1	AF180143	Glycine max

SEQ ID NO. 943

CAA52414.1	X74403	Phaseolus vulgaris
CAA59468.1	X85185	Catharanthus roseus
CAA69598.1	Y08273	Digitalis lanata
AAA63543.1	M55019	Lycopersicon esculentum
CAA76054.1	Y16088	Lupinus luteus
AAF00471.1	AF178458	Lupinus luteus
AAD22975.1	AF126551	Solanum tuberosum subsp. tuberosum
AAA63403.1	M55021	Zea mays
CAA48638.1	X68678	Zea mays
AAF65770.1	AF242312	Euphorbia esula
AAA57045.1	L29469	Oryza sativa
AAB51386.1	U92087	Solanum commersonii
AAA57046.1	L29470	Oryza sativa
AAA62706.1	M55018	Brassica napus
AAC05639.1	AF052206	Chlamydomonas reinhardtii
AAA57044.1	L29471	Oryza sativa
AAG01536.1	AF291180	Capsicum annuum
AAA64430.1	L32095	Vicia faba
CAA10766.1	AJ132763	Pseudotsuga menziesii
CAA65889.1	X97255	Digitalis lanata
CAA78459.1	Z14081	Nicotiana tabacum

SEQ ID NO. 944

BAB21558.1	AB037156	Coix lacryma-jobi
BAA01472.1	D10622	Zea mays
BAA07327.1	D38130	Zea mays
AAD13812.1	AF117334	Ipomoea batatas
CAA11899.1	AJ224331	Castanea sativa
BAB18768.1	AB038394	Triticum aestivum
BAB18766.1	AB038392	Triticum aestivum
BAA19608.1	D31700	Glycine max
BAA95416.1	AB039673	Helianthus annuus
BAA19610.1	D64115	Glycine max
CAA50437.1	X71124	Carica papaya
AAF23127.1	AF198389	Lycopersicon esculentum
AAF23126.1	AF198388	Lycopersicon esculentum
AAB24010.1	S49967	Oryza
AAA33903.1	J03469	Oryza sativa
AAB66355.1	U54702	Oryza sativa
AAK15090.1	AF240007	Sesamum indicum
AAA33911.1	J05595	Oryza sativa
AAA32672.1	L16624	Ambrosia artemisiifolia
CAA40860.1	X57658	Oryza sativa

AAD33907.1	AF143677	Artemisia vulgaris
BAB18767.1	AB038393	Triticum aestivum
AAA16120.1	L16450	Solanum tuberosum
BAB18765.1	AB038391	Triticum aestivum
AAF23128.1	AF198390	Lycopersicon esculentum
BAB18769.1	AB038395	Triticum aestivum
AAG38521.1	AF283536	Citrus x paradisi

SEQ ID NO. 945

AAB00109.1	U21801	Lycopersicon esculentum
AAF04193.1	AF053638	Pisum sativum
AAF04253.1	AF097651	Pisum sativum
AAB57737.1	U89270	Tripsacum dactyloides
CAA11154.1	AJ223178	Nicotiana tabacum
CAA11153.1	AJ223177	Nicotiana tabacum
AAC35340.1	AF072447	Ipomoea trifida
AAC35342.1	AF072449	Ipomoea trifida
AAC37345.1	L20621	Zea mays
AAC35343.1	AF072450	Ipomoea trifida
AAC35341.1	AF072448	Ipomoea trifida
AAF04194.1	AF053639	Pisum sativum
AAB57738.1	U89271	Tripsacum dactyloides
AAF89645.1	AF169018	Glycine max
CAA52213.1	X74115	Picea abies

SEQ ID NO. 946

AAB71079.1	U62752	Zea mays
AAA91168.1	U40147	Zea mays
CAA47042.1	X66411	Chlamydomonas reinhardtii
AAD11447.1	U62750	Zea mays
BAA92988.1	AP001550	Oryza sativa
AAD11446.1	U62749	Zea mays
CAA60251.1	X86553	Zea mays
AAC49360.1	U29383	Zea mays
AAD11459.1	U62748	Zea mays
AAB63814.1	L46848	Glycine max
CAA63786.1	X93587	Lupinus luteus
AAB71078.1	U62751	Zea mays
AAF34767.1	AF227622	Euphorbia esula
AAB71080.1	U62753	Zea mays
BAA04668.1	D21130	Oryza sativa
CAA55047.1	X78213	Parthenium argentatum
CAA69256.1	Y07959	Zea mays

SEQ ID NO. 947

AAG34813.1	AF243378	Glycine max
AAF64449.1	AF239927	Euphorbia esula
AAG34814.1	AF243379	Glycine max
CAA41279.1	X58390	Dianthus caryophyllus
AAA33277.1	M64268	Dianthus caryophyllus
AAF72197.1	AF263737	Euphorbia esula
CAA55039.1	X78203	Hyoscyamus muticus
AAG34812.1	AF243377	Glycine max
AAB65163.1	AF002692	Solanum commersonii
AAA51450.1	L05916	Dianthus caryophyllus
CAB38119.1	AJ010296	Zea mays
CAA96431.1	Z71749	Nicotiana plumbaginifolia
BAA01394.1	D10524	Nicotiana tabacum
CAB38118.1	AJ010295	Zea mays
AAG34815.1	AF243380	Glycine max
CAA68993.1	Y07721	Petunia x hybrida
AAC50036.1	U42463	Coccomyxa sp. PA
CAA09191.1	AJ010452	Alopecurus myosuroides
AAG34825.1	AF244682	Zea mays
CAA09190.1	AJ010451	Alopecurus myosuroides
CAA09193.1	AJ010454	Alopecurus myosuroides
AAA33931.1	M84969	Silene vulgaris
AAA33930.1	M84968	Silene vulgaris
CAA09192.1	AJ010453	Alopecurus myosuroides
AAF61392.1	AF133894	Persea americana
AAC64007.1	AF062403	Oryza sativa
AAA33469.1	M16902	Zea mays
AAA33470.1	M16901	Zea mays
AAD56395.1	AF184059	Triticum aestivum
CAA56047.1	X79515	Zea mays
AAA20585.1	U12679	Zea mays
CAA05354.1	AJ002380	Oryza sativa

SEQ ID NO. 948

AAA33280.1	L20475	Datura stramonium
AAA33281.1	L20473	Datura stramonium
CAC34420.1	AJ307584	Solanum tuberosum

BAA13547.1	D88156	Hyoscyamus niger
BAA85844.1	AB026544	Hyoscyamus niger
CAB52307.1	AJ245634	Solanum tuberosum
CAC19810.1	AJ292343	Solanum tuberosum
AAA33282.1	L20474	Datura stramonium
AAB09776.1	L20485	Hyoscyamus niger
BAA85845.1	AB026545	Hyoscyamus niger
CAA45866.1	X64566	Cuphea lanceolata
CAA45793.1	X64463	Brassica napus
AAB20114.2	S60064	Brassica napus
CAA74176.1	Y13861	Nicotiana tabacum
CAA05816.1	AJ003025	Oryza sativa
CAA74177.1	Y13862	Nicotiana tabacum
CAA05879.1	AJ003124	Petunia x hybrida
AAC78100.1	AF093628	Oryza sativa
CAA64729.1	X95462	Brassica napus
AAB05206.1	L22766	Medicago truncatula
AAB05205.1	L22765	Medicago truncatula

SEQ ID NO. 949

AAF61374.1	AF133267	Thlaspi caerulescens
AAD30548.1	AF136579	Lycopersicon esculentum
AAF97509.1	AF246266	Lycopersicon esculentum
AAC17441.1	AF065444	Pisum sativum
AAF97510.1	AF246266	Lycopersicon esculentum
AAD30549.1	AF136580	Lycopersicon esculentum
AAG09635.1	AY007281	Medicago truncatula

SEQ ID NO. 953

AAC18941.1	AF058757	Zea mays

SEQ ID NO. 954

AAG43550.1	AF211532	Nicotiana tabacum
BAA96875.1	AB045121	Oryza sativa
BAA78746.1	AB023482	Oryza sativa
BAA85438.1	AP000616	Oryza sativa
BAA77204.1	AB026262	Cicer arietinum

SEQ ID NO. 958

AAD11430.1	AF097667	Mesembryanthemum crystallinum
CAB90634.1	AJ277744	Fagus sylvatica
AAC35951.1	AF079355	Mesembryanthemum crystalli
CAC09576.1	AJ298988	Fagus sylvatica
CAA72341.1	Y11607	Medicago sativa
AAD17804.1	AF092431	Lotus japonicus
AAD17805.1	AF092432	Lotus japonicus
CAC10358.1	AJ277086	Nicotiana tabacum
CAC10359.1	AJ277087	Nicotiana tabacum
AAC36697.1	AF075579	Mesembryanthemum crystalli
AAG43835.1	AF213455	Zea mays
AAC36698.1	AF075580	Mesembryanthemum crystalli
CAB90633.1	AJ277743	Fagus sylvatica
AAC36700.1	AF075582	Mesembryanthemum crystalli
CAC09575.1	AJ298987	Fagus sylvatica
AAC26828.1	AF075603	Oryza sativa
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAB93832.1	U81960	Zea mays

SEQ ID NO. 959

CAA06756.1	AJ005899	Nicotiana tabacum
CAA06757.1	AJ005900	Nicotiana tabacum
AAD56039.1	AF184068	Citrus limon

SEQ ID NO. 964

CAA71238.1	Y10156	Brassica napus
CAB62165.1	AJ223307	Brassica napus
CAA71237.1	Y10155	Brassica napus
AAC49181.1	U39289	Brassica napus
AAC49182.1	U39319	Brassica napus

SEQ ID NO. 970

AAF21982.1	AF115543	Populus tremula x Populus tremuloides
CAB65535.1	AJ011794	Zea mays

SEQ ID NO. 972

CAA06216.1	AJ004916	Prunus avium
AAB69323.1	AF012867	Petroselinum crispum
AAB69322.2	AF012866	Petroselinum crispum

SEQ ID NO. 973

AAG13424.1	AC051634	Oryza sativa

SEQ ID NO. 974

AAB88295.1	AF024512	Oryza sativa

SEQ ID NO. 976

BAA32557.1	AB017159	Daucus carota
AAA82743.1	U19481	Citrus maxima
CAA59008.1	X84226	Nicotiana tabacum
CAA52976.1	X75082	Solanum tuberosum
BAA82390.1	AP000367	Oryza sativa
CAA59010.1	X84228	Beta vulgaris
CAA59009.1	X84227	Populus x generosa
BAA07328.1	D38132	Cucurbita sp.

SEQ ID NO. 977

AAG49341.1	AF319457	Petroselinum crispum
AAB71526.1	U94781	Helianthus annuus
AAK21311.1	AF338254	Petroselinum crispum
AAD31926.1	AF147738	Zea mays
AAB93521.1	U94783	Helianthus annuus
AAF43440.1	AF233886	Vallisneria gigantea
AAD17931.2	AF104924	Zea mays
AAB71529.1	U94785	Helianthus annuus
BAA87057.1	AB034154	Chara corallina
BAB03273.1	AB007459	Chara corallina
AAB71527.1	U94782	Helianthus annuus
AAB71528.1	U94784	Helianthus annuus
AAC27525.1	AF077352	Chlamydomonas reinhardtii
AAB53062.1	U94398	Acetabularia cliftonii
AAD34597.1	AF147739	Zea mays
AAB53061.1	U94397	Acetabularia cliftonii
AAF43441.1	AF233887	Vallisneria gigantea
CAA47477.1	X67103	Anemia phyllitidis
CAA47476.1	X67102	Anemia phyllitidis
AAA92114.1	U48788	Gossypium hirsutum
AAA92121.1	U48786	Vigna mungo
AAA92117.1	U48787	Triticum aestivum
AAA92111.1	U48789	Azolla rubra
AAA92120.1	U48785	Vigna mungo
AAA92119.1	U48782	Trifolium subterraneum
AAA92115.1	U48790	Nitella cristata

SEQ ID NO. 978

AAC09416.1	M68929	Mitochondrion Marchantia polymorpha

SEQ ID NO. 981

AAC99620.1	AF040700	Oryza sativa

SEQ ID NO. 983

AAA74715.1	M64682	Spinacia oleracea
AAA34041.1	M57413	Spinacia oleracea
CAA40019.1	X56691	Spinacia oleracea
CAA28130.1	X04465	Plastid Marchantia polymor

SEQ ID NO. 984

BAA88222.1	AB028650	Nicotiana tabacum
CAA78386.1	Z13996	Petunia x hybrida
CAA78387.1	Z13997	Petunia x hybrida
CAA64615.1	X95297	Lycopersicon esculentum
CAB43399.1	AJ006292	Antirrhinum majus
AAK19616.1	AF336283	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
CAA64614.1	X95296	Lycopersicon esculentum
CAA72218.1	Y11415	Oryza sativa
CAA67575.1	X99134	Lycopersicon esculentum
CAA72217.1	Y11414	Oryza sativa
CAA66952.1	X98308	Lycopersicon esculentum
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
CAA72187.1	Y11352	Oryza sativa
BAA23337.1	D88617	Oryza sativa
BAA81733.2	AB029162	Glycine max
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
BAA81736.1	AB029165	Glycine max
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
CAA50221.1	X70876	Hordeum vulgare

AAK19619.1	AF336286	Gossypium hirsutum
BAA23338.1	D88618	Oryza sativa
AAG36774.1	AF210616	Zea mays
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
AAA33500.1	M73028	Zea mays
CAA65525.1	X96749	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum

SEQ ID NO. 985

CAA69598.1	Y08273	Digitalis lanata
CAA59468.1	X85185	Catharanthus roseus
AAA57045.1	L29469	Oryza sativa
AAC05639.1	AF052206	Chlamydomonas reinhardtii
AAA57046.1	L29470	Oryza sativa
CAA48638.1	X68678	Zea mays
AAD22975.1	AF126551	Solanum tuberosum subsp. tuberosum
AAA63403.1	M55021	Zea mays
CAA52414.1	X74403	Phaseolus vulgaris
AAA63543.1	M55019	Lycopersicon esculentum
AAA57044.1	L29471	Oryza sativa
AAF00471.1	AF178458	Lupinus luteus
CAA76054.1	Y16088	Lupinus luteus
AAF65770.1	AF242312	Euphorbia esula
AAB51386.1	U92087	Solanum commersonii
AAA62706.1	M55018	Brassica napus
AAA64430.1	L32095	Vicia faba
CAA10766.1	AJ132763	Pseudotsuga menziesii
AAG01536.1	AF291180	Capsicum annuum
CAA65889.1	X97255	Digitalis lanata
CAA78459.1	Z14081	Nicotiana tabacum

SEQ ID NO. 987

CAC14568.1	AJ237848	Brassica napus
BAA81862.1	AB026295	Oryza sativa
CAA49353.1	X69664	Malus sp.
CAA61486.1	X89199	Bromheadia finlaysoniana
AAB39995.1	U82432	Dianthus caryophyllus
CAA49839.1	X70378	Dianthus caryophyllus
CAA51190.1	X72592	Dianthus caryophyllus
AAD56577.1	AF184270	Daucus carota
CAA51192.1	X72594	Matthiola incana
CAA55628.1	X78994	Medicago sativa
AAC49929.1	AF022142	Petunia x hybrida
CAA43027.1	X60512	Petunia x hybrida
CAA51191.1	X72593	Callistephus chinensis
CAA53580.1	X75966	Vitis vinifera
CAA41146.1	X58138	Hordeum vulgare
AAD56580.1	AF184273	Daucus carota
BAA20143.1	AB003779	Perilla frutescens
AAD56581.1	AF184274	Daucus carota
BAA21897.1	D83041	Ipomoea nil

SEQ ID NO. 988

AAB63030.1	U83921	Daucus carota
AAF37386.1	AF134835	Medicago truncatula
BAA76896.1	AB022687	Lycopersicon esculentum
BAA76895.1	AB022686	Lycopersicon esculentum
AAC18914.1	U94748	Petunia x hybrida
AAB70241.1	AF016845	Lycopersicon esculentum
AAF27919.1	AF220203	Malus x domestica

SEQ ID NO. 989

CAA70815.1	Y09602	Hordeum vulgare
CAB59202.1	X78878	Hordeum vulgare
BAB08188.1	AP002539	Oryza sativa
CAA55478.1	X78877	Hordeum vulgare
AAD22150.1	AF061282	Sorghum bicolor
AAF44708.1	AF242849	Lycopersicon esculentum
CAA70816.1	Y09603	Hordeum vulgare
AAD22151.1	AF061282	Sorghum bicolor
CAB58992.1	X78876	Hordeum vulgare
AAD01265.1	AF006080	Solanum berthaultii
AAD01263.1	AF006078	Solanum berthaultii
AAF64227.1	AF248647	Lycopersicon pennellii
AAD01264.1	AF006079	Solanum berthaultii
AAD22164.1	AF061282	Sorghum bicolor
AAD42963.2	AF141384	Matricaria chamomilla
AAA32940.1	J03897	Hordeum vulgare
BAA04510.1	D17586	Oryza sativa
CAA70817.1	Y09604	Hordeum vulgare

BAA04511.1	D17587	Oryza sativa
BAA01757.1	D10985	Oryza sativa
BAB19126.1	AP002839	Oryza sativa
BAA94235.1	AP001633	Oryza sativa
CAB71127.1	AJ271659	Cicer arietinum
AAA92064.1	U49741	Vigna radiata
AAA92062.1	U49382	Vigna radiata
CAA92216.1	Z68130	Pisum sativum

SEQ ID NO. 990

AAD16018.1	AF081514	Taxus canadensis

SEQ ID NO. 991

AAF21901.1	AF109392	Brassica napus

SEQ ID NO. 995

CAA42596.1	X59970	Brassica napus
BAA88179.1	AP000836	Oryza sativa
CAA65502.1	X96727	Nicotiana tabacum
CAA47720.1	X67310	Solanum tuberosum
CAA74777.1	Y14432	Nicotiana tabacum
CAA74776.1	Y14431	Nicotiana tabacum
CAA76076.1	Y16126	Lycopersicon esculentum

SEQ ID NO. 1003

AAA91166.1	U39228	Prunus avium
BAA11831.1	D83177	Costus speciosus
AAF04007.1	AF163097	Dalbergia cochinchinensis
AAF34650.1	AF221526	Prunus serotina
AAF03675.1	AF149311	Rauvolfia serpentina
AAG25897.1	AF170087	Cucurbita pepo
BAA78708.1	AB003089	Polygonum tinctorium
CAA64442.1	X94986	Manihot esculenta
AAB22162.1	S35175	Manihot esculenta
AAD09850.1	U44087	Zea mays
AAC49177.1	U33817	Sorghum bicolor
AAC69619.1	AF072736	Pinus contorta
CAA40058.1	X56734	Trifolium repens
AAA87339.1	L41869	Hordeum vulgare
AAA65946.1	U25157	Zea mays
AAD10503.1	U33816	Zea mays
AAB03266.1	U44773	Zea mays
CAA52293.1	X74217	Zea mays
AAF28800.1	AF112888	Catharanthus roseus
AAD02839.1	AF082991	Avena sativa
AAG00614.1	AF293849	Secale cereale
CAA40057.1	X56733	Trifolium repens
CAA55196.1	X78433	Avena sativa
AAB71381.1	U95298	Manihot esculenta
AAK07429.1	AF321287	Musa acuminata
CAA79989.2	Z21977	Brassica napus
CAA57913.1	X82577	Brassica napus
AAB38784.1	U72154	Brassica nigra
CAC08209.1	AJ005950	Cicer arietinum
AAA84906.1	U28047	Oryza sativa

SEQ ID NO. 1004

AAF19196.1	AF206320	Musa acuminata
AAB71208.1	U63550	Fragaria x ananassa
AAF63756.1	AF243475	Vitis vinifera
AAF19195.1	AF206319	Musa acuminata
CAA70735.1	Y09541	Zinnia elegans
CAA63496.1	X92943	Musa acuminata
AAA86241.1	U41472	Medicago sativa
CAA47630.1	X67158	Nicotiana tabacum
CAA43414.1	X61102	Nicotiana tabacum
CAA43413.1	X61101	Nicotiana tabacum
CAA47631.1	X67159	Nicotiana tabacum

SEQ ID NO. 1005

AAK07429.1	AF321287	Musa acuminata
AAC69619.1	AF072736	Pinus contorta
AAF04007.1	AF163097	Dalbergia cochinchinensis
BAA78708.1	AB003089	Polygonum tinctorium
BAA11831.1	D83177	Costus speciosus
AAF03675.1	AF149311	Rauvolfia serpentina
AAG00614.1	AF293849	Secale cereale
AAA91166.1	U39228	Prunus avium
AAG25897.1	AF170087	Cucurbita pepo
AAF34650.1	AF221526	Prunus serotina
AAC49177.1	U33817	Sorghum bicolor
AAB22162.1	S35175	Manihot esculenta

AAA87339.1	L41869	Hordeum vulgare
CAA64442.1	X94986	Manihot esculenta
AAD02839.1	AF082991	Avena sativa
AAB03266.1	U44773	Zea mays
AAD09850.1	U44087	Zea mays
CAA52293.1	X74217	Zea mays
AAD10503.1	U33816	Zea mays
AAA65946.1	U25157	Zea mays
AAF28800.1	AF112888	Catharanthus roseus
CAA40058.1	X56734	Trifolium repens
CAA55196.1	X78433	Avena sativa
CAA40057.1	X56733	Trifolium repens
CAA79989.2	Z21977	Brassica napus
AAB71381.1	U95298	Manihot esculenta
CAA57913.1	X82577	Brassica napus
AAB38784.1	U72154	Brassica nigra
AAA84906.1	U28047	Oryza sativa
CAC08209.1	AJ005950	Cicer arietinum

SEQ ID NO. 1006

AAG43283.1	AF139210	Oryza sativa
AAD37698.1	AF145729	Oryza sativa
AAF01765.1	AF184278	Glycine max
AAD37695.1	AF145726	Oryza sativa
AAF19980.1	AF211193	Oryza sativa
AAK31270.1	AC079890	Oryza sativa
CAA65456.2	X96681	Oryza sativa
BAA93466.1	AB028078	Physcomitrella patens
CAA64491.1	X95193	Pimpinella brachycarpa
CAA62608.1	X91212	Lycopersicon esculentum
CAA64152.1	X94375	Pimpinella brachycarpa
BAA05625.1	D26576	Daucus carota
AAA63768.2	AF339748	Helianthus annuus
AAD38144.1	AF139497	Prunus armeniaca
CAA06728.1	AJ005833	Craterostigma plantagineum
AAD37700.1	AF145731	Oryza sativa
BAA93462.1	AB028074	Physcomitrella patens
BAA93463.1	AB028075	Physcomitrella patens
BAB18171.1	AB042769	Zinnia elegans
BAA05624.1	D26575	Daucus carota
BAA93467.1	AB028079	Physcomitrella patens
BAA93465.1	AB028077	Physcomitrella patens
AAD37699.1	AF145730	Oryza sativa
BAA21017.1	D26578	Daucus carota
CAA63222.1	X92489	Glycine max

SEQ ID NO. 1007

AAB88617.1	AF034946	Zea mays
AAA34125.1	L23762	Lycopersicon esculentum
AAA64427.1	L29077	Pisum sativum
CAA51821.1	X73419	Lycopersicon esculentum
AAD51109.1	AF176040	Mesembryanthemum crystalli
AAB02168.1	U15971	Oryza sativa
AAA86089.1	U17250	Brassica oleracea
AAD42941.1	AF091621	Catharanthus roseus
BAA21006.1	D17786	Oryza sativa
AAF73016.1	AF262934	Avicennia marina
AAA34310.1	M62720	Triticum aestivum
BAB40310.1	AB026055	Nicotiana tabacum
BAB40311.1	AB026056	Nicotiana tabacum
CAA58111.1	X82938	Lycopersicon esculentum
CAA06493.1	AJ005348	Cicer arietinum
AAC12662.1	AF032468	Zea mays
BAA90392.1	AP001081	Oryza sativa
CAA05772.1	AJ002959	Zea mays
AAF22280.1	AF165420	Mesembryanthemum crystallinum
AAF03236.1	AF180143	Glycine max
AAG23847.1	AY004247	Lycopersicon esculentum
AAB63513.1	AF008910	Prunus armeniaca
AAA34309.1	M28059	Triticum aestivum
CAA10494.1	AJ131733	Pseudotsuga menziesii
AAC32141.1	AF051240	Picea mariana

SEQ ID NO. 1008

CAA63222.1	X92489	Glycine max
CAA64221.1	X94449	Pimpinella brachycarpa
CAA64152.1	X94375	Pimpinella brachycarpa
CAA64491.1	X95193	Pimpinella brachycarpa
CAA65456.2	X96681	Oryza sativa
AAF19980.1	AF211193	Oryza sativa
AAK31270.1	AC079890	Oryza sativa
AAA74017.1	U30475	Glycine max

BAA93463.1	AB028075	Physcomitrella patens
AAD37695.1	AF145726	Oryza sativa
AAD37700.1	AF145731	Oryza sativa
CAA06728.1	AJ005833	Craterostigma plantagineum
AAD37696.1	AF145727	Oryza sativa
BAB18169.1	AB042767	Zinnia elegans
CAA06717.1	AJ005820	Craterostigma plantagineum
BAA05622.1	D26573	Daucus carota
BAA93462.1	AB028074	Physcomitrella patens
AAD37698.1	AF145729	Oryza sativa
CAA64417.1	X94947	Lycopersicon esculentum
BAA21017.1	D26578	Daucus carota
BAA05624.1	D26575	Daucus carota
AAF01764.2	AF184277	Glycine max
BAA93468.1	AB028080	Physcomitrella patens
BAA05625.1	D26576	Daucus carota
BAA93467.1	AB028079	Physcomitrella patens
AAF01765.1	AF184278	Glycine max
BAA93461.1	AB028073	Physcomitrella patens
BAB18171.1	AB042769	Zinnia elegans
BAA93464.1	AB028076	Physcomitrella patens
BAA05623.1	D26574	Daucus carota
BAA93466.1	AB028078	Physcomitrella patens
BAA93460.1	AB028072	Physcomitrella patens
AAD37697.1	AF145728	Oryza sativa

SEQ ID NO. 1009

BAA12159.1	D83968	Glycine max
BAA13076.1	D86351	Glycine max
AAD38930.1	AF135485	Glycine max
BAA84071.1	AB028151	Antirrhinum majus
BAA22423.1	AB001380	Glycyrrhiza echinata
BAA74466.1	AB022733	Glycyrrhiza echinata
BAA84072.1	AB028152	Torenia hybrida
BAA93632.1	AB024931	Lotus japonicus
AAF34532.1	AF195811	Trifolium pratense
AAF34529.1	AF195808	Vigna radiata
AAF34528.1	AF195807	Vigna radiata
AAF34531.1	AF195810	Trifolium pratense
AAD38929.1	AF135484	Glycine max
BAA76380.1	AB023636	Glycyrrhiza echinata
AAF34538.1	AF195817	Beta vulgaris
AAF34527.1	AF195806	Vigna radiata
AAF34530.1	AF195809	Vigna radiata
AAF34526.1	AF195805	Lens culinaris
AAF45142.1	AF195818	Glycine max
AAB94591.1	AF022462	Glycine max
AAF45143.1	AF195819	Glycine max
AAF34533.1	AF195812	Pisum sativum
AAF34534.1	AF195813	Lupinus albus
AAF34537.1	AF195816	Beta vulgaris
AAF34536.1	AF195815	Trifolium repens
AAF34525.1	AF195804	Lens culinaris
AAF34535.1	AF195814	Trifolium repens
CAB56503.1	AJ238612	Catharanthus roseus
CAA50155.1	X70824	Solanum melongena
AAD56282.1	AF155332	Petunia x hybrida
AAC39318.1	AF029858	Sorghum bicolor
BAB40323.1	AB037244	Asparagus officinalis

SEQ ID NO. 1010

AAC37479.1	L41355	Brassica rapa
AAA96316.1	U51119	Brassica rapa
CAA79954.1	Z21954	Vigna unguiculata
BAA19610.1	D64115	Glycine max
BAA19608.1	D31700	Glycine max
AAF23127.1	AF198389	Lycopersicon esculentum
CAA60610.1	X87126	Zea mays
BAA09666.1	D63342	Zea mays
BAA01472.1	D10622	Zea mays
AAF23126.1	AF198388	Lycopersicon esculentum
CAA89697.1	Z49697	Ricinus communis
AAA97905.1	U51853	Glycine max
BAA89582.1	AP001073	Oryza sativa
AAF72202.1	AF265551	Manihot esculenta
BAA07327.1	D38130	Zea mays
CAA11899.1	AJ224331	Castanea sativa
CAA60634.1	X87168	Sorghum bicolor
BAB21558.1	AB037156	Coix lacryma-jobi
BAA95416.1	AB039673	Helianthus annuus
AAA33903.1	J03469	Oryza sativa
AAB24010.1	S49967	Oryza

AAB66355.1	U54702	Oryza sativa
AAF64480.1	AF241536	Ipomoea batatas
AAD13812.1	AF117334	Ipomoea batatas
AAA97906.1	U51854	Glycine max
AAB71505.1	U82220	Pyrus communis
AAK15090.1	AF240007	Sesamum indicum
AAA97907.1	U51855	Glycine max
CAA72790.1	Y12068	Hordeum vulgare
AAA32672.1	L16624	Ambrosia artemisiifolia
AAK30004.1	AY028994	Dianthus caryophyllus
AAD33907.1	AF143677	Artemisia vulgaris
BAB18768.1	AB038394	Triticum aestivum
BAB18766.1	AB038392	Triticum aestivum
CAA50437.1	X71124	Carica papaya
AAC69278.1	AF064734	Dianthus caryophyllus
BAB18767.1	AB038393	Triticum aestivum
CAA40860.1	X57658	Oryza sativa
AAA33911.1	J05595	Oryza sativa
BAB18769.1	AB038395	Triticum aestivum
BAB18765.1	AB038391	Triticum aestivum
AAA16120.1	L16450	Solanum tuberosum
AAC32853.1	AF083253	Lycopersicon esculentum
AAF23128.1	AF198390	Lycopersicon esculentum
AAG38521.1	AF283536	Citrus x paradisi
CAA48037.1	X67844	Solanum tuberosum

SEQ ID NO. 1011

AAC31157.1	AF047477	Brassica oleracea
AAG41977.1	AF311942	Carica papaya
AAB94773.1	AF039746	Pisum sativum
CAA06723.1	AJ005829	Pisum sativum
AAD03598.1	AF098272	Vigna radiata
BAA37137.1	AB015497	Passiflora edulis
BAB13735.1	AB049128	Cucumis melo var. reticulatus
BAA85818.1	AB026499	Cucumis sativus
AAD26899.1	AF055894	Phalaenopsis sp. 'True Lady'
AAB72193.1	AF013979	Oryza sativa
AAB96765.2	AF039921	Nicotiana tabacum
AAD12777.1	AF051938	Solanum tuberosum
AAF28893.1	AF124527	Prunus persica
BAA37136.1	AB015496	Passiflora edulis

BAB18937.1	AB052228	Cucumis melo var. reticula
BAA85817.1	AB026498	Cucumis sativus
AAC31123.1	AF032448	Malus x domestica
AAF08300.1	AF113748	Musa acuminata
AAF61919.1	AF227742	Mangifera indica
AAD37577.1	AF141929	Pelargonium x hortorum
AAD37576.1	AF141928	Pelargonium x hortorum
AAC02213.1	AF043084	Lycopersicon esculentum
AAA85479.1	U41103	Lycopersicon esculentum
AAB68819.1	U63291	Rumex palustris
CAA69646.1	Y08359	Rumex palustris
AAC39497.1	AF047476	Brassica oleracea
AAB97160.1	AF022727	Nicotiana tabacum
AAC02214.1	AF043085	Lycopersicon esculentum
AAB39386.1	U47279	Lycopersicon esculentum
CAB76929.1	AJ276294	Citrus sinensis
BAA96745.1	AB035806	Dianthus caryophyllus
AAD31396.1	AF118843	Lycopersicon esculentum
AAC31213.3	AF026267	Nicotiana tabacum
BAB13718.1	AB040406	Zea mays
AAD31397.1	AF118844	Lycopersicon esculentum
BAA85819.1	AB026500	Cucumis sativus
BAA90552.1	AB031029	Prunus mume
BAA90551.1	AB031028	Prunus mume
AAD45346.1	AF159172	Rosa hybrid cultivar

SEQ ID NO. 1013

AAG34797.1	AF243362	Glycine max
AAG34798.1	AF243363	Glycine max
AAG34803.1	AF243368	Glycine max
AAF64450.1	AF239928	Euphorbia esula
AAG34801.1	AF243366	Glycine max
AAG34804.1	AF243369	Glycine max
AAG34796.1	AF243361	Glycine max
AAG34809.1	AF243374	Glycine max
AAG34807.1	AF243372	Glycine max
AAG34810.1	AF243375	Glycine max
AAG34844.1	AF244701	Zea mays
AAG34831.1	AF244688	Zea mays
AAC18566.1	AF048978	Glycine max
AAG34832.1	AF244689	Zea mays

AAG34808.1	AF243373	Glycine max
AAG34837.1	AF244694	Zea mays
AAG34800.1	AF243365	Glycine max
AAG34836.1	AF244693	Zea mays
CAA04391.1	AJ000923	Carica papaya
CAA71784.1	Y10820	Glycine max
AAG34849.1	AF244706	Zea mays
AAA68430.1	J03679	Solanum tuberosum
AAG34802.1	AF243367	Glycine max
CAC24549.1	AJ296343	Cichorium intybus x Cichorium endivia
CAA09187.1	AJ010448	Alopecurus myosuroides
AAF22518.1	AF118925	Papaver somniferum
CAA09188.1	AJ010449	Alopecurus myosuroides
AAF22517.1	AF118924	Papaver somniferum
AAF22647.1	AF193439	Lycopersicon esculentum

SEQ ID NO. 1016

AAC36698.1	AF075580	Mesembryanthemum crystallinum
CAA72341.1	Y11607	Medicago sativa
AAG43835.1	AF213455	Zea mays
AAD17804.1	AF092431	Lotus japonicus
AAD17805.1	AF092432	Lotus japonicus
AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAB90633.1	AJ277743	Fagus sylvatica
CAC10358.1	AJ277086	Nicotiana tabacum
CAC10359.1	AJ277087	Nicotiana tabacum
AAC36700.1	AF075582	Mesembryanthemum crystallinum
CAC09575.1	AJ298987	Fagus sylvatica
CAB90634.1	AJ277744	Fagus sylvatica
AAC35951.1	AF079355	Mesembryanthemum crystallinum
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAB93832.1	U81960	Zea mays
AAC26828.1	AF075603	Oryza sativa
AAC36699.1	AF075581	Mesembryanthemum crystallinum
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 1017

CAA96516.1	Z71997	Medicago sativa
AAB36543.1	U77935	Phaseolus vulgaris

SEQ ID NO. 1018

CAA87068.1	Z46944	Citrus sinensis
AAK15005.1	AF233452	Impatiens balsamina
AAB61593.1	AF003125	Mesembryanthemum crystalli
AAA33462.1	M73828	Zea mays
AAA34028.1	M35660	Spinacia oleracea
AAC49171.1	U29516	Chlamydomonas reinhardtii
AAA33085.1	L10349	Chlamydomonas reinhardtii
CAA26281.1	X02432	Silene latifolia subsp. al
AAA33665.1	M31713	Pisum sativum
CAA52980.1	X75089	Triticum aestivum
AAA33461.1	M73831	Zea mays
BAA32348.1	AB016810	Zea mays
BAA06456.1	D30794	Oryza sativa
AAA33460.1	M73830	Zea mays
AAA33459.1	M73829	Zea mays
BAA06436.1	D30763	Oryza sativa
CAA99756.1	Z75520	Lycopersicon esculentum
BAA19865.1	D83660	Oryza sativa
AAD02175.1	AF039662	Capsicum annuum
BAA90760.1	AB038037	Ipomoea nil
CAA73265.1	Y12734	Physcomitrella patens
AAB65699.1	AF010320	Oryza sativa

SEQ ID NO. 1020

AAF74567.1	AF215853	Solanum tuberosum
AAF74566.1	AF215852	Nicotiana tabacum
AAF74565.1	AF215851	Spinacia oleracea
AAF74568.1	AF215854	Zea mays
AAG43998.1	AF215837	Apium graveolens var. dulce
BAB19864.1	AB052885	Oryza sativa
CAA09419.1	AJ010942	Lycopersicon esculentum
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA53192.1	X75440	Chlorella kessleri
CAA68813.1	Y07520	Chlorella kessleri
AAA79761.1	L08196	Ricinus communis
CAB06079.1	Z83829	Picea abies
CAB07812.1	Z93775	Vicia faba
CAA47324.1	X66856	Nicotiana tabacum
CAA39036.1	X55349	Chlorella kessleri
AAB06594.1	U38651	Medicago truncatula

CAA04511.1	AJ001061	Vitis vinifera
AAA79857.1	L08188	Ricinus communis
CAA70777.1	Y09590	Vitis vinifera
BAB19863.1	AB052884	Oryza sativa
BAB19862.1	AB052883	Oryza sativa
CAB52690.1	AJ132225	Lycopersicon esculentum
BAA85398.1	AP000615	Oryza sativa
CAB52688.1	AJ132223	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris

SEQ ID NO. 1021

CAA96516.1	Z71997	Medicago sativa
AAB36543.1	U77935	Phaseolus vulgaris

SEQ ID NO. 1022

AAG43549.1	AF211531	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum
BAA78738.1	AB023482	Oryza sativa
CAC12822.1	AJ299252	Nicotiana tabacum
AAF76898.1	AF274033	Atriplex hortensis
BAB16083.1	AB036883	Oryza sativa
BAB03248.1	AB037183	Oryza sativa
AAC24587.1	AF071893	Prunus armeniaca
AAF23899.1	AF193803	Oryza sativa
AAK01089.1	AF298231	Hordeum vulgare
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
BAA07321.1	D38123	Nicotiana tabacum
AAF63205.1	AF245119	Mesembryanthemum crystallinum
AAG43545.1	AF211527	Nicotiana tabacum
AAC62619.1	AF057373	Nicotiana tabacum
BAA99376.1	AP002526	Oryza sativa

SEQ ID NO. 1025

AAA33280.1	L20475	Datura stramonium
AAA33281.1	L20473	Datura stramonium
CAC34420.1	AJ307584	Solanum tuberosum
BAA13547.1	D88156	Hyoscyamus niger
BAA85844.1	AB026544	Hyoscyamus niger
AAA33282.1	L20474	Datura stramonium
CAB52307.1	AJ245634	Solanum tuberosum
CAC19810.1	AJ292343	Solanum tuberosum
BAA85845.1	AB026545	Hyoscyamus niger
AAB09776.1	L20485	Hyoscyamus niger
CAA45866.1	X64566	Cuphea lanceolata
CAA45793.1	X64463	Brassica napus
AAB20114.2	S60064	Brassica napus
CAA74176.1	Y13861	Nicotiana tabacum
CAA05879.1	AJ003124	Petunia x hybrida
CAA74177.1	Y13862	Nicotiana tabacum
CAA05816.1	AJ003025	Oryza sativa
AAB82767.1	U89509	Zea mays
CAA64729.1	X95462	Brassica napus
AAB82766.1	U89510	Hordeum vulgare

SEQ ID NO. 1026

CAB51555.1	AJ242531	Triticum aestivum
BAA90749.1	AB030956	Oryza sativa
CAB51557.1	AJ242530	Zea mays

SEQ ID NO. 1027

AAC63113.1	AF000307	Brassica napus
AAC63111.1	AF000305	Brassica napus
AAC63112.1	AF000306	Brassica napus
AAA33342.2	M84135	Flaveria chloraefolia
AAA61638.1	U10275	Flaveria bidentis
AAA33343.1	M84136	Flaveria chloraefolia
AAA87399.1	U10277	Flaveria bidentis

SEQ ID NO. 1029

AAC98969.1	AF047428	Oryza sativa
AAC98962.1	AF045571	Oryza sativa
AAD31844.1	AF133118	Oryza sativa
BAB08194.1	AP002539	Oryza sativa
BAA96755.1	AP002521	Oryza sativa

SEQ ID NO. 1031

AAF66242.1	AF243180	Lycopersicon esculentum
CAA80963.1	Z25471	Pisum sativum
AAD10251.1	AF031195	Triticum aestivum
AAC64163.1	AF093537	Zea mays
CAA10134.1	AJ012693	Cicer arietinum

AAF66243.1	AF243181	Lycopersicon esculentum
CAB65280.1	AJ248323	Medicago sativa subsp. x varia
AAC32448.1	U76296	Spinacia oleracea
SEQ ID NO. 1034		
BAA23143.1	D87261	Oryza sativa
BAA23142.1	D87260	Oryza sativa
SEQ ID NO. 1035		
AAG45501.1	AY012513	Populus balsamifera subsp. trichocarpa
AAG43046.1	AY012515	Populus x canescens
SEQ ID NO. 1039		
AAA97411.1	U51918	Pisum sativum
SEQ ID NO. 1042		
CAA42234.1	X59714	Zea mays
SEQ ID NO. 1045		
BAA88182.1	AP000836	Oryza sativa
SEQ ID NO. 1046		
AAC96077.1	AF049350	Nicotiana tabacum
AAC96079.1	AF049352	Nicotiana tabacum
AAC96078.1	AF049351	Nicotiana tabacum
AAB37749.1	U30460	Cucumis sativus
AAG32920.1	AF184232	Lycopersicon esculentum
AAG01875.1	AF291659	Striga asiatica
AAD47901.1	AF085330	Pinus taeda
AAF21101.1	AF159563	Fragaria x ananassa
AAB40637.1	U64893	Pinus taeda
AAB40635.1	U64891	Pinus taeda
AAB40634.1	U64890	Pinus taeda
AAB40636.1	U64892	Pinus taeda
BAB19676.1	AB029083	Prunus persica
AAC63088.1	U82123	Lycopersicon esculentum
AAG13982.1	AF297521	Prunus avium
AAC33530.1	AF038815	Prunus armeniaca
AAB37746.1	U30382	Cucumis sativus
AAC33529.1	U93167	Prunus armeniaca
AAC39512.1	AF043284	Gossypium hirsutum
CAC19184.1	AJ291817	Cicer arietinum
AAF35901.1	AF230332	Zinnia elegans
CAA69105.1	Y07782	Oryza sativa
CAB46492.1	AJ243340	Lycopersicon esculentum
CAB43197.1	AJ239068	Lycopersicon esculentum
AAC64201.1	AF096776	Lycopersicon esculentum
AAB38074.1	U30477	Oryza sativa
AAF32410.1	AF230277	Triphysaria versicolor
AAB81662.1	U85246	Oryza sativa
CAA06271.2	AJ004997	Lycopersicon esculentum
AAF32409.1	AF230276	Triphysaria versicolor
CAA04385.1	AJ000885	Brassica napus
AAD13633.1	AF059489	Lycopersicon esculentum
AAF17571.1	AF202120	Regnellidium diphyllum
AAG13983.1	AF297522	Prunus avium
AAC96081.1	AF049354	Nicotiana tabacum
AAD49956.1	AF167360	Rumex palustris
AAF32411.1	AF230278	Triphysaria versicolor
AAF35902.1	AF230333	Zinnia elegans
AAD13632.1	AF059488	Lycopersicon esculentum
BAB32732.1	AB049406	Eustoma grandiflorum
CAC19183.1	AJ291816	Cicer arietinum
CAC06433.1	AJ276007	Festuca pratensis
AAG32921.1	AF184233	Lycopersicon esculentum
AAF62182.1	AF247164	Oryza sativa
CAC06432.1	AJ276006	Festuca pratensis
SEQ ID NO. 1047		
BAA37171.1	AB022674	Oryza sativa
BAA37170.1	AB022673	Oryza sativa
AAA34031.1	J02849	Spinacia oleracea
CAA44226.1	X62368	Nicotiana tabacum
CAA44214.1	X62339	Nicotiana tabacum
CAA48414.1	X68340	Secale cereale
AAB21989.1	S93166	Chloroplast Nicotiana sylvestris
CAA48400.1	X68325	Secale cereale
AAD54786.1	AF137379	Chloroplast Nephroselmis olivacea
AAB66886.1	AF010581	Oryza sativa

BAA57991.1	AB001684	Chlorella vulgaris
CAB38448.1	AJ236874	Plastid Prototheca wickerhamii

SEQ ID NO. 1059

CAA09001.1	AJ010110	Chlamydomonas reinhardtii
CAA34615.1	X16619	Chlamydomonas reinhardtii
AAF43427.1	AF233374	Volvox carteri

SEQ ID NO. 1060

AAA50763.1	U15605	Nicotiana glutinosa
CAA08798.1	AJ009720	Solanum tuberosum
AAG09951.1	AF175388	Glycine max
AAK28810.1	AF310964	Linum usitatissimum
AAK28812.1	AF310968	Linum usitatissimum
AAK28811.1	AF310966	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
AAK28806.1	AF310960	Linum usitatissimum
AAK28804.1	AF310959	Linum usitatissimum
AAK28809.1	AF310962	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum
CAA08797.1	AJ009719	Solanum tuberosum
AAG43546.1	AF211528	Nicotiana tabacum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
CAC35326.1	AJ310151	Linum usitatissimum
CAC35332.1	AJ310157	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
CAC35330.1	AJ310155	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
CAC35321.1	AJ310150	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
AAD25966.1	AF093639	Linum usitatissimum
AAG01052.1	AF175395	Glycine max
AAB47618.1	U73916	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAG09952.1	AF175389	Glycine max
AAA91022.1	U27081	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
AAG01051.1	AF175394	Glycine max
AAD25965.1	AF093638	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum

SEQ ID NO. 1061

AAA34025.1	M31480	Spinacia oleracea
AAB41696.1	U69142	Spinacia oleracea
CAA49425.1	X69770	Atriplex hortensis
CAA41376.1	X58462	Beta vulgaris
CAA41377.1	X58463	Beta vulgaris
BAB18543.1	AB043539	Avicennia marina
BAA21098.1	AB001348	Oryza sativa
AAB70010.1	AF017150	Amaranthus hypochondriacus
AAF73828.1	AF162665	Oryza sativa
BAB19052.1	AB044537	Oryza sativa
AAB58165.1	AF000132	Amaranthus hypochondriacus
BAB18544.1	AB043540	Avicennia marina
BAA05466.1	D26448	Hordeum vulgare
BAA96793.1	AB030939	Oryza sativa
CAA71003.1	Y09876	Nicotiana tabacum
AAG43988.1	AF215823	Zea mays
BAA96794.1	AB037421	Oryza sativa
AAC49268.1	U12196	Sorghum bicolor
CAA53076.1	X75327	Pisum sativum
AAB47571.1	U87848	Nicotiana plumbaginifolia
AAF08296.1	AF196292	Apium graveolens
AAC49267.1	U12195	Sorghum bicolor
CAA53075.1	X75326	Zea mays

AAG43027.1	AF323586	Oryza sativa
AAC03055.1	AF045770	Oryza sativa
AAB33843.1	S77096	Brassica napus

SEQ ID NO. 1062

CAA76555.1	Y16953	Sinapis alba
CAA58772.1	X83920	Brassica napus
CAA63073.1	X92102	Raphanus sativus
AAB03378.1	U27107	Brassica napus
AAD42937.1	AF084971	Catharanthus roseus
CAA88492.1	Z48602	Nicotiana tabacum
CAA88493.1	Z48603	Nicotiana tabacum
AAC49398.1	U46217	Petroselinum crispum
AAA80169.1	U10270	Zea mays
AAB40291.1	U42208	Oryza sativa
AAB00098.1	L01449	Glycine max
CAA58774.1	X83922	Brassica napus
CAA58773.1	X83921	Brassica napus
AAK14790.1	AY027510	Catharanthus roseus
AAC49556.1	U04295	Oryza sativa
AAD42938.1	AF084972	Catharanthus roseus
AAA34293.1	M28704	Triticum aestivum
CAA71768.1	Y10809	Petroselinum crispum
CAA52896.1	X74942	Lycopersicon esculentum
CAA71770.1	Y10810	Petroselinum crispum
BAA10928.1	D64051	Triticum aestivum
CAA52897.1	X74943	Lycopersicon esculentum
CAA52895.1	X74941	Lycopersicon esculentum
CAB62402.1	Y15165	Zea mays
AAA17488.1	U07933	Triticum aestivum
AAA68429.1	M63999	Triticum aestivum
AAA19103.1	U10466	Triticum aestivum
CAA71687.1	Y10685	Glycine max

SEQ ID NO. 1063

CAA58750.1	X83869	Daucus carota
AAB47181.1	S82324	Zea mays
BAA12691.1	D84507	Zea mays
BAA12692.1	D84508	Zea mays
AAG01179.1	AF289237	Zea mays
BAA22410.1	D38452	Zea mays

AAC24961.1	AF009337	Tradescantia virginiana
AAF23900.1	AF194413	Oryza sativa
AAF23901.2	AF194414	Oryza sativa
AAC78558.1	AF030879	Solanum tuberosum
CAA57157.1	X81394	Oryza sativa
AAC25423.1	AF072908	Nicotiana tabacum
BAA12715.1	D85039	Zea mays
AAA69507.1	U28376	Zea mays
BAA81751.1	AB017517	Marchantia polymorpha
BAA81749.1	AB017515	Marchantia polymorpha
CAA39936.1	X56599	Daucus carota
AAB49984.1	U90262	Cucurbita pepo
BAA81750.1	AB017516	Marchantia polymorpha
BAA81748.1	AB017515	Marchantia polymorpha
AAD17800.1	AF090835	Mesembryanthemum crystallinum
AAB80693.1	U69174	Glycine max
AAD28192.2	AF115406	Solanum tuberosum
BAA13440.1	D87707	Ipomoea batatas
CAA07481.1	AJ007366	Zea mays
AAB88537.1	AF035944	Fragaria x ananassa
CAA65500.1	X96723	Medicago sativa
AAA61682.1	L27484	Zea mays
AAB70706.1	U82087	Tortula ruralis
BAB16888.1	AB042550	Oryza sativa
BAA85396.1	AP000615	Oryza sativa
BAA12338.1	D84408	Zea mays
CAA57156.1	X81393	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
AAC49405.1	U08140	Vigna radiata
BAA13232.1	D87042	Zea mays
AAB80692.1	U69173	Glycine max
AAF21062.1	AF216527	Dunaliella tertiolecta
AAK26164.1	AY027885	Cucumis sativus
AAA33443.1	L15390	Zea mays
CAA89202.1	Z49233	Chlamydomonas eugametos
AAG46110.1	AC073166	Oryza sativa
BAA02698.1	D13436	Oryza sativa
BAA90814.1	AP001168	Oryza sativa
CAB46228.1	Y18055	Arachis hypogaea
AAC49008.1	U24188	Lilium longiflorum
AAF19401.1	AF203479	Glycine max

AAD52098.1	U70923	Nicotiana tabacum

SEQ ID NO. 1064

CAB43937.1	AJ006348	Fragaria x ananassa
AAC95009.1	AF074923	Fragaria x ananassa
CAA65827.1	X97189	Capsicum annuum
AAA69909.1	U13055	Lycopersicon esculentum
AAC12684.1	U76725	Pinus radiata
AAA80495.1	U20590	Lycopersicon esculentum
BAA85150.1	AB032830	Pisum sativum
AAC12685.1	U76756	Pinus radiata
BAB32662.1	AB055886	Atriplex lentiformis
BAA77239.1	AB025796	Populus alba
CAB59900.1	AJ010950	Capsicum annuum
CAA65828.1	X97190	Capsicum annuum
BAB39483.1	AB049200	Populus alba
AAA96135.1	L41046	Pisum sativum
AAC62241.1	AF077339	Lycopersicon esculentum
CAA72133.1	Y11268	Lycopersicon esculentum
CAA65600.1	X96856	Prunus persica
CAA65597.1	X96853	Prunus persica
BAB39482.1	AB049199	Populus alba
AAD08699.1	AF098292	Lycopersicon esculentum
CAA65826.1	X97188	Capsicum annuum
CAA60737.1	X87323	Capsicum annuum
AAC78504.1	U34754	Phaseolus vulgaris
AAA02563.1	M57400	Phaseolus vulgaris
CAB43938.1	AJ006349	Fragaria x ananassa
BAA96207.1	AP002094	Oryza sativa
AAA69908.1	U13054	Lycopersicon esculentum
BAA96209.1	AP002094	Oryza sativa
CAA11301.1	AJ223386	Fragaria x ananassa
AAC49704.1	U78526	Lycopersicon esculentum
BAA94257.1	AB040769	Hordeum vulgare
CAB51903.1	AJ242807	Brassica napus
AAA20082.1	U00730	Glycine max
CAA11302.1	AJ223387	Fragaria x ananassa
BAA21111.1	D88417	Gossypium hirsutum
CAA80627.1	Z23081	Vigna radiata

SEQ ID NO. 1065

CAA06999.1	AJ006378	Lycopersicon esculentum
CAA07000.1	AJ006379	Lycopersicon esculentum
CAA67430.1	X98930	Lycopersicon esculentum
CAA67429.1	X98929	Lycopersicon esculentum
CAA76725.1	Y17276	Lycopersicon esculentum
CAA71234.1	Y10149	Lycopersicon esculentum
CAA06414.1	AJ005173	Lycopersicon esculentum
CAA06412.1	AJ005171	Lycopersicon esculentum
CAA76727.1	Y17278	Lycopersicon esculentum
CAB67120.1	Y18932	Lycopersicon esculentum
CAA06413.1	AJ005172	Lycopersicon esculentum
CAA07250.1	AJ006786	Lycopersicon esculentum
BAB21149.1	AP002899	Oryza sativa
CAB67119.1	Y18931	Lycopersicon esculentum
CAA64566.1	X95270	Lycopersicon esculentum
CAA76724.1	Y17275	Lycopersicon esculentum
CAA59964.1	X85975	Alnus glutinosa
CAA76726.1	Y17277	Lycopersicon esculentum
CAA06997.1	AJ006376	Lycopersicon esculentum
CAA07001.1	AJ006380	Lycopersicon esculentum
CAA07059.1	AJ006480	Lycopersicon esculentum
CAA06998.1	AJ006377	Lycopersicon esculentum
CAA07060.1	AJ006481	Lycopersicon esculentum
CAA07062.1	AJ006483	Lycopersicon esculentum
BAB03290.1	AB037371	Oryza sativa
AAG38994.1	AF160513	Glycine max
AAD02075.3	AF036960	Glycine max
AAG09442.1	AF200467	Oryza sativa
AAF13299.1	AF181496	Lycopersicon esculentum
BAA04839.1	D21815	Lilium longiflorum
AAF31406.1	AF201883	Gossypioides kirkii
CAA10987.1	AJ222782	Hordeum vulgare

SEQ ID NO. 1066

BAA82556.1	AB030083	Populus nigra
AAD21872.1	AF078082	Phaseolus vulgaris
AAF43408.1	AF230515	Oryza sativa subsp. japonica
CAA73134.1	Y12531	Brassica oleracea
AAB93834.1	U82481	Zea mays
BAA92954.1	AP001551	Oryza sativa
AAK21965.1	AY028699	Brassica napus

BAA92953.1	AP001551	Oryza sativa
BAA94516.1	AP001800	Oryza sativa
AAD52097.1	AF088885	Nicotiana tabacum
AAC23542.1	U20948	Ipomoea trifida
AAG16628.1	AY007545	Brassica napus
AAA33915.1	L27821	Oryza sativa
BAA94509.1	AB041503	Populus nigra
AAD46420.1	AF100771	Hordeum vulgare
BAA23676.1	AB000970	Brassica rapa
BAA94517.1	AP001800	Oryza sativa
BAA21132.1	D88193	Brassica rapa
BAA06285.1	D30049	Brassica rapa
BAA94529.2	AP001800	Oryza sativa
AAB61708.1	U93048	Daucus carota
CAA79355.1	Z18921	Brassica oleracea
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
BAA94510.1	AB041504	Populus nigra
AAA33000.1	M76647	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
AAB47421.1	U59316	Lycopersicon esculentum
BAA07577.2	D38564	Brassica rapa
AAA33008.1	M97667	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
BAA92837.1	AB032474	Brassica oleracea

SEQ ID NO. 1067

AAF23903.1	AF194416	Oryza sativa
AAD52659.1	AF177392	Oryza sativa
AAF23902.1	AF194415	Oryza sativa
AAD28617.1	AF129087	Medicago sativa
CAB61750.1	AJ275316	Cicer arietinum
AAB57843.1	U96716	Selaginella lepidophylla
AAF65766.1	AF242308	Euphorbia esula
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAA58761.1	X83880	Nicotiana tabacum
CAA47099.1	X66469	Medicago sativa
AAB41548.1	L07042	Medicago sativa
AAB58396.1	U94192	Nicotiana tabacum
CAA50036.1	X70703	Pisum sativum
AAF73236.1	AF153061	Pisum sativum
BAB32406.1	AB055515	Nicotiana tabacum
CAA58760.1	X83879	Nicotiana tabacum
CAA57721.1	X82270	Medicago sativa
AAF81420.1	AF247136	Capsicum annuum
AAD37790.1	AF149424	Ipomoea batatas
AAG40580.1	AF216316	Oryza sativa
CAB37188.1	AJ224336	Medicago sativa
AAF61238.1	AF241166	Oryza sativa
AAG40581.1	AF216317	Oryza sativa
CAB61889.1	AJ251330	Oryza sativa
CAA73323.1	Y12785	Petroselinum crispum
CAC13967.1	AJ250311	Oryza sativa
CAA56314.1	X79993	Avena sativa
CAA49592.1	X69971	Nicotiana tabacum
CAA58466.1	X83440	Petunia x hybrida
AAK01710.1	AF332873	Oryza sativa
AAG40579.1	AF216315	Oryza sativa
CAA57719.1	X82268	Medicago sativa
AAC28850.1	AF079318	Triticum aestivum
BAA74734.1	AB016802	Zea mays
AAF73257.1	AF154329	Pisum sativum
BAA09600.1	D61377	Nicotiana tabacum
AAF81419.1	AF247135	Capsicum annuum
BAA74733.1	AB016801	Zea mays
CAA05328.1	AJ002314	Nicotiana tabacum
CAA05329.1	AJ002315	Nicotiana tabacum
CAA11861.1	AJ224164	Petunia x hybrida
CAA58595.1	X83620	Petunia x hybrida
CAA11862.1	AJ224165	Petunia x hybrida
CAA58594.1	X83619	Petunia x hybrida
AAA92823.1	U18365	Brassica napus
BAA92214.1	AP001278	Oryza sativa
CAA67554.1	X99100	Trifolium repens

SEQ ID NO. 1070

AAF76898.1	AF274033	Atriplex hortensis
CAC12822.1	AJ299252	Nicotiana tabacum
AAC24587.1	AF071893	Prunus armeniaca
AAF23899.1	AF193803	Oryza sativa
BAA78738.1	AB023482	Oryza sativa
AAG43545.1	AF211527	Nicotiana tabacum

AAF63205.1	AF245119	Mesembryanthemum crystallinum
BAA07321.1	D38123	Nicotiana tabacum
BAB16083.1	AB036883	Oryza sativa
BAB03248.1	AB037183	Oryza sativa
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
BAA99376.1	AP002526	Oryza sativa
AAC62619.1	AF057373	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum
AAG43549.1	AF211531	Nicotiana tabacum
AAK01089.1	AF298231	Hordeum vulgare

SEQ ID NO. 1071

AAA34181.1	M98466	Lycopersicon esculentum
AAB39547.1	U63374	Lycopersicon esculentum
AAB38497.1	U79772	Mercurialis annua

SEQ ID NO. 1072

AAA73945.1	L33904	Brassica oleracea
AAC63372.1	AF093751	Brassica oleracea
AAA73947.1	L33906	Brassica oleracea
AAA64310.1	U22174	Brassica napus
AAB37228.1	U22105	Brassica napus
AAA73946.1	L33905	Brassica oleracea
AAA73948.1	L33907	Brassica oleracea
AAA32995.1	L29767	Brassica oleracea
AAF35185.1	AF195864	Gossypium hirsutum
AAK28533.1	AF329829	Corylus avellana
AAA74624.1	U31766	Oryza sativa
AAB70539.1	AF017359	Oryza sativa
AAG29777.1	AF228333	Gossypium hirsutum
AAF35186.1	AF195865	Gossypium hirsutum
AAC00499.1	AF044204	Gossypium hirsutum
AAD09107.1	AF101038	Brassica napus
CAA50661.1	X71668	Sorghum bicolor
AAF26449.1	AF221501	Prunus avium
AAB06443.1	U66105	Zea mays
CAA80809.1	Z23271	Oryza sativa
AAA34032.1	M58635	Spinacia oleracea
AAF26450.1	AF221502	Malus x domestica
CAA50660.1	X71667	Sorghum bicolor
CAB96874.1	AJ277164	Malus x domestica
CAA05771.1	AJ002958	Cicer arietinum
CAA65475.1	X96714	Prunus dulcis
AAA33493.1	J04176	Zea mays
CAA65477.1	X96716	Prunus dulcis
AAB70538.1	AF017358	Oryza sativa
AAF35184.1	AF195863	Gossypium hirsutum
AAK20395.1	AF334185	Triticum aestivum
AAA86694.1	U18127	Hordeum vulgare
AAG27707.1	AF302788	Triticum aestivum
AAA75599.1	U15153	Gossypium hirsutum
AAB34774.1	S78173	Gossypium hirsutum
CAA85484.1	Z37115	Hordeum vulgare
AAD46683.1	AF171094	Lilium longiflorum
AAB96834.1	M64746	Daucus carota
CAA63407.1	X92748	Beta vulgaris
AAB70541.1	AF017361	Oryza sativa
AAA33494.1	M57249	Zea mays
CAA91436.1	Z66529	Hordeum vulgare
AAB05812.1	U63993	Hordeum vulgare
AAB70540.1	AF017360	Oryza sativa
CAA69949.1	Y08691	Oryza sativa
AAB18815.1	U77295	Oryza sativa
CAA48621.1	X68654	Hordeum vulgare

SEQ ID NO. 1073

AAD46406.1	AF096250	Lycopersicon esculentum
AAD10057.1	AF110519	Lycopersicon esculentum
AAD10056.1	AF110518	Lycopersicon esculentum
AAG31141.1	AF305911	Oryza sativa
AAG31142.1	AF305912	Hordeum vulgare
CAA06334.1	AJ005077	Lycopersicon esculentum
AAK30005.1	AY029067	Rosa hybrid cultivar
AAA34002.1	M67449	Glycine max
AAK11734.1	AY027437	Arachis hypogaea
CAC09580.1	AJ298992	Fagus sylvatica
AAF76189.1	AF271206	Rosa hybrid cultivar
AAF78015.1	AF238471	Oryza sativa
AAD43962.1	U78762	Triticum aestivum
CAA61510.1	X89226	Oryza sativa
AAD46415.1	AF100765	Oryza sativa

AAG00510.1	AF285172	Phaseolus vulgaris
BAB39437.1	AP003338	Oryza sativa
BAB39434.1	AP003338	Oryza sativa
AAF78020.1	AF238476	Oryza sativa
AAF78019.1	AF238475	Oryza sativa
AAF68399.1	AF237569	Oryza sativa
AAF68397.1	AF237567	Oryza sativa
AAD44031.1	AF085166	Hordeum vulgare
BAA94516.1	AP001800	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
AAG25966.1	AF302082	Nicotiana tabacum

SEQ ID NO. 1075

AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
AAD20980.1	AF079782	Zea mays
BAA95704.1	AB042643	Oryza sativa
BAA95705.1	AB042644	Oryza sativa
AAG48833.1	AC084218	Oryza sativa

SEQ ID NO. 1076

AAF33670.1	AF079872	Nicotiana tabacum
AAF33669.1	AF079871	Nicotiana tabacum
AAB53255.1	U65390	Nicotiana tabacum
CAA65254.1	X96390	Lycopersicon esculentum
BAA84085.1	AB032074	Nicotiana paniculata
AAF36832.1	AF207745	Triticum aestivum
CAB62555.1	AJ249962	Daucus carota
CAA68912.1	Y07632	Zea mays
CAC05488.1	AJ271446	Populus tremula x Populus tremuloides
CAC05489.1	AJ271447	Populus tremula x Populus tremuloides
AAD39492.1	AF145272	Samanea saman
BAA96150.1	AP002092	Oryza sativa
BAA96192.1	AP002093	Oryza sativa
AAD16278.1	AF099095	Samanea saman
CAC10514.1	AJ299019	Samanea saman
CAB54856.1	AJ132686	Zea mays
CAA56175.1	X79779	Solanum tuberosum
CAA71598.1	Y10579	Vicia faba

SEQ ID NO. 1077

AAG31173.1	AF315714	Ipomoea nil
AAC98912.1	AF029984	Lycopersicon esculentum
CAB89693.1	AJ276591	Pisum sativum
CAB94800.1	AJ289773	Pisum sativum
CAA70768.1	Y09579	Pisum sativum
CAB94801.1	AJ289774	Pisum sativum
BAA94422.1	AB040053	Oryza sativa subsp. japoni
CAB89694.1	AJ276592	Pisum sativum

SEQ ID NO. 1078

AAD11481.1	U51191	Glycine max
AAD11482.1	U51192	Glycine max
AAA65637.1	L13654	Lycopersicon esculentum
AAA65636.1	L13653	Lycopersicon esculentum
CAA76374.2	Y16776	Spinacia oleracea
BAA03644.1	D14997	Oryza sativa
CAA80502.1	Z22920	Spirodela polyrrhiza
BAA07664.1	D42065	Nicotiana tabacum
AAF63024.1	AF244921	Spinacia oleracea
BAA07663.1	D42064	Nicotiana tabacum
BAA77387.1	AB024437	Scutellaria baicalensis
CAC21393.1	AJ401276	Zea mays
AAD11483.1	U51193	Glycine max
AAD11484.1	U51194	Glycine max
CAA62226.1	X90693	Medicago sativa
CAA62227.1	X90694	Medicago sativa
AAB41811.1	L36157	Medicago sativa
CAA64413.1	X94943	Lycopersicon esculentum
BAA89584.1	AP001073	Oryza sativa
BAA90365.1	AP001081	Oryza sativa
BAA01950.1	D11337	Vigna angularis
AAB67737.1	L77080	Stylosanthes humilis
AAA32676.1	M37637	Arachis hypogaea
AAF63027.1	AF244924	Spinacia oleracea
CAA62225.1	X90692	Medicago sativa

CAC21391.1	AJ401274	Zea mays
AAD37427.1	AF149277	Phaseolus vulgaris
CAB94692.1	AJ242742	Ipomoea batatas
AAB41810.1	L36156	Medicago sativa
BAA82307.1	AB027753	Nicotiana tabacum
AAF65464.2	AF247700	Oryza sativa
BAA92500.1	AP001383	Oryza sativa
AAD37430.1	AF149280	Phaseolus vulgaris
CAA62615.1	X91232	Mercurialis annua
AAC98519.1	AF007211	Glycine max
AAB97734.1	AF014502	Glycine max
CAA39486.1	X56011	Triticum aestivum
BAA94962.1	AB042103	Asparagus officinalis
AAD37429.2	AF149279	Phaseolus vulgaris
AAF63026.1	AF244923	Spinacia oleracea
CAA71488.1	Y10462	Spinacia oleracea
AAD37375.1	AF145349	Glycine max
CAA76376.1	Y16778	Spinacia oleracea
BAA14143.1	D90115	Armoracia rusticana
CAA59485.1	X85228	Triticum aestivum

SEQ ID NO. 1079

AAG16628.1	AY007545	Brassica napus
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
BAA78764.1	AB023482	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max
AAC27894.1	AF023164	Zea mays
AAF66615.1	AF142596	Nicotiana tabacum
CAB51834.1	00069	Oryza sativa
AAD21872.1	AF078082	Phaseolus vulgaris
AAC27895.1	AF023165	Zea mays
AAB61708.1	U93048	Daucus carota
CAA97692.1	Z73295	Catharanthus roseus
AAA33915.1	L27821	Oryza sativa
AAF91322.1	AF244888	Glycine max
AAK11568.1	AF318492	Lycopersicon hirsutum
AAB09771.1	U67422	Zea mays
AAF76307.1	AF220602	Lycopersicon pimpinellifol
AAF76314.1	AF220603	Lycopersicon esculentum
AAB47424.1	U59317	Lycopersicon pimpinellifol
BAA92954.1	AP001551	Oryza sativa
AAB47422.1	U59318	Lycopersicon esculentum
AAF91324.1	AF244890	Glycine max

SEQ ID NO. 1080

AAB86850.1	AF031540	Fritillaria agrestis
AAC84135.1	AF101422	Cichorium intybus
BAA02159.1	D12634	Oryza sativa
AAA63515.1	M63704	Oryza sativa
AAB70265.1	AF017367	Oryza sativa
AAA33084.1	M35173	Chlamydomonas reinhardtii
CAB16954.1	Z99829	Chlamydomonas reinhardtii
CAA79708.1	Z21499	Stellaria longipes

SEQ ID NO. 1081

BAA02159.1	D12634	Oryza sativa
AAA63515.1	M63704	Oryza sativa
AAB86850.1	AF031540	Fritillaria agrestis
AAC84135.1	AF101422	Cichorium intybus
AAB70265.1	AF017367	Oryza sativa
AAA33084.1	M35173	Chlamydomonas reinhardtii
CAB16954.1	Z99829	Chlamydomonas reinhardtii
CAA79708.1	Z21499	Stellaria longipes

SEQ ID NO. 1082

BAB08188.1	AP002539	Oryza sativa
CAA70815.1	Y09602	Hordeum vulgare
CAB59202.1	X78878	Hordeum vulgare
CAA55478.1	X78877	Hordeum vulgare
AAD22150.1	AF061282	Sorghum bicolor
CAB58992.1	X78876	Hordeum vulgare
AAD22151.1	AF061282	Sorghum bicolor
AAF44708.1	AF242849	Lycopersicon esculentum
AAD22164.1	AF061282	Sorghum bicolor
BAA04510.1	D17586	Oryza sativa

CAA70816.1	Y09603	Hordeum vulgare
AAA32940.1	J03897	Hordeum vulgare
AAF64227.1	AF248647	Lycopersicon pennellii
AAD01265.1	AF006080	Solanum berthaultii
AAD01263.1	AF006078	Solanum berthaultii
AAD01264.1	AF006079	Solanum berthaultii
AAD42963.2	AF141384	Matricaria chamomilla
BAA04511.1	D17587	Oryza sativa
BAA01757.1	D10985	Oryza sativa
CAA70817.1	Y09604	Hordeum vulgare
BAA94235.1	AP001633	Oryza sativa
CAB71127.1	AJ271659	Cicer arietinum
BAB19126.1	AP002839	Oryza sativa
AAA92062.1	U49382	Vigna radiata
AAA92064.1	U49741	Vigna radiata
CAA92216.1	Z68130	Pisum sativum

SEQ ID NO. 1083

AAC49002.1	U17098	Brassica rapa
CAA52070.1	X73850	Brassica napus
CAA52069.1	X73849	Brassica napus
CAA61111.1	X87842	Brassica napus
AAC72883.1	AF062401	Cuphea hookeriana
AAA33020.1	M96569	Carthamus tinctorius
AAB51523.1	U92876	Garcinia mangostana
AAA33019.1	M96568	Carthamus tinctorius
AAG35064.1	AF318288	Capsicum chinense
AAG43859.1	AF213478	Iris germanica
AAB51524.1	U92877	Garcinia mangostana
AAD28187.1	AF110462	Elaeis guineensis
CAC14164.1	AJ278479	Brassica juncea
AAC48990.1	U17076	Cuphea hookeriana
AAB71729.1	U65642	Myristica fragrans
AAB51525.1	U92878	Garcinia mangostana
AAC72882.1	AF062400	Cuphea hookeriana
AAB88824.1	AF036565	Helianthus annuus
AAD33895.1	AF143095	Elaeis guineensis
AAD33870.1	AF141382	Elaeis oleifera
CAA54060.1	X76561	Cuphea lanceolata
AAD01982.1	AF034266	Gossypium hirsutum
AAF02215.1	AF076535	Gossypium hirsutum
CAC19933.1	AJ131739	Cuphea lanceolata
AAG43857.1	AF213476	Iris germanica
AAG43858.1	AF213477	Iris germanica
AAG43861.1	AF213480	Iris tectorum
AAG43860.1	AF213479	Iris tectorum
BAA83582.1	AP000399	Oryza sativa
CAB60830.1	AJ131740	Cuphea lanceolata
AAC49180.1	U38189	Cuphea palustris
AAC49784.1	U56104	Cuphea wrightii
AAC49783.1	U56103	Cuphea wrightii
CAC19934.1	AJ131741	Cuphea lanceolata
AAC49179.1	U38188	Cuphea palustris
AAC72881.1	AF062399	Cuphea hookeriana
AAC49269.1	U39834	Cuphea hookeriana
AAD42220.1	AF147879	Elaeis guineensis
AAC49151.1	U31813	Cinnamomum camphora
AAA34215.1	M94159	Umbellularia californica
AAC49001.1	U17097	Umbellularia californica
CAA06001.1	AJ003221	Solanum tuberosum

SEQ ID NO. 1084

BAB41080.1	AB052729	Pisum sativum
AAA34085.1	M93436	Nicotiana tabacum
AAA34054.1	M96432	Nicotiana tabacum

SEQ ID NO. 1085

CAA06334.1	AJ005077	Lycopersicon esculentum
AAG31141.1	AF305911	Oryza sativa
AAG31142.1	AF305912	Hordeum vulgare
AAK30005.1	AY029067	Rosa hybrid cultivar
AAD46406.1	AF096250	Lycopersicon esculentum
AAD10057.1	AF110519	Lycopersicon esculentum
AAD10056.1	AF110518	Lycopersicon esculentum
AAA34002.1	M67449	Glycine max
AAK11734.1	AY027437	Arachis hypogaea
CAC09580.1	AJ298992	Fagus sylvatica
CAA97692.1	Z73295	Catharanthus roseus
AAF59906.1	AF197947	Glycine max
AAF59905.1	AF197946	Glycine max
CAA08995.1	AJ010091	Brassica napus
CAB51834.1	00069	Oryza sativa

CAA08997.1	AJ010093	Brassica napus
AAF34436.1	AF172282	Oryza sativa
AAG25966.1	AF302082	Nicotiana tabacum
BAA06538.1	D31737	Nicotiana tabacum
AAF76189.1	AF271206	Rosa hybrid cultivar
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum
AAF91322.1	AF244888	Glycine max
AAD21872.1	AF078082	Phaseolus vulgaris
CAA61510.1	X89226	Oryza sativa
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
AAF43394.1	AF230501	Oryza sativa subsp. japonica
AAK16409.1	AF320086	Zea mays
AAK21965.1	AY028699	Brassica napus
BAB39437.1	AP003338	Oryza sativa
AAK11568.1	AF318492	Lycopersicon hirsutum

SEQ ID NO. 1086

BAA85400.1	AP000615	Oryza sativa

SEQ ID NO. 1088

AAF35901.1	AF230332	Zinnia elegans
CAC19184.1	AJ291817	Cicer arietinum
AAG13982.1	AF297521	Prunus avium
BAB19676.1	AB029083	Prunus persica
AAC33529.1	U93167	Prunus armeniaca
AAC33530.1	AF038815	Prunus armeniaca
AAD47901.1	AF085330	Pinus taeda
AAB37746.1	U30382	Cucumis sativus
AAF21101.1	AF159563	Fragaria x ananassa
AAB40634.1	U64890	Pinus taeda
AAB40637.1	U64893	Pinus taeda
AAB40635.1	U64891	Pinus taeda
CAB43197.1	AJ239068	Lycopersicon esculentum
AAB40636.1	U64892	Pinus taeda
AAC64201.1	AF096776	Lycopersicon esculentum
AAD49956.1	AF167360	Rumex palustris
AAC96081.1	AF049354	Nicotiana tabacum
AAC39512.1	AF043284	Gossypium hirsutum
AAB81662.1	U85246	Oryza sativa
AAG13983.1	AF297522	Prunus avium
AAF32409.1	AF230276	Triphysaria versicolor
AAG32921.1	AF184233	Lycopersicon esculentum
BAB32732.1	AB049406	Eustoma grandiflorum
AAF32411.1	AF230278	Triphysaria versicolor
AAF35902.1	AF230333	Zinnia elegans
AAB38074.1	U30477	Oryza sativa
AAC96080.1	AF049353	Nicotiana tabacum
AAF17570.1	AF202119	Marsilea quadrifolia
CAC06433.1	AJ276007	Festuca pratensis
AAD13633.1	AF059489	Lycopersicon esculentum
CAC19183.1	AJ291816	Cicer arietinum
AAF62181.1	AF247163	Oryza sativa
AAF62180.1	AF247162	Oryza sativa
CAB46492.1	AJ243340	Lycopersicon esculentum
BAA88200.1	AP000837	Oryza sativa
AAF32410.1	AF230277	Triphysaria versicolor
AAB37749.1	U30460	Cucumis sativus
CAA04385.1	AJ000885	Brassica napus
AAF17571.1	AF202120	Regnellidium diphyllum
AAD13632.1	AF059488	Lycopersicon esculentum
CAA06271.2	AJ004997	Lycopersicon esculentum
AAC63088.1	U82123	Lycopersicon esculentum
AAC96077.1	AF049350	Nicotiana tabacum
AAF62182.1	AF247164	Oryza sativa
CAC18802.1	AJ289154	Glycine max
AAC96078.1	AF049351	Nicotiana tabacum
AAG01875.1	AF291659	Striga asiatica
CAA69105.1	Y07782	Oryza sativa
AAC96079.1	AF049352	Nicotiana tabacum

SEQ ID NO. 1089

AAD02848.1	AF086839	Populus tremula x Populus tremuloides
CAB66329.1	AJ279687	Betula pendula
BAA36555.1	AB011798	Citrus unshiu
AAC77357.1	U79562	Pisum sativum
CAB61887.1	AJ250003	Lycopersicon esculentum
BAA36556.1	AB011799	Citrus unshiu
AAB16804.1	U68560	Malus x domestica

BAB40808.1	AB058921	Nicotiana suaveolens x Nicotiana tabacum
BAB40809.1	AB058922	Nicotiana suaveolens x Nicotiana tabacum
AAC32147.1	AF051247	Picea mariana
CAB56223.1	AJ133276	Hordeum vulgare
CAB56224.1	AJ133277	Hordeum vulgare
AAC24568.2	AF055909	Zea mays

SEQ ID NO. 1090

AAA34030.1	J03492	Spinacia oleracea
AAB40396.1	U80071	Mesembryanthemum crystallinum
BAA03131.1	D14044	Cucurbita sp.
AAB82143.1	AF022740	Oryza sativa
CAA63482.1	X92888	Lycopersicon esculentum
AAC32392.1	AF082874	Medicago sativa
AAC33509.1	U62485	Nicotiana tabacum
AAF03097.1	AF162196	Lactuca sativa

SEQ ID NO. 1091

BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95704.1	AB042643	Oryza sativa
BAA95705.1	AB042644	Oryza sativa

SEQ ID NO. 1094

CAA06773.1	AJ005931	Brassica napus
CAA06770.1	AJ005928	Brassica napus
BAA24448.1	AB003516	Panax ginseng
CAA06223.1	AJ004923	Lycopersicon esculentum

SEQ ID NO. 1096

AAG14455.1	AF283707	Tulipa gesneriana
AAG14456.1	AF283708	Tulipa gesneriana
AAG14454.1	AF283706	Tulipa gesneriana
AAC08401.1	AF053564	Mesembryanthemum crystallinum

SEQ ID NO. 1102

AAF37266.1	AF220405	Vitis riparia
AAB36223.1	S81261	Brassica napus
AAB36222.1	S81261	Brassica napus
AAC49266.1	U33885	Brassica napus
AAC49265.1	U33884	Brassica napus
AAD28439.1	AF120092	Nicotiana tabacum

SEQ ID NO. 1103

BAA90508.1	AP001111	Oryza sativa
BAA90507.1	AP001111	Oryza sativa
CAA94437.1	Z70524	Spirodela polyrrhiza
BAA83352.1	AP000391	Oryza sativa

SEQ ID NO. 1104

AAD25300.1	AF088276	Lycopersicon esculentum
CAA63704.1	X93301	Oryza sativa
AAD25225.1	AF088279	Potamogeton crispus
AAD24966.1	AF109150	Lycopersicon esculentum

SEQ ID NO. 1105

AAC05983.1	AF049708	Glycine max
AAA74360.1	L33912	Zea mays
AAC05981.1	AF049706	Chloroplast Glycine max
AAA16972.1	L11529	Daucus carota
BAA11417.1	D78573	Oryza sativa
AAA74361.1	L33913	Zea mays
AAD41796.1	AF135862	Glycine max
BAA95630.1	AB042521	Oryza sativa

SEQ ID NO. 1106

AAG25928.1	AF260919	Petunia x hybrida
AAG25927.1	AF260918	Petunia x hybrida
AAB00686.1	U18348	Phaseolus vulgaris
AAC28907.1	U18349	Phaseolus vulgaris
AAD15818.1	AF061107	Zea mays
CAB92300.1	AJ251719	Zea mays
AAC49219.1	U39860	Oryza sativa
AAC39455.1	AF020545	Petunia x hybrida
AAC49212.1	U39863	Oryza australiensis
AAC49216.1	U39865	Oryza officinalis
AAC49213.1	U39864	Oryza eichingeri

AAD56411.1	AF185269	Tulipa gesneriana
SEQ ID NO. 1107		
AAB69757.1	U75644	Lycopersicon esculentum
AAC49666.1	U83708	Lycopersicon esculentum
AAB38796.1	U73203	Nicotiana glutinosa
SEQ ID NO. 1109		
BAA33531.1	D83583	Nicotiana tabacum
BAA33796.1	AB010717	Nicotiana tabacum
AAG59996.1	AY017473	Glycine max
BAA23641.1	D50679	Zea mays
AAC24584.1	AF071890	Prunus armeniaca
CAA70137.1	Y08937	Chlamydomonas reinhardtii
AAA74456.1	U10419	Phaseolus vulgaris
BAA09122.1	D50556	Oryza sativa
AAC17127.1	AF065616	Capsicum annuum
AAA60450.1	M23456	Zea mays
CAC06095.1	AJ293240	Lotus japonicus
AAB50233.1	U90429	Glycine max
CAA46940.1	X66145	Nicotiana tabacum
CAA46942.1	X66147	Nicotiana tabacum
CAA34893.1	X17031	Spinacia oleracea
CAA42690.1	X60093	Betula pendula
CAA46941.1	X66146	Nicotiana tabacum
AAC34042.1	AF082602	Leavenworthia crassa
AAC34043.1	AF082603	Leavenworthia uniflora
AAC34044.1	AF082604	Leavenworthia crassa
AAC34046.1	AF082606	Leavenworthia uniflora
AAC34045.1	AF082605	Leavenworthia stylosa
AAC34047.1	AF082607	Leavenworthia stylosa
AAA96730.1	L23855	Glycine max
AAC34048.1	AF082608	Leavenworthia uniflora
SEQ ID NO. 1110		
AAG14455.1	AF283707	Tulipa gesneriana
AAG14456.1	AF283708	Tulipa gesneriana
AAG14454.1	AF283706	Tulipa gesneriana
AAC08401.1	AF053564	Mesembryanthemum crystallinum
SEQ ID NO. 1111		
BAB39155.1	AB048713	Pisum sativum
AAG13663.1	AF263457	Zea mays
BAA90816.1	AP001168	Oryza sativa
AAC98090.1	AF067400	Zea mays
SEQ ID NO. 1114		
CAA05249.1	AJ002204	Zea mays
CAC03739.1	AJ251568	Zea mays
CAC04001.1	AJ251018	Zea mays
CAC04002.1	AJ251019	Zea mays
SEQ ID NO. 1115		
AAD22518.1	AF001136	Pinus radiata
SEQ ID NO. 1119		
CAA06925.1	AJ006228	Nicotiana tabacum
SEQ ID NO. 1122		
CAB61752.1	AJ275318	Cicer arietinum
CAC14890.1	AJ295156	Phragmites australis
AAB68605.1	U82433	Prunus armeniaca
SEQ ID NO. 1124		
AAD16018.1	AF081514	Taxus canadensis
SEQ ID NO. 1125		
CAC34339.1	AJ308597	Solanum tuberosum
AAF97863.1	AF175507	Eucalyptus camaldulensis
CAA12225.1	AJ224926	Solanum tuberosum
AAD16279.1	AF099096	Samanea saman
SEQ ID NO. 1127		
CAA67728.1	X99348	Vigna radiata
SEQ ID NO. 1133		
AAC36700.1	AF075582	Mesembryanthemum crystallinum
AAG43835.1	AF213455	Zea mays
AAD17804.1	AF092431	Lotus japonicus
AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAC36697.1	AF075579	Mesembryanthemum crystallinum
AAD17805.1	AF092432	Lotus japonicus

CAA72341.1	Y11607	Medicago sativa
CAC10358.1	AJ277086	Nicotiana tabacum
CAC10359.1	AJ277087	Nicotiana tabacum
CAC09575.1	AJ298987	Fagus sylvatica
AAC26828.1	AF075603	Oryza sativa
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAD11430.1	AF097667	Mesembryanthemum crystallinum
CAB90634.1	AJ277744	Fagus sylvatica
AAC35951.1	AF079355	Mesembryanthemum crystallinum
AAB93832.1	U81960	Zea mays
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 1141

CAA55860.1	X79273	Solanum tuberosum

SEQ ID NO. 1147

AAB59330.1	M31545	Hordeum vulgare
AAC48996.1	U20260	Glycine max
AAA81881.1	L39279	Lycopersicon esculentum
CAA46787.1	X65974	Nicotiana tabacum
CAA46786.1	X65973	Nicotiana tabacum
AAA18861.1	U03632	Chlamydomonas reinhardtii
AAA18862.1	U03633	Chlamydomonas reinhardtii

SEQ ID NO. 1153

BAB39155.1	AB048713	Pisum sativum
BAA90816.1	AP001168	Oryza sativa
AAG13663.1	AF263457	Zea mays
AAC98090.1	AF067400	Zea mays
AAC98091.1	AF067401	Oryza sativa
BAB39156.1	AB048714	Pisum sativum

SEQ ID NO. 1154

CAA42942.1	X60391	Phaseolus vulgaris
CAA49895.1	X70441	Nicotiana alata
AAA98492.1	L36982	Petroselinum crispum

SEQ ID NO. 1163

BAA95840.1	AP002070	Oryza sativa
CAA48297.1	X68215	Pisum sativum
CAA48300.1	X68218	Pisum sativum
AAA33945.1	J03919	Glycine max
AAA33944.1	J03920	Glycine max
CAA48299.1	X68217	Pisum sativum
CAA48298.1	X68216	Pisum sativum
AAD50278.1	AF169830	Glycine max

SEQ ID NO. 1164

BAA31510.1	AB010878	Nicotiana tabacum
CAA63651.1	X93160	Spinacia oleracea
CAA75149.1	Y14932	Spinacia oleracea

SEQ ID NO. 1167

BAA90815.1	AP001168	Oryza sativa
BAA90804.1	AP001168	Oryza sativa
BAA90803.1	AP001168	Oryza sativa

SEQ ID NO. 1168

AAG25966.1	AF302082	Nicotiana tabacum
AAA33915.1	L27821	Oryza sativa
AAB61708.1	U93048	Daucus carota
AAD21872.1	AF078082	Phaseolus vulgaris
BAA06538.1	D31737	Nicotiana tabacum
AAF66615.1	AF142596	Nicotiana tabacum
AAB09771.1	U67422	Zea mays
BAA94516.1	AP001800	Oryza sativa
AAB93834.1	U82481	Zea mays
BAA92954.1	AP001551	Oryza sativa
CAB41878.1	Y18259	Brassica oleracea
AAK21965.1	AY028699	Brassica napus
BAA94517.1	AP001800	Oryza sativa
CAA73134.1	Y12531	Brassica oleracea
AAC23542.1	U20948	Ipomoea trifida
BAA78764.1	AB023482	Oryza sativa
CAA67145.1	X98520	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
BAA94509.1	AB041503	Populus nigra
CAA73133.1	Y12530	Brassica oleracea
BAA92836.1	AB032473	Brassica oleracea

SEQ ID NO. 1170

AAB88875.1	U93272	Prunus armeniaca

CAA83683.1	Z32850	Ricinus communis
AAA63452.1	M55191	Solanum tuberosum
AAC67586.1	AF095520	Citrus x paradisi
AAA63451.1	M55190	Solanum tuberosum
AAC67587.1	AF095521	Citrus x paradisi
CAA83682.1	Z32849	Ricinus communis

SEQ ID NO. 1182

CAC20842.1	AJ250467	Pinus sylvestris
AAF59906.1	AF197947	Glycine max
AAB36558.1	U77888	Ipomoea nil
AAF91324.1	AF244890	Glycine max
AAF59905.1	AF197946	Glycine max
AAF91323.1	AF244889	Glycine max
AAF91322.1	AF244888	Glycine max
AAF34426.1	AF172282	Oryza sativa
CAA61510.1	X89226	Oryza sativa
AAC49123.1	U37133	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata
AAB82755.1	U72725	Oryza longistaminata
AAB82756.1	U72724	Oryza sativa
BAA88636.1	AB029327	Nicotiana tabacum

SEQ ID NO. 1183

BAA83103.1	D88820	Acetabularia mediterranea
CAA58701.1	X83730	Nicotiana tabacum
BAA23649.1	AB009077	Vigna radiata
CAA54869.1	X77915	Nicotiana tabacum
BAA08232.1	D45383	Oryza sativa
AAA61609.1	L32791	Beta vulgaris
BAA33149.1	D86306	Cucurbita moschata
BAA08233.1	D45384	Oryza sativa
CAA58700.1	X83729	Nicotiana tabacum
AAF69010.1	AF257777	Vitis vinifera
BAA02717.2	D13472	Hordeum vulgare
AAC49175.1	U31467	Vigna radiata
BAA36841.1	AB018529	Chara corallina
BAB18681.1	AB032839	Hordeum vulgare
AAA61610.1	L32792	Beta vulgaris
CAA58699.1	X83728	Nicotiana tabacum
AAA80347.1	U36437	Zea mays
AAC04387.1	AF009568	Gossypium hirsutum
AAF07174.1	AF192308	Vitis vinifera
AAC06255.1	AF053080	Malus x domestica
AAA79993.1	U36439	Rubus hispidus

SEQ ID NO. 1184

AAD21872.1	AF078082	Phaseolus vulgaris
AAC23542.1	U20948	Ipomoea trifida
CAA73134.1	Y12531	Brassica oleracea
AAB93834.1	U82481	Zea mays
CAB89179.1	AJ245479	Brassica napus subsp. napu
AAA33008.1	M97667	Brassica napus
AAA33000.1	M76647	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
BAA92836.1	AB032473	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
CAB41879.1	Y18260	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
CAA74662.1	Y14286	Brassica oleracea
AAA62232.1	U00443	Brassica napus
BAA92837.1	AB032474	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
BAA07577.2	D38564	Brassica rapa
BAA07576.1	D38563	Brassica rapa
BAB21001.1	AB054061	Brassica rapa
AAD52097.1	AF088885	Nicotiana tabacum
AAA33915.1	L27821	Oryza sativa
BAA92954.1	AP001551	Oryza sativa
AAK21965.1	AY028699	Brassica napus
CAB51836.1	AJ243961	Oryza sativa
AAG03090.1	AC073405	Oryza sativa
CAA79324.1	Z18884	Brassica oleracea

SEQ ID NO. 1186

CAA06999.1	AJ006378	Lycopersicon esculentum
CAA07000.1	AJ006379	Lycopersicon esculentum
CAA76727.1	Y17278	Lycopersicon esculentum

BAB21149.1	AP002899	Oryza sativa
CAA76725.1	Y17276	Lycopersicon esculentum
CAA71234.1	Y10149	Lycopersicon esculentum
CAA76724.1	Y17275	Lycopersicon esculentum
CAA64566.1	X95270	Lycopersicon esculentum
CAB67120.1	Y18932	Lycopersicon esculentum
CAB67119.1	Y18931	Lycopersicon esculentum
CAA59964.1	X85975	Alnus glutinosa
CAA07001.1	AJ006380	Lycopersicon esculentum
CAA06997.1	AJ006376	Lycopersicon esculentum
CAA76726.1	Y17277	Lycopersicon esculentum
CAA06998.1	AJ006377	Lycopersicon esculentum
AAD02075.3	AF036960	Glycine max
AAG38994.1	AF160513	Glycine max
BAB03290.1	AB037371	Oryza sativa
AAG09442.1	AF200467	Oryza sativa
AAF31406.1	AF201883	Gossypioides kirkii
CAB65690.1	AJ270956	Lycopersicon esculentum
CAA10987.1	AJ222782	Hordeum vulgare

SEQ ID NO. 1188

CAB43505.1	AJ239051	Cicer arietinum
BAA22422.1	AB001379	Glycyrrhiza echinata
BAA74465.1	AB022732	Glycyrrhiza echinata
BAA93634.1	AB025016	Lotus japonicus
CAB41490.1	AJ238439	Cicer arietinum
CAA10067.1	AJ012581	Cicer arietinum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAA32913.1	M32885	Persea americana
AAD56282.1	AF155332	Petunia x hybrida
AAB94590.1	AF022461	Glycine max
AAG09208.1	AF175278	Pisum sativum
CAA65580.1	X96784	Nicotiana tabacum
AAC49188.2	U29333	Pisum sativum
CAB56742.1	AJ249800	Cicer arietinum
BAA12159.1	D83968	Glycine max
AAC39454.1	AF014802	Eschscholzia californica
AAG44132.1	AF218296	Pisum sativum
AAB17562.1	U72654	Eustoma grandiflorum
BAA13076.1	D86351	Glycine max
CAA64635.1	X95342	Nicotiana tabacum
AAC32274.1	AF081575	Petunia x hybrida
CAA50155.1	X70824	Solanum melongena
BAB40324.1	AB037245	Asparagus officinalis
BAB40323.1	AB037244	Asparagus officinalis
CAA70576.1	Y09424	Nepeta racemosa

SEQ ID NO. 1189

CAA50312.1	X70981	Solanum melongena
CAA70575.1	Y09423	Nepeta racemosa
CAA70576.1	Y09424	Nepeta racemosa
AAA32913.1	M32885	Persea americana
CAA50645.1	X71654	Solanum melongena
BAA03635.1	D14990	Solanum melongena
CAA83941.1	Z33875	Mentha x piperita
AAB94584.1	AF022157	Glycine max
AAF27282.1	AF122821	Capsicum annuum
AAB94588.1	AF022459	Glycine max
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
AAA19701.1	L24438	Thlaspi arvense
CAA50313.1	X70982	Solanum melongena
AAD47832.1	AF166332	Nicotiana tabacum
CAB56503.1	AJ238612	Catharanthus roseus
CAA57421.1	X81827	Zea mays
AAB94589.1	AF022460	Glycine max
CAA57422.1	X81828	Zea mays
BAB40322.1	AB036772	Triticum aestivum
CAA72196.1	Y11368	Zea mays
CAA57425.1	X81831	Zea mays
AAD56282.1	AF155332	Petunia x hybrida
AAC39318.1	AF029858	Sorghum bicolor
CAA65580.1	X96784	Nicotiana tabacum
AAG44132.1	AF218296	Pisum sativum
BAA12159.1	D83968	Glycine max
CAA64635.1	X95342	Nicotiana tabacum
CAA72208.1	Y11404	Zea mays
CAA57423.1	X81829	Zea mays
CAA72207.1	Y11403	Zea mays
CAA57424.2	X81830	Zea mays
AAD44150.1	AF124815	Mentha spicata

SEQ ID NO. 1190

BAA78764.1	AB023482	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
CAB51834.1	00069	Oryza sativa
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max
AAC61805.1	U28007	Lycopersicon esculentum
AAB09771.1	U67422	Zea mays
AAK11566.1	AF318490	Lycopersicon hirsutum
AAF66615.1	AF142596	Nicotiana tabacum
CAA97692.1	Z73295	Catharanthus roseus
AAG33377.1	AF290411	Oryza meyeriana
AAB47421.1	U59316	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
AAC27894.1	AF023164	Zea mays
AAK11567.1	AF318491	Lycopersicon hirsutum
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAG25966.1	AF302082	Nicotiana tabacum
BAA92954.1	AP001551	Oryza sativa
BAA92953.1	AP001551	Oryza sativa
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAB61708.1	U93048	Daucus carota

SEQ ID NO. 1192

AAK28345.1	AF243040	Lycopersicon esculentum
AAC12254.1	U58474	Lycopersicon esculentum
AAK28346.1	AF243041	Zea mays
AAA33715.1	L27341	Petunia integrifolia
AAC12253.1	U58473	Lycopersicon esculentum
AAF91322.1	AF244888	Glycine max
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
AAB61708.1	U93048	Daucus carota
CAA61510.1	X89226	Oryza sativa
AAF59906.1	AF197947	Glycine max
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
AAC27894.1	AF023164	Zea mays
AAF59905.1	AF197946	Glycine max
CAC20842.1	AJ250467	Pinus sylvestris
AAC36318.1	AF053127	Malus x domestica
AAC27895.1	AF023165	Zea mays
AAD27675.1	AF119222	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAA33915.1	L27821	Oryza sativa
AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max

SEQ ID NO. 1193

CAA76376.1	Y16778	Spinacia oleracea
AAD11484.1	U51194	Glycine max
AAB06183.1	M37636	Arachis hypogaea
AAD11483.1	U51193	Glycine max
AAB02554.1	L37790	Stylosanthes humilis
CAA71488.1	Y10462	Spinacia oleracea
BAA82306.1	AB027752	Nicotiana tabacum
CAA71490.1	Y10464	Spinacia oleracea
AAB02926.1	U59284	Linum usitatissimum
BAA01950.1	D11337	Vigna angularis
AAD43561.1	AF155124	Gossypium hirsutum
CAA71496.1	Y10470	Spinacia oleracea
AAA98491.1	L36981	Petroselinum crispum
BAA77387.1	AB024437	Scutellaria baicalensis
BAA92422.1	AP001366	Oryza sativa
BAA92497.1	AP001383	Oryza sativa
AAA32676.1	M37637	Arachis hypogaea
BAA92500.1	AP001383	Oryza sativa
BAA01877.1	D11102	Populus kitakamiensis
AAG02215.1	AF291667	Pinus sylvestris
BAA77389.1	AB024439	Scutellaria baicalensis
AAB48184.1	L24120	Linum usitatissimum

AAA33129.1	M91372	Cucumis sativus
AAD37376.1	AF145350	Glycine max
CAA40796.1	X57564	Armoracia rusticana
AAA34050.1	M74103	Nicotiana sylvestris
AAC49819.1	AF014468	Oryza sativa
CAA71493.1	Y10467	Spinacia oleracea
BAA77388.1	AB024438	Scutellaria baicalensis
CAA71494.1	Y10468	Spinacia oleracea
AAB67737.1	L77080	Stylosanthes humilis
CAA62597.1	X91172	Raphanus sativus
AAF63024.1	AF244921	Spinacia oleracea
AAA32973.1	M73234	Hordeum vulgare
CAA64413.1	X94943	Lycopersicon esculentum
AAA33121.1	M32742	Cucumis sativus
CAA62615.1	X91232	Mercurialis annua
BAA03911.1	D16442	Oryza sativa
AAC49821.1	AF014470	Oryza sativa
BAA11853.1	D83225	Populus nigra
CAB99487.1	AJ276227	Hordeum vulgare
AAB97853.1	AF043234	Striga asiatica
AAA34108.1	J02979	Nicotiana tabacum
AAA65637.1	L13654	Lycopersicon esculentum
CAA59487.1	X85230	Triticum aestivum

SEQ ID NO. 1195

AAD39534.2	AF150630	Gossypium hirsutum
AAC39333.1	AF030052	Oryza sativa subsp. japonica

SEQ ID NO. 1196

CAA98168.1	Z73940	Lotus japonicus
AAA34004.1	L14930	Glycine max
AAA34242.1	L14928	Vigna aconitifolia
CAA98169.1	Z73941	Lotus japonicus
AAB71504.1	U82219	Prunus armeniaca
CAA98170.1	Z73942	Lotus japonicus
CAA98171.1	Z73943	Lotus japonicus
CAA46600.1	X65650	Pisum sativum
AAB47557.1	U87142	Mesembryanthemum crystallinum
BAA02904.1	D13758	Oryza sativa

SEQ ID NO. 1198

CAA69598.1	Y08273	Digitalis lanata
AAA57045.1	L29469	Oryza sativa
AAA62706.1	M55018	Brassica napus
AAA57046.1	L29470	Oryza sativa
AAA63543.1	M55019	Lycopersicon esculentum
CAA59468.1	X85185	Catharanthus roseus
AAC05639.1	AF052206	Chlamydomonas reinhardtii
AAA57044.1	L29471	Oryza sativa
AAD22975.1	AF126551	Solanum tuberosum subsp. tuberosum
CAA52414.1	X74403	Phaseolus vulgaris
CAA76054.1	Y16088	Lupinus luteus
AAF00471.1	AF178458	Lupinus luteus
AAA63403.1	M55021	Zea mays
CAA48638.1	X68678	Zea mays
AAA64430.1	L32095	Vicia faba
AAB51386.1	U92087	Solanum commersonii
AAF65770.1	AF242312	Euphorbia esula
AAG01536.1	AF291180	Capsicum annuum
CAA10766.1	AJ132763	Pseudotsuga menziesii
CAA65889.1	X97255	Digitalis lanata
CAA78459.1	Z14081	Nicotiana tabacum

SEQ ID NO. 1200

CAA50575.1	X71441	Nicotiana tabacum
CAA56318.1	X80008	Nicotiana tabacum
CAA53366.1	X75670	Oryza sativa
CAA04702.1	AJ001369	Olea europaea
AAC49701.1	U79011	Borago officinalis
AAA62621.1	L22209	Cuscuta reflexa
CAA04703.1	AJ001370	Olea europaea
AAA32990.1	M87514	Brassica oleracea
CAA48240.1	X68140	Nicotiana tabacum
AAD10774.1	AF098510	Petunia x hybrida
AAF60299.1	AF233640	Petunia x hybrida

SEQ ID NO. 1201

BAA08910.1	D50407	Cucumis sativus
AAD16897.1	AF105221	Glycine max
BAA25168.1	D88383	Hordeum vulgare
BAA25003.1	AB011416	Oryza sativa

CAA60054.1	X86101	Hordeum vulgare
CAA63140.1	X92403	Hordeum vulgare
BAA25167.1	D88382	Hordeum vulgare
BAA11091.1	D67088	Cucumis sativus
CAA60055.1	X86102	Hordeum vulgare
AAG41962.1	AF305613	Chlamydomonas reinhardtii
AAG02480.1	AF294753	Hordeum vulgare
AAG02479.1	AF294752	Hordeum vulgare

SEQ ID NO. 1202

AAG09811.1	AF275345	Lycopersicon esculentum
AAK27150.1	AF345246	Ipomoea batatas
AAF22455.1	AF060880	Paulownia kawakamii
AAK27151.1	AF346303	Ipomoea batatas
AAB94005.1	AF008651	Solanum tuberosum
AAK21250.1	AF335237	Petunia x hybrida
BAA81880.1	AB003322	Oryza sativa
CAB97349.1	AJ249141	Hordeum vulgare
CAC29335.1	AJ293816	Oryza sativa
AAF66690.1	AF144623	Canavalia lineata
AAB94006.1	AF008652	Solanum tuberosum
AAK21256.1	AF335243	Petunia x hybrida
AAC84133.1	AF101420	Cichorium intybus
AAG09919.1	AF112149	Zea mays
BAA25246.1	D89671	Ceratopteris richardii
AAG09136.1	AF150932	Physcomitrella patens
AAG09135.1	AF150931	Physcomitrella patens
AAF77579.1	AF072534	Capsicum annuum
AAK21257.1	AF335244	Petunia x hybrida
AAB71434.1	U78890	Oryza sativa
BAA81865.1	AB026295	Oryza sativa
CAB56800.1	AJ011675	Oryza sativa
AAF18376.1	AF158543	Picea abies
AAD10625.1	AF035378	Lolium temulentum
CAB97354.1	AJ249146	Hordeum vulgare
AAK21252.1	AF335239	Petunia x hybrida
BAA81883.1	AB003325	Oryza sativa
AAB51377.1	U91964	Medicago sativa
CAA67968.1	X99654	Betula pendula
AAD10626.1	AF035379	Lolium temulentum
CAA53782.1	X76188	Nicotiana tabacum
AAF04972.1	AF091458	Oryza sativa
BAA33457.1	AB007504	Triticum aestivum
AAB50187.1	U49734	Sorghum bicolor
AAC49817.1	U78892	Oryza sativa
AAF19048.1	AF058698	Oryza sativa
AAC83170.1	U78948	Malus x domestica

SEQ ID NO. 1203

AAG28780.1	AF306518	Brassica napus
CAC10555.1	AJ279059	Lotus japonicus
CAA64475.1	X95098	Lycopersicon esculentum
AAG11397.1	AF118858	Lycopersicon esculentum
AAD16012.1	AF080541	Nepenthes alata
AAF01774.1	AF188744	Brassica napus

SEQ ID NO. 1205

AAG28600.1	AF247134	Limnanthes douglasii
AAC49186.1	U37088	Simmondsia chinensis
AAB72178.1	AF009563	Brassica napus
AAA96054.1	U50771	Brassica napus
AAK11266.1	AF333040	Dunaliella salina
CAC17746.1	AJ291728	Zea mays
AAC25109.1	AF054497	Brassica napus
AAC25110.1	AF054498	Brassica napus
AAC25111.1	AF054499	Brassica rapa
AAC25112.1	AF054500	Brassica oleracea

SEQ ID NO. 1206

AAF06346.1	AF195653	Vitis vinifera
BAA28872.1	AB006009	Pyrus pyrifolia
CAC10270.1	AJ243427	Malus x domestica
AAC36740.1	AF090143	Malus x domestica
BAA74546.2	AB000834	Nicotiana tabacum
CAB62167.1	AJ242828	Castanea sativa
AAF06347.1	AF195654	Vitis vinifera
CAC09477.1	AL442113	Oryza sativa
AAB38064.1	U32440	Prunus avium
AAB95118.1	U71244	Brassica rapa
CAA10492.1	AJ131731	Pseudotsuga menziesii
BAA95017.1	AB031870	Cestrum elegans
AAB02259.1	U57787	Avena sativa

AAD55090.1	AF178653	Vitis riparia
BAA95165.1	AB029918	Nicotiana tabacum
AAB61590.1	AF003007	Vitis vinifera
AAF82264.1	AF227324	Vitis vinifera
AAB53368.1	U77657	Oryza sativa
CAA09228.1	AJ010501	Cicer arietinum
CAA33293.1	X15224	Nicotiana tabacum
CAA33292.1	X15223	Nicotiana tabacum

SEQ ID NO. 1208

AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAG43835.1	AF213455	Zea mays
CAA72341.1	Y11607	Medicago sativa
CAC10358.1	AJ277086	Nicotiana tabacum
AAD17804.1	AF092431	Lotus japonicus
AAD17805.1	AF092432	Lotus japonicus
AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAC10359.1	AJ277087	Nicotiana tabacum
CAB90633.1	AJ277743	Fagus sylvatica
AAC36700.1	AF075582	Mesembryanthemum crystallinum
CAC09575.1	AJ298987	Fagus sylvatica
CAB90634.1	AJ277744	Fagus sylvatica
AAC26828.1	AF075603	Oryza sativa
AAB93832.1	U81960	Zea mays
AAC35951.1	AF079355	Mesembryanthemum crystallinum
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAC36699.1	AF075581	Mesembryanthemum crystallinum
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 1210

AAC27894.1	AF023164	Zea mays
AAC27895.1	AF023165	Zea mays
AAK21965.1	AY028699	Brassica napus
AAC61805.1	U28007	Lycopersicon esculentum
AAF91336.1	AF249317	Glycine max
AAF91337.1	AF249318	Glycine max
BAA82394.1	AP000367	Oryza sativa
AAG16628.1	AY007545	Brassica napus
BAA94510.1	AB041504	Populus nigra
BAA94509.1	AB041503	Populus nigra
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
BAA78764.1	AB023482	Oryza sativa
AAB09771.1	U67422	Zea mays
AAF66615.1	AF142596	Nicotiana tabacum
AAG03090.1	AC073405	Oryza sativa
CAB51834.1	00069	Oryza sativa
AAG25966.1	AF302082	Nicotiana tabacum
CAA97692.1	Z73295	Catharanthus roseus
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
BAA82556.1	AB030083	Populus nigra
BAA94516.1	AP001800	Oryza sativa
AAF59906.1	AF197947	Glycine max
AAF59905.1	AF197946	Glycine max

SEQ ID NO. 1211

AAC09420.1	M68929	Mitochondrion Marchantia polymorpha
CAA33994.1	X15901	Plastid Oryza sativa

SEQ ID NO. 1212

CAA43941.1	X61937	Brassica napus
CAA41064.1	X58000	Brassica napus
AAB22218.2	S37032	Brassica napus
CAA45313.1	X63779	Brassica napus
CAA55008.1	X78118	Prunus dulcis
CAA88360.1	Z48450	Citrus sinensis
AAD42942.1	AF091840	Sesamum indicum
AAB67992.1	U72411	Bromus secalinus
AAA68065.1	U13701	Zea mays
AAC02239.1	U43930	Oryza sativa
CAA57995.1	X82678	Hordeum vulgare
AAC33281.1	AF022148	Oryza sativa
AAD41080.1	AF147758	Elaeis guineensis
AAG43516.1	AF210696	Perilla frutescens
AAB58402.1	U97700	Sesamum indicum
AAG43517.1	AF210697	Perilla frutescens
AAG09751.1	AF237625	Perilla frutescens
AAA17854.1	U09118	Glycine max
AAG24455.1	AF311746	Perilla frutescens
AAA17855.1	U09119	Glycine max

CAA43183.1	X60773	Glycine max
AAK13449.1	AF325917	Arachis hypogaea
AAG23840.1	AF302807	Sesamum indicum
CAA44224.1	X62352	Helianthus annuus
AAK13450.1	AF325918	Arachis hypogaea
CAA57994.1	X82677	Hordeum vulgare
AAG01171.1	AF288622	Fagopyrum esculentum
CAA57544.1	X82019	Brassica napus
CAA43182.1	X60772	Glycine max
CAA57545.1	X82020	Brassica napus
AAA67699.1	J05212	Zea mays
AAB01098.1	U47099	Daucus carota
AAD10240.1	AF019212	Oryza sativa subsp. indica
AAC02240.1	U43931	Oryza sativa
CAA55348.1	X78679	Helianthus annuus
AAA68066.1	U13702	Zea mays
CAA64801.1	X95555	Brassica napus
AAD24547.1	AF117126	Brassica oleracea
CAA64800.1	X95554	Brassica napus
CAA64805.1	X95559	Brassica napus
CAA70173.1	Y08986	Brassica napus

SEQ ID NO. 1213

CAB94968.1	AJ287322	Arabidopsis lyrata
AAB87071.1	AF031921	Raphanus sativus
CAA53577.1	X75963	Vitis vinifera
BAA36552.1	AB011794	Citrus sinensis
AAC16013.1	AF061808	Elaeagnus umbellata
CAA32729.1	X14589	Petunia x hybrida
CAA68769.1	Y00852	Petunia x hybrida
CAA91921.1	Z67980	Callistephus chinensis
AAF60296.1	AF233637	Petunia x hybrida
CAA91931.1	Z67989	Dianthus caryophyllus
AAB86474.1	AF028238	Ipomoea purpurea
CAA32730.1	X14590	Petunia x hybrida
BAA90334.1	AB037396	Ipomoea batatas
CAA80441.1	Z22760	Zea mays
CAA48774.1	X68978	Malus sp.
CAA48775.1	X68979	Malus sp.
BAA09795.1	D63577	Pueraria montana var. lobata
CAA78763.1	Z15046	Phaseolus vulgaris
AAB41524.1	M91079	Medicago sativa
CAA34490.1	X16470	Phaseolus vulgaris
AAB41480.1	M91080	Medicago sativa
CAA06202.1	AJ004902	Glycine max
AAA50174.1	U03433	Pisum sativum
BAA76416.1	AB024988	Cicer arietinum
AAG32050.1	AF307301	Lotus corniculatus
AAG30542.1	AF308141	Lotus corniculatus
AAG30541.1	AF308140	Lotus corniculatus

SEQ ID NO. 1215

AAF06347.1	AF195654	Vitis vinifera
AAF06346.1	AF195653	Vitis vinifera
BAA28872.1	AB006009	Pyrus pyrifolia
BAA74546.2	AB000834	Nicotiana tabacum
CAC10270.1	AJ243427	Malus x domestica
AAC36740.1	AF090143	Malus x domestica
CAC09477.1	AL442113	Oryza sativa
AAB38064.1	U32440	Prunus avium
AAB95118.1	U71244	Brassica rapa
CAB62167.1	AJ242828	Castanea sativa
BAA95017.1	AB031870	Cestrum elegans
CAA10492.1	AJ131731	Pseudotsuga menziesii
BAA95165.1	AB029918	Nicotiana tabacum
AAB02259.1	U57787	Avena sativa
AAB53368.1	U77657	Oryza sativa
AAD55090.1	AF178653	Vitis riparia
CAA09228.1	AJ010501	Cicer arietinum
CAA33293.1	X15224	Nicotiana tabacum
CAA33292.1	X15223	Nicotiana tabacum
AAB61590.1	AF003007	Vitis vinifera
AAF82264.1	AF227324	Vitis vinifera
AAA93095.1	J01209	Thaumatococcus daniellii

SEQ ID NO. 1216

BAB41137.1	AB060130	Zea mays
BAB20581.1	AB042268	Zea mays
BAB17300.1	AB042260	Zea mays
BAB20580.1	AB042267	Zea mays
BAB20582.1	AB042269	Zea mays
BAA82873.1	AB024291	Zea mays

BAB20579.1	AB042261	Zea mays
BAA85113.1	AB031012	Zea mays
AAK14395.1	AF339732	Dianthus caryophyllus
BAA85112.1	AB031011	Zea mays
BAA75253.1	AB004882	Zea mays
AAD55941.1	AF174532	Chlamydomonas reinhardtii
AAD55945.1	AF174480	Chlamydomonas reinhardtii
AAF32350.1	AF219972	Mesembryanthemum crystallinum

SEQ ID NO. 1219

BAA78738.1	AB023482	Oryza sativa
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
AAF76898.1	AF274033	Atriplex hortensis
CAC12822.1	AJ299252	Nicotiana tabacum
AAC24587.1	AF071893	Prunus armeniaca
BAB03248.1	AB037183	Oryza sativa
BAB16083.1	AB036883	Oryza sativa
AAG43545.1	AF211527	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum
AAG43549.1	AF211531	Nicotiana tabacum
AAF23899.1	AF193803	Oryza sativa
AAF63205.1	AF245119	Mesembryanthemum crystallinum
BAA07321.1	D38123	Nicotiana tabacum
AAC62619.1	AF057373	Nicotiana tabacum
BAA99376.1	AP002526	Oryza sativa
AAK01089.1	AF298231	Hordeum vulgare

SEQ ID NO. 1220

CAC20842.1	AJ250467	Pinus sylvestris
AAB36558.1	U77888	Ipomoea nil
AAF91324.1	AF244890	Glycine max
AAF91322.1	AF244888	Glycine max
AAC36318.1	AF053127	Malus x domestica
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
AAF59905.1	AF197946	Glycine max
AAF91323.1	AF244889	Glycine max
AAF34426.1	AF172282	Oryza sativa
CAA61510.1	X89226	Oryza sativa
AAB82755.1	U72725	Oryza longistaminata
AAB61708.1	U93048	Daucus carota
AAF66615.1	AF142596	Nicotiana tabacum
AAB82756.1	U72724	Oryza sativa
AAK21965.1	AY028699	Brassica napus
AAC27894.1	AF023164	Zea mays

SEQ ID NO. 1222

CAA03982.1	AJ000265	Spinacia oleracea
BAB17656.1	AB044969	Arabidopsis lyrata subsp. petraea
BAB17655.1	AB044968	Arabis gemmifera
BAA08148.1	D45217	Oryza sativa
BAA08149.1	D45218	Oryza sativa
AAC08411.1	AF054455	Leavenworthia crassa
CAA03983.1	AJ000266	Spinacia oleracea
BAA23184.1	D88929	Dioscorea tokoro
BAA23183.1	D88928	Dioscorea tokoro
BAA23181.1	D88926	Dioscorea tokoro
BAA23179.1	D88924	Dioscorea tokoro
BAA23178.1	D88923	Dioscorea tokoro
BAA23177.1	D88922	Dioscorea tokoro
BAA23176.1	D88921	Dioscorea tokoro
BAA23182.1	D88927	Dioscorea tokoro
BAA23185.1	D88930	Dioscorea tokoro
BAA23180.1	D88925	Dioscorea tokoro
CAA61575.1	X89395	Clarkia arcuata
AAA82734.1	U17225	Zea mays
CAA61564.1	X89384	Clarkia lewisii
CAA50402.1	X71084	Clarkia lewisii
CAA61566.1	X89386	Clarkia xantiana
CAA56693.1	X80666	Clarkia xantiana
CAA61574.1	X89394	Clarkia williamsonii
CAA61569.1	X89389	Clarkia mildrediae
CAB55566.1	Y14129	Clarkia gracilis
CAA61576.1	X89396	Clarkia franciscana
CAA61567.1	X89387	Clarkia xantiana
CAA56694.1	X80667	Clarkia xantiana
CAA61570.1	X89390	Clarkia concinna
CAA61572.1	X89392	Clarkia rostrata
CAA61577.1	X89397	Oenothera mexicana
CAB55567.1	Y14130	Clarkia gracilis

CAA61565.1	X89385	Clarkia lewisii
CAA45616.1	X64332	Clarkia lewisii
CAA61571.1	X89391	Clarkia concinna
BAA23205.1	AB006088	Dioscorea quinqueloba
BAA22035.1	AB006617	Dioscorea nipponica
BAA22037.1	AB006619	Dioscorea septemloba
BAA22038.1	AB006620	Dioscorea tenuipes
BAA23175.1	D88920	Dioscorea tenuipes
BAA22033.1	AB006615	Dioscorea gracillima
BAA22036.1	AB006618	Dioscorea quinqueloba
BAA22034.1	AB006616	Dioscorea gracillima
CAA50403.1	X71085	Clarkia lewisii
AAK07826.1	AF293478	Leavenworthia stylosa
AAK07825.1	AF293477	Leavenworthia stylosa
AAK07822.1	AF293474	Leavenworthia stylosa
AAK07821.1	AF293473	Leavenworthia stylosa
AAK07820.1	AF293472	Leavenworthia stylosa

SEQ ID NO. 1224

BAB03447.1	AP002817	Oryza sativa
BAA92400.1	AP001366	Oryza sativa
CAA63102.2	X92205	Petunia x hybrida
CAA63101.1	X92204	Petunia x hybrida
BAA84803.1	AP000559	Oryza sativa

SEQ ID NO. 1226

AAD43046.1	AF124045	Sorghum bicolor

SEQ ID NO. 1227

AAC49832.1	AF005492	Oryza sativa
AAC04862.1	AF046934	Paulownia kawakamii
BAA97100.1	AB040471	Nicotiana tabacum
CAA05898.1	AJ003142	Lycopersicon esculentum
CAA52015.1	X73635	Lycopersicon esculentum
BAA96162.1	AP002092	Oryza sativa
CAA71687.1	Y10685	Glycine max
CAA41453.1	X58577	Petroselinum crispum
CAA70216.1	Y09013	Triticum aestivum

SEQ ID NO. 1228

CAA09619.1	AJ011418	Lycopersicon esculentum
AAC32140.1	AF051239	Picea mariana
AAA34308.1	M55604	Triticum aestivum
AAA34265.1	M90663	Triticum aestivum
AAA34266.1	M90664	Triticum aestivum
CAA71762.1	Y10804	Nicotiana tabacum

SEQ ID NO. 1229

CAA55693.1	X79086	Zea mays
CAA55691.1	X79085	Zea mays
AAF97508.1	AF242298	Oryza sativa

SEQ ID NO. 1234

AAA50763.1	U15605	Nicotiana glutinosa
CAA08798.1	AJ009720	Solanum tuberosum
AAG09951.1	AF175388	Glycine max
AAG43546.1	AF211528	Nicotiana tabacum
CAC35326.1	AJ310151	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35321.1	AJ310150	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
CAA08797.1	AJ009719	Solanum tuberosum
CAC35330.1	AJ310155	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
AAK28810.1	AF310964	Linum usitatissimum
AAK28806.1	AF310960	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
CAC35332.1	AJ310157	Linum usitatissimum
AAK28811.1	AF310966	Linum usitatissimum
AAK28812.1	AF310968	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum
AAB47618.1	U73916	Linum usitatissimum

AAK28809.1	AF310962	Linum usitatissimum
AAD25965.1	AF093638	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91022.1	U27081	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
AAD25966.1	AF093639	Linum usitatissimum
AAG09952.1	AF175389	Glycine max
AAG01052.1	AF175395	Glycine max
AAG01051.1	AF175394	Glycine max
AAG09954.1	AF175399	Glycine max

SEQ ID NO. 1237

AAF27919.1	AF220203	Malus x domestica
AAK19614.1	AF336281	Gossypium hirsutum

SEQ ID NO. 1238

AAG17476.1	AF106844	Oryza sativa
AAC32134.1	AF051233	Picea mariana

SEQ ID NO. 1239

BAB11940.1	AB038492	Atriplex gmelini
BAA83337.1	AB021878	Oryza sativa
BAB16381.1	AB033990	Ipomoea nil
BAB16380.1	AB033989	Ipomoea nil
AAK27314.1	AY028416	Citrus x paradisi
AAK28483.1	AF307944	Zea mays

SEQ ID NO. 1245

AAF21982.1	AF115543	Populus tremula x Populus tremuloides
CAB65535.1	AJ011794	Zea mays

SEQ ID NO. 1247

BAA21921.1	AB006599	Petunia x hybrida
BAA21922.1	AB006600	Petunia x hybrida
BAA19110.1	AB000451	Petunia x hybrida
BAA21923.1	AB006601	Petunia x hybrida
BAA21925.1	AB006603	Petunia x hybrida
BAA21924.1	AB006602	Petunia x hybrida
BAA21920.1	AB006598	Petunia x hybrida
BAA19111.1	AB000452	Petunia x hybrida
BAA21926.1	AB006604	Petunia x hybrida
BAA21927.1	AB006605	Petunia x hybrida
BAA96071.1	AB035133	Petunia x hybrida
BAA21919.1	AB006597	Petunia x hybrida
BAA96070.1	AB035132	Petunia x hybrida
AAB53260.1	U76554	Brassica rapa
AAB53261.1	U76555	Brassica rapa
BAA19114.1	AB000455	Petunia x hybrida
BAA05078.1	D26085	Petunia x hybrida
AAD26942.1	AF119050	Datisca glomerata
BAA05077.1	D26084	Petunia x hybrida
AAC06243.1	AF053077	Nicotiana tabacum
BAA19112.1	AB000453	Petunia x hybrida
AAK01713.1	AF332876	Oryza sativa
BAA05076.1	D26083	Petunia x hybrida
BAA05079.1	D26086	Petunia x hybrida
BAA21928.1	AB006606	Petunia x hybrida
BAA19926.1	AB000456	Petunia x hybrida
BAA19113.1	AB000454	Petunia x hybrida

SEQ ID NO. 1250

BAA82375.1	AP000367	Oryza sativa

SEQ ID NO. 1253

BAA04864.1	D21836	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAB51522.1	U92541	Oryza sativa
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
BAA25681.1	AB010434	Brassica rapa
AAB53694.1	U59379	Brassica napus
AAF88067.1	AF286593	Triticum aestivum

AAC32111.1	AF051206	Picea mariana
BAB20886.1	AB053294	Oryza sativa
CAA55399.1	X78822	Chlamydomonas reinhardtii
CAA94534.1	Z70677	Ricinus communis
CAA56850.1	X80887	Chlamydomonas reinhardtii
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
AAC49358.1	U35831	Pisum sativum
CAA53900.1	X76269	Pisum sativum
BAA13524.1	D87984	Fagopyrum esculentum
CAA41415.1	X58527	Nicotiana tabacum
AAD49233.1	AF159388	Phalaris coerulescens
BAB39913.1	AP002912	Oryza sativa
AAD49230.1	AF159385	Hordeum bulbosum
AAD49234.1	AF159389	Phalaris coerulescens
AAD49232.1	AF159387	Lolium perenne
CAA35826.1	X51462	Spinacia oleracea
CAA35827.1	X51463	Spinacia oleracea
CAA77847.1	Z11803	Nicotiana tabacum
AAD56954.1	AF186240	Secale cereale
AAD49231.1	AF159386	Secale cereale
AAD33596.1	AF133127	Hevea brasiliensis
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii
CAA06736.1	AJ005841	Oryza sativa
CAA06735.1	AJ005840	Triticum aestivum
AAB53695.1	U59380	Brassica napus
AAD45358.1	AF160870	Brassica napus
AAB52409.1	U76831	Brassica napus
CAA33082.1	X14959	Spinacia oleracea
AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA45098.1	X63537	Pisum sativum
AAC49357.1	U35830	Pisum sativum
AAC04671.1	AF018174	Brassica napus

SEQ ID NO. 1255

CAA52213.1	X74115	Picea abies
AAC35342.1	AF072449	Ipomoea trifida
AAC35340.1	AF072447	Ipomoea trifida
CAA11153.1	AJ223177	Nicotiana tabacum
CAA11154.1	AJ223178	Nicotiana tabacum
AAC37345.1	L20621	Zea mays
AAC35341.1	AF072448	Ipomoea trifida
AAC35343.1	AF072450	Ipomoea trifida
AAB57737.1	U89270	Tripsacum dactyloides
AAF89645.1	AF169018	Glycine max
AAF04253.1	AF097651	Pisum sativum
AAF04193.1	AF053638	Pisum sativum
AAB57738.1	U89271	Tripsacum dactyloides
AAF04194.1	AF053639	Pisum sativum
AAB00109.1	U21801	Lycopersicon esculentum

SEQ ID NO. 1259

AAC78466.1	AF053311	Zantedeschia aethiopica
CAA04142.1	AJ000508	Pisum sativum
CAB59895.1	AJ238745	Hordeum vulgare
CAB59893.1	AJ238697	Hordeum vulgare
CAB96145.1	AJ250951	Mesembryanthemum crystallinum
BAA22194.1	D63425	Spinacia oleracea
CAA42780.1	X60219	Nicotiana sylvestris
BAB16430.1	AB041518	Nicotiana tabacum
CAA75009.1	Y14707	Helianthus annuus
CAA75054.1	Y14762	Lycopersicon esculentum
AAB94892.1	AF037051	Gossypium hirsutum
CAB59894.1	AJ238744	Hordeum vulgare
CAA74775.1	Y14429	Helianthus annuus
AAB66330.1	AF014927	Chlamydomonas reinhardtii
BAA83594.1	AB009083	Chlamydomonas sp. W80
CAA75055.1	Y14763	Lycopersicon esculentum
CAA09194.1	AJ010455	Triticum aestivum
CAB66331.1	AJ279689	Betula pendula

SEQ ID NO. 1261

AAB18669.1	U11716	Pisum sativum
AAD25355.1	AF115574	Pisum sativum
AAA33662.1	M18250	Pisum sativum

SEQ ID NO. 1264

AAB40396.1	U80071	Mesembryanthemum crystallinum
BAA03131.1	D14044	Cucurbita sp.
AAA34030.1	J03492	Spinacia oleracea
AAB82143.1	AF022740	Oryza sativa

CAA63482.1	X92888	Lycopersicon esculentum
AAC32392.1	AF082874	Medicago sativa
AAC33509.1	U62485	Nicotiana tabacum
AAF03097.1	AF162196	Lactuca sativa

SEQ ID NO. 1268

AAC78593.1	AF053995	Lycopersicon esculentum
AAC78591.1	AF053993	Lycopersicon esculentum
AAC78596.1	AF053998	Lycopersicon esculentum
AAC78592.1	AF053994	Lycopersicon esculentum
AAD50430.1	AF166121	Hordeum vulgare
AAC78595.1	AF053997	Lycopersicon esculentum
BAB08215.1	AP002539	Oryza sativa
BAA96776.1	AP002521	Oryza sativa
AAC78594.1	AF053996	Lycopersicon pimpinellifolium
CAA05276.1	AJ002236	Lycopersicon pimpinellifolium
CAA05279.1	AJ002237	Lycopersicon esculentum
CAB55409.1	AL117265	Oryza sativa
CAA05274.1	AJ002236	Lycopersicon pimpinellifolium
AAA65235.1	U15936	Lycopersicon pimpinellifolium
CAA05268.1	AJ002235	Lycopersicon hirsutum
AAC80225.1	U72723	Oryza longistaminata
AAC49123.1	U37133	Oryza sativa

SEQ ID NO. 1269

AAG00510.1	AF285172	Phaseolus vulgaris
AAK21965.1	AY028699	Brassica napus
CAA97692.1	Z73295	Catharanthus roseus
CAB51834.1	00069	Oryza sativa
AAK11567.1	AF318491	Lycopersicon hirsutum
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
AAK11566.1	AF318490	Lycopersicon hirsutum
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAG03090.1	AC073405	Oryza sativa
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAB09771.1	U67422	Zea mays
AAK11569.1	AF318493	Lycopersicon hirsutum
AAF59906.1	AF197947	Glycine max
CAA61510.1	X89226	Oryza sativa
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
AAB47424.1	U59317	Lycopersicon pimpinellifol
AAF76307.1	AF220602	Lycopersicon pimpinellifol
BAA94510.1	AB041504	Populus nigra
BAA94509.1	AB041503	Populus nigra
AAG16628.1	AY007545	Brassica napus
AAF76314.1	AF220603	Lycopersicon esculentum
AAK11568.1	AF318492	Lycopersicon hirsutum
AAF59905.1	AF197946	Glycine max
BAA78764.1	AB023482	Oryza sativa
AAB47422.1	U59318	Lycopersicon esculentum

SEQ ID NO. 1270

AAG00510.1	AF285172	Phaseolus vulgaris
CAB51834.1	00069	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
AAK21965.1	AY028699	Brassica napus
AAF59905.1	AF197946	Glycine max
AAF59906.1	AF197947	Glycine max
AAF91324.1	AF244890	Glycine max
AAF91322.1	AF244888	Glycine max
AAF91323.1	AF244889	Glycine max
BAA78764.1	AB023482	Oryza sativa
AAK11567.1	AF318491	Lycopersicon hirsutum
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
AAC36318.1	AF053127	Malus x domestica
BAA94509.1	AB041503	Populus nigra
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAG16628.1	AY007545	Brassica napus
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAK11566.1	AF318490	Lycopersicon hirsutum
BAA94510.1	AB041504	Populus nigra
AAG03090.1	AC073405	Oryza sativa
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAK11569.1	AF318493	Lycopersicon hirsutum
AAF76307.1	AF220602	Lycopersicon pimpinellifolium

AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAF76314.1	AF220603	Lycopersicon esculentum
AAK11568.1	AF318492	Lycopersicon hirsutum

SEQ ID NO. 1271

BAA82826.1	AB023464	Arabis gemmifera
AAF69793.1	AF135153	Arabis parishii
AAF69785.1	AF135145	Arabis lignifera
AAF69775.1	AF135135	Arabis drummondii
AAF69777.1	AF135137	Arabis fecunda
AAF69783.1	AF135143	Arabis lemmonii
AAF69772.1	AF135132	Arabis gunnisoniana
AAF69780.1	AF135140	Arabis glabra
AAF69778.1	AF135138	Arabis glabra
AAF69784.1	AF135144	Arabis lemmonii
AAF69792.1	AF135152	Arabis parishii
AAA32986.1	M95835	Brassica napus
AAF69786.1	AF135146	Arabis lignifera
AAF69788.1	AF135148	Arabis lyallii
AAF69781.1	AF135141	Arabis gunnisoniana
AAF69770.1	AF135130	Arabis holboellii
AAF69773.1	AF135133	Arabis blepharophylla
AAF69789.1	AF135149	Arabis microphylla
AAF69776.1	AF135136	Arabis fecunda
AAF69791.1	AF135151	Arabis microphylla
AAF69787.1	AF135147	Arabis lignifera
AAF69790.1	AF135150	Arabis microphylla
AAF69782.1	AF135142	Halimolobos perplexa var. perplexa
AAF69774.1	AF135134	Arabis blepharophylla
CAA45822.1	X64519	Nicotiana tabacum
CAA35945.1	X51599	Nicotiana tabacum
CAC17793.1	AJ301671	Nicotiana sylvestris
CAA34813.1	X16939	Nicotiana tabacum
CAA34812.1	X16938	Nicotiana tabacum
AAB23374.1	S44869	Nicotiana tabacum
AAA34070.1	M15173	Nicotiana tabacum
AAA18332.1	U02605	Solanum tuberosum
CAA78845.1	Z15140	Lycopersicon esculentum
AAA17408.1	U02606	Solanum tuberosum
AAA17409.1	U02607	Solanum tuberosum
BAB13369.1	AB048531	Psophocarpus tetragonolobu
CAA30142.1	X07130	Solanum tuberosum
AAB67842.1	U60197	Gossypium hirsutum
CAB01591.1	Z78202	Persea americana
CAA45821.1	X64518	Nicotiana tabacum
CAA33517.1	X15494	Solanum tuberosum
AAB41324.1	U83591	Medicago sativa
AAB41325.1	U83592	Medicago sativa
AAA33756.1	M13968	Phaseolus vulgaris
CAA71402.1	Y10373	Medicago truncatula
AAA75196.1	L37876	Pisum sativum
AAB23263.1	S43926	Phaseolus vulgaris
AAG23965.1	AF307511	Vigna sesquipedalis
CAA61278.1	X88800	Vigna unguiculata
AAA80656.1	U30324	Theobroma cacao

SEQ ID NO. 1272

CAB57457.2	AJ249786	Nicotiana tabacum
AAB57668.1	U82974	Citrus sinensis

SEQ ID NO. 1273

CAA40796.1	X57564	Armoracia rusticana
BAA08499.1	D49551	Oryza sativa
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA84764.1	D84400	Oryza sativa
CAB94692.1	AJ242742	Ipomoea batatas
BAA06335.1	D30653	Populus kitakamiensis
BAA11853.1	D83225	Populus nigra
AAD37427.1	AF149277	Phaseolus vulgaris
AAD37430.1	AF149280	Phaseolus vulgaris
BAA11852.1	D83224	Populus nigra
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
BAA07241.1	D38051	Populus kitakamiensis
BAA92500.1	AP001383	Oryza sativa
CAA50597.1	X71593	Lycopersicon esculentum
CAB67121.1	Y19023	Lycopersicon esculentum

CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
AAB47602.1	L07554	Linum usitatissimum
CAA62226.1	X90693	Medicago sativa
AAA34108.1	J02979	Nicotiana tabacum
CAA62227.1	X90694	Medicago sativa
BAA06334.1	D30652	Populus kitakamiensis
BAA01992.1	D11396	Nicotiana tabacum
AAD43561.1	AF155124	Gossypium hirsutum
BAA82306.1	AB027752	Nicotiana tabacum
AAC98519.1	AF007211	Glycine max
BAA14143.1	D90115	Armoracia rusticana
AAB97734.1	AF014502	Glycine max
AAF63027.1	AF244924	Spinacia oleracea
CAA62225.1	X90692	Medicago sativa
BAA01877.1	D11102	Populus kitakamiensis
AAF63026.1	AF244923	Spinacia oleracea
BAA14144.1	D90116	Armoracia rusticana
AAB41810.1	L36156	Medicago sativa
AAA34050.1	M74103	Nicotiana sylvestris
CAA62597.1	X91172	Raphanus sativus
AAB02554.1	L37790	Stylosanthes humilis
CAA76680.1	Y17192	Cucurbita pepo
CAA71492.1	Y10466	Spinacia oleracea
BAA94962.1	AB042103	Asparagus officinalis
BAA77389.1	AB024439	Scutellaria baicalensis
AAD37428.1	AF149278	Phaseolus vulgaris
AAB41811.1	L36157	Medicago sativa
AAB06183.1	M37636	Arachis hypogaea

SEQ ID NO. 1274

CAA07547.1	AJ007507	Cichorium intybus x Cichorium endivia
AAA33018.1	L28826	Casuarina glauca
AAA18503.1	U09671	Canavalia lincata
CAA32044.1	X13815	Sesbania rostrata
CAA31859.1	X13505	Sesbania rostrata
CAA32043.1	X13814	Sesbania rostrata
AAC49882.1	U76029	Oryza sativa
CAA32492.1	X14311	Medicago sativa
BAA31155.1	AB015719	Pisum sativum
AAA32657.1	M36100	Medicago sativa
AAC49883.1	U76030	Oryza sativa
CAA31750.1	X13375	Medicago sativa
BAA31157.1	AB015721	Pisum sativum
AAB48005.1	M91077	Medicago sativa
AAA03002.1	M23312	Sesbania rostrata
BAA31156.1	AB015720	Pisum sativum
AAK07676.1	AY026343	Lycopersicon esculentum
AAC04853.1	U50083	Lupinus luteus
CAA37898.1	X53950	Casuarina glauca
AAB70097.1	U94968	Hordeum vulgare
CAA68462.1	Y00401	Lupinus luteus
AAA97887.1	U47143	Glycine max
AAF44664.1	AF236080	Zea mays
AAC49881.1	U76028	Oryza sativa
AAC49884.1	U76031	Oryza sativa
AAG01183.1	AF291052	Zea mays subsp. parviglumis
AAB86653.1	U27194	Parasponia andersonii
CAA68405.1	Y00296	Trema tomentosa
AAA03005.1	M23313	Sesbania rostrata
AAG01375.1	AY005818	Zea mays subsp. mays
CAA40900.1	X57733	Medicago truncatula
CAA38024.1	X54089	Medicago sativa
AAG29748.1	AF172172	Medicago sativa
AAC28426.1	AF027215	Trema orientalis
BAA24088.1	AB009844	Pisum sativum
CAA90869.1	Z54158	Vicia faba
CAB63706.1	AJ131349	Trema virgata
CAB63709.1	AJ131352	Trema virgata
CAA90870.1	Z54159	Vicia faba
CAB63707.1	AJ131350	Trema virgata
CAB63708.1	AJ131351	Trema virgata
CAA40899.1	X57732	Medicago truncatula

SEQ ID NO. 1275

CAC07206.1	AJ278966	Brassica napus
AAD01600.1	AF016713	Lycopersicon esculentum
AAC32034.1	AF023472	Hordeum vulgare
AAF20002.1	AF213936	Prunus dulcis
AAF07875.1	AF140606	Oryza sativa
BAB19757.1	AB052785	Glycine max

BAB19756.1	AB052784	Glycine max
BAB19760.1	AB052788	Glycine max
AAB69642.1	AF000392	Lotus japonicus
CAA93316.1	Z69370	Cucumis sativus
AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 1276

BAA25753.1	AB012932	Vigna radiata
AAF91350.1	AF256229	Zea mays
BAA75232.1	AB018526	Ipomoea nil

SEQ ID NO. 1278

CAA11219.1	AJ223281	Manihot esculenta
AAC49184.1	U40402	Hevea brasiliensis
CAA82334.1	Z29091	Manihot esculenta
CAA11428.1	AJ223506	Manihot esculenta

SEQ ID NO. 1279

AAG43549.1	AF211531	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum
BAA78738.1	AB023482	Oryza sativa
CAC12822.1	AJ299252	Nicotiana tabacum
AAF76898.1	AF274033	Atriplex hortensis
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
AAC24587.1	AF071893	Prunus armeniaca
AAK01089.1	AF298231	Hordeum vulgare
BAB16083.1	AB036883	Oryza sativa
BAB03248.1	AB037183	Oryza sativa
AAF23899.1	AF193803	Oryza sativa
BAA07321.1	D38123	Nicotiana tabacum
AAG43545.1	AF211527	Nicotiana tabacum
AAF63205.1	AF245119	Mesembryanthemum crystallinum
AAC62619.1	AF057373	Nicotiana tabacum
BAA99376.1	AP002526	Oryza sativa

SEQ ID NO. 1280

CAB57457.2	AJ249786	Nicotiana tabacum

SEQ ID NO. 1282

CAA64442.1	X94986	Manihot esculenta
AAB22162.1	S35175	Manihot esculenta
AAA91166.1	U39228	Prunus avium
AAF34650.1	AF221526	Prunus serotina
AAF03675.1	AF149311	Rauvolfia serpentina
CAA57913.1	X82577	Brassica napus
BAA78708.1	AB003089	Polygonum tinctorium
BAA11831.1	D83177	Costus speciosus
AAG25897.1	AF170087	Cucurbita pepo
AAF04007.1	AF163097	Dalbergia cochinchinensis
AAC69619.1	AF072736	Pinus contorta
AAB38784.1	U72154	Brassica nigra
AAD02839.1	AF082991	Avena sativa
AAA87339.1	L41869	Hordeum vulgare
AAB71381.1	U95298	Manihot esculenta
CAA55196.1	X78433	Avena sativa
AAC49177.1	U33817	Sorghum bicolor
AAD09850.1	U44087	Zea mays
AAG00614.1	AF293849	Secale cereale
AAF28800.1	AF112888	Catharanthus roseus
CAA40058.1	X56734	Trifolium repens
CAA40057.1	X56733	Trifolium repens
AAD10503.1	U33816	Zea mays
AAA65946.1	U25157	Zea mays
CAA52293.1	X74217	Zea mays
AAB03266.1	U44773	Zea mays
AAK07429.1	AF321287	Musa acuminata
CAA79989.2	Z21977	Brassica napus
AAA84906.1	U28047	Oryza sativa
CAC08209.1	AJ005950	Cicer arietinum

SEQ ID NO. 1283

AAB36223.1	S81261	Brassica napus
AAB36222.1	S81261	Brassica napus
AAC49266.1	U33885	Brassica napus
AAC49265.1	U33884	Brassica napus
AAF37266.1	AF220405	Vitis riparia
AAD28439.1	AF120092	Nicotiana tabacum

SEQ ID NO. 1284

AAD03693.1	AF084554	Brassica napus

CAA10372.1	AJ131455	Plastid Solanum demissum
CAA50750.1	X71952	Capsicum annuum
SEQ ID NO. 1286		
AAB07452.1	U65890	Brassica napus
AAB63591.1	AF009413	Oryza sativa
AAF60293.1	AF233745	Lycopersicon esculentum
AAB59307.1	M87646	Spinacia oleracea
SEQ ID NO. 1288		
AAB62693.1	AF004947	Oryza sativa
CAA73067.1	Y12464	Sorghum bicolor
CAA73068.1	Y12465	Sorghum bicolor
AAF22219.1	AF141378	Zea mays
BAA83688.1	AB011967	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
BAA83689.1	AB011968	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
BAA05649.1	D26602	Nicotiana tabacum
AAD23582.1	AF128443	Glycine max
CAA71142.1	Y10036	Cucumis sativus
CAA65244.1	X95997	Solanum tuberosum
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
AAB05457.1	U55768	Oryza sativa
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
CAA46554.1	X65604	Hordeum vulgare
AAD00239.1	U73938	Nicotiana tabacum
BAA13608.1	D88399	Oryza sativa
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
AAB68962.1	L38855	Glycine max
CAA89202.1	Z49233	Chlamydomonas eugametos
AAB58348.1	U29095	Triticum aestivum
AAD00240.1	U73939	Nicotiana tabacum
CAA06503.1	AJ005373	Craterostigma plantagineum
AAF27340.1	AF186020	Vicia faba
AAA96325.1	M94726	Triticum aestivum
CAA81443.1	Z26846	Mesembryanthemum crystallinum
AAF21062.1	AF216527	Dunaliella tertiolecta

SEQ ID NO. 1289		
BAA94228.1	AP001633	Oryza sativa
BAA94224.1	AP001633	Oryza sativa
BAA94236.1	AP001633	Oryza sativa
BAA94219.1	AP001633	Oryza sativa
BAA94215.1	AP001633	Oryza sativa
AAC49181.1	U39289	Brassica napus
AAC49182.1	U39319	Brassica napus
BAB21153.1	AP002899	Oryza sativa
SEQ ID NO. 1290		
AAC49375.1	U43839	Glycine max
CAC24490.1	AJ305033	Pisum sativum
AAC49374.1	U43838	Glycine max
AAC49376.1	U43840	Glycine max
SEQ ID NO. 1291		
AAF74566.1	AF215852	Nicotiana tabacum
AAF74565.1	AF215851	Spinacia oleracea
AAF74567.1	AF215853	Solanum tuberosum
AAF74568.1	AF215854	Zea mays
AAG43998.1	AF215837	Apium graveolens var. dulce
CAA68813.1	Y07520	Chlorella kessleri
CAA53192.1	X75440	Chlorella kessleri
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA39036.1	X55349	Chlorella kessleri
CAA47324.1	X66856	Nicotiana tabacum
CAA09419.1	AJ010942	Lycopersicon esculentum
CAB07812.1	Z93775	Vicia faba
BAB19864.1	AB052885	Oryza sativa
AAA79761.1	L08196	Ricinus communis
AAB06594.1	U38651	Medicago truncatula
CAA04511.1	AJ001061	Vitis vinifera
CAA70777.1	Y09590	Vitis vinifera
CAB06079.1	Z83829	Picea abies
AAA79857.1	L08188	Ricinus communis
BAB19863.1	AB052884	Oryza sativa
BAB19862.1	AB052883	Oryza sativa
CAB52688.1	AJ132223	Lycopersicon esculentum
BAA85398.1	AP000615	Oryza sativa

CAB52690.1	AJ132225	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris

SEQ ID NO. 1293

CAA78388.1	Z13998	Petunia x hybrida
CAA78387.1	Z13997	Petunia x hybrida
CAA78386.1	Z13996	Petunia x hybrida

SEQ ID NO. 1294

AAG13395.1	AF283006	Oryza sativa
AAB18207.1	U73216	Triticum aestivum

SEQ ID NO. 1296

BAA92260.1	AB030697	Raphanus sativus
AAD39374.1	AF118383	Brassica napus
BAA92261.1	AB030698	Raphanus sativus
AAD39373.1	AF118382	Brassica napus
BAA32778.1	AB012045	Raphanus sativus
AAC17529.1	AF067185	Samanea saman
AAK26758.1	AF326491	Zea mays
BAB40141.1	AB058678	Pyrus communis
AAB67868.1	U60147	Beta vulgaris
AAK26761.1	AF326494	Zea mays
AAK26760.1	AF326493	Zea mays
BAB40143.1	AB058680	Pyrus communis
AAK26759.1	AF326492	Zea mays
AAD28761.1	AF130975	Zea mays
AAF65845.1	AF255795	Allium cepa
AAK26763.1	AF326496	Zea mays
AAC16545.1	AF062393	Oryza sativa
CAB46351.1	Y18312	Solanum tuberosum
AAK26762.1	AF326495	Zea mays
AAC32107.1	AF051202	Picea mariana
AAA86991.1	U18403	Atriplex canescens
AAG30607.1	AF314656	Brassica oleracea
AAA99274.1	L77969	Spinacia oleracea
CAB07783.1	Z93764	Picea abies
AAG02208.1	AF290201	Solanum chacoense
AAB67869.1	U60148	Beta vulgaris
AAF61463.1	AF139814	Triticum aestivum
AAF78062.1	AF266760	Vicia faba
CAB93959.1	AJ289701	Vicia faba
BAA32777.1	AB012044	Raphanus sativus
AAG23179.1	AF299050	Brassica oleracea
AAG23180.1	AF299051	Brassica oleracea
BAA92258.1	AB030695	Raphanus sativus
CAA64896.1	X95640	Brassica oleracea
AAF65846.1	AF255796	Allium cepa

SEQ ID NO. 1300

AAC39318.1	AF029858	Sorghum bicolor
AAA19701.1	L24438	Thlaspi arvense
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
AAA32913.1	M32885	Persea americana
AAB94589.1	AF022460	Glycine max
AAB94588.1	AF022459	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
AAD47832.1	AF166332	Nicotiana tabacum
CAB56503.1	AJ238612	Catharanthus roseus
AAF27282.1	AF122821	Capsicum annuum
AAB94584.1	AF022157	Glycine max
BAA03635.1	D14990	Solanum melongena
CAA50645.1	X71654	Solanum melongena
CAA50312.1	X70981	Solanum melongena
CAA70576.1	Y09424	Nepeta racemosa
BAB40322.1	AB036772	Triticum aestivum
AAD44152.1	AF124817	Mentha x piperita
AAD44151.1	AF124816	Mentha x piperita
AAD44150.1	AF124815	Mentha spicata
CAA83941.1	Z33875	Mentha x piperita
AAD56282.1	AF155332	Petunia x hybrida
AAG44132.1	AF218296	Pisum sativum
CAC27827.1	AJ295719	Catharanthus roseus
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
AAG14963.1	AF214009	Brassica napus
CAA57424.2	X81830	Zea mays
CAA72207.1	Y11403	Zea mays
CAA65580.1	X96784	Nicotiana tabacum
AAG14962.1	AF214008	Brassica napus
AAG14961.1	AF214007	Brassica napus

SEQ ID NO. 1301

AAC39318.1	AF029858	Sorghum bicolor
AAA19701.1	L24438	Thlaspi arvense
AAA32913.1	M32885	Persea americana
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
CAA70575.1	Y09423	Nepeta racemosa
AAD47832.1	AF166332	Nicotiana tabacum
CAA50312.1	X70981	Solanum melongena
AAB94588.1	AF022459	Glycine max
AAB94589.1	AF022460	Glycine max
BAA03635.1	D14990	Solanum melongena
CAA50645.1	X71654	Solanum melongena
AAB94584.1	AF022157	Glycine max
AAF27282.1	AF122821	Capsicum annuum
CAA70576.1	Y09424	Nepeta racemosa
AAD44150.1	AF124815	Mentha spicata
BAB40322.1	AB036772	Triticum aestivum
CAB56503.1	AJ238612	Catharanthus roseus
CAA83941.1	Z33875	Mentha x piperita
AAD44151.1	AF124816	Mentha x piperita
AAG44132.1	AF218296	Pisum sativum
AAD56282.1	AF155332	Petunia x hybrida
CAA65580.1	X96784	Nicotiana tabacum
AAD44152.1	AF124817	Mentha x piperita
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
CAC27827.1	AJ295719	Catharanthus roseus
CAA64635.1	X95342	Nicotiana tabacum
AAG14962.1	AF214008	Brassica napus
AAG14961.1	AF214007	Brassica napus

SEQ ID NO. 1302

AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA33082.1	X14959	Spinacia oleracea
AAC04671.1	AF018174	Brassica napus
CAA45098.1	X63537	Pisum sativum
AAC49357.1	U35830	Pisum sativum
CAA94534.1	Z70677	Ricinus communis
AAF88067.1	AF286593	Triticum aestivum
CAA77847.1	Z11803	Nicotiana tabacum

SEQ ID NO. 1303

BAA12039.1	D83669	Spinacia oleracea
BAA19611.1	D77997	Spinacia oleracea
BAA24610.1	AB002467	Spinacia oleracea
BAA24609.1	AB002467	Spinacia oleracea
AAC19394.1	AF069316	Mesembryanthemum crystalli
AAC19393.1	AF069315	Mesembryanthemum crystalli
BAA78553.1	AB022274	Chloroplast Nicotiana taba
BAA78552.1	AB022273	Chloroplast Nicotiana taba
BAA22196.1	D88420	Cucurbita sp.
BAA12029.1	D83656	Cucurbita sp.
CAA11265.1	AJ223325	Chlamydomonas reinhardtii
BAA83595.1	AB009084	Chlamydomonas sp. W80
AAD30294.1	AF139190	Mesembryanthemum crystallinum
AAB52954.1	U37060	Gossypium hirsutum
AAC08576.1	AF053474	Zantedeschia aethiopica
AAD43338.1	AF158654	Fragaria x ananassa
AAD43336.1	AF158652	Fragaria x ananassa
AAB95222.1	AF039953	Fragaria x ananassa
AAD41408.1	AF159633	Fragaria x ananassa
AAD41407.1	AF159632	Fragaria x ananassa
AAD41403.1	AF159628	Fragaria x ananassa
AAD41402.1	AF159627	Fragaria x ananassa
AAD43337.1	AF158653	Fragaria x ananassa
AAD41406.1	AF159631	Fragaria x ananassa
AAD41404.1	AF159629	Fragaria x ananassa
AAB94574.1	AF022213	Fragaria x ananassa
AAD41405.1	AF159630	Fragaria x ananassa
BAA08264.1	D45423	Oryza sativa
BAA13671.1	D88649	Cucumis sativus
CAA55209.1	X78452	Raphanus sativus
BAA12890.1	D85864	Spinacia oleracea
AAA99518.1	L20864	Spinacia oleracea
BAA12918.1	D85912	Nicotiana tabacum
AAB03844.1	U61379	Vigna unguiculata
CAB58361.1	Y16773	Lycopersicon esculentum
CAA57140.1	X81376	Capsicum annuum
CAA06996.1	AJ006358	Hordeum vulgare
AAF22246.1	AF159380	Pimpinella brachycarpa

AAA86689.1	U15933	Nicotiana tabacum
CAA84406.1	Z34934	Zea mays
CAA43992.1	X62077	Pisum sativum
AAA33645.1	M93051	Pisum sativum
AAB01221.1	U56634	Glycine max
BAB20889.1	AB053297	Oryza sativa
CAA72247.1	Y11461	Brassica napus
BAB17666.1	AB050724	Oryza sativa subsp. japonica
AAD20022.1	AF127804	Glycine max
AAB94927.1	AF038839	Brassica juncea

SEQ ID NO. 1304

BAA97124.1	AB016266	Nicotiana sylvestris
BAA97122.1	AB016264	Nicotiana sylvestris
BAA87068.1	AB035270	Matricaria chamomilla
AAC50047.1	U89255	Lycopersicon esculentum
BAA07321.1	D38123	Nicotiana tabacum
AAC49740.1	U89256	Lycopersicon esculentum
AAC62619.1	AF057373	Nicotiana tabacum
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
AAB38748.1	U81157	Nicotiana tabacum
AAF05606.1	AF190770	Oryza sativa
AAC29516.1	U77655	Solanum tuberosum
BAB03248.1	AB037183	Oryza sativa
BAA97123.1	AB016265	Nicotiana sylvestris
BAA76734.1	AB024575	Nicotiana tabacum
AAD00708.1	U91857	Stylosanthes hamata
AAC49741.1	U89257	Lycopersicon esculentum
AAD45623.1	AF084185	Brassica napus
AAG59619.1	AF243384	Oryza sativa
AAK01089.1	AF298231	Hordeum vulgare

SEQ ID NO. 1305

AAG17172.1	AF190881	Populus tremula x Populus tremuloides
CAC24691.1	AJ132363	Brassica juncea
AAC39514.1	AF056027	Oryza sativa

SEQ ID NO. 1306

BAA33201.1	AB001883	Oryza sativa
BAA33203.1	AB001885	Oryza sativa
BAA33204.1	AB001886	Oryza sativa
BAA33202.1	AB001884	Oryza sativa
AAC99309.1	AF052584	Malus x domestica
AAC99310.1	AF052585	Malus x domestica
AAC35496.1	AF052690	Raphanus sativus
AAG27547.1	AF269128	Brassica nigra
AAG27546.1	AF269126	Brassica nigra
AAC27696.1	AF016011	Brassica napus
AAC27695.1	AF016010	Brassica napus
AAC27694.1	AF016009	Brassica napus
AAG24863.1	AF300700	Ipomoea nil
AAD22518.1	AF001136	Pinus radiata
BAA33206.1	AB001888	Oryza sativa
BAA33200.1	AB001882	Oryza sativa

SEQ ID NO. 1307

AAG25966.1	AF302082	Nicotiana tabacum
AAC27894.1	AF023164	Zea mays
AAC27895.1	AF023165	Zea mays
AAF66615.1	AF142596	Nicotiana tabacum
CAB41878.1	Y18259	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
AAK21965.1	AY028699	Brassica napus
AAD21872.1	AF078082	Phaseolus vulgaris
CAA97692.1	Z73295	Catharanthus roseus
CAA74661.1	Y14285	Brassica oleracea
AAC23542.1	U20948	Ipomoea trifida
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA23676.1	AB000970	Brassica rapa
CAA47962.1	X67733	Zea mays
CAA67145.1	X98520	Brassica oleracea
AAB09771.1	U67422	Zea mays
CAA74662.1	Y14286	Brassica oleracea
BAA94510.1	AB041504	Populus nigra
AAB93834.1	U82481	Zea mays
CAA73133.1	Y12530	Brassica oleracea
BAA06538.1	D31737	Nicotiana tabacum
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum

BAB21001.1	AB054061	Brassica rapa
BAA78764.1	AB023482	Oryza sativa
BAA07576.1	D38563	Brassica rapa
AAB47422.1	U59318	Lycopersicon esculentum
BAA21132.1	D88193	Brassica rapa

SEQ ID NO. 1308

BAA20482.1	D85610	Spinacia oleracea
AAC50011.1	U85494	Zea mays
AAC50021.1	U85495	Zea mays
BAA77218.1	AB026197	Lithospermum erythrorhizon

SEQ ID NO. 1311

AAG41777.1	AF212991	Cucurbita maxima
AAK11616.1	AF326277	Hordeum vulgare
AAK00946.1	AF318211	Taxus cuspidata
AAC49659.1	U74319	Sorghum bicolor
AAA17732.1	L19074	Catharanthus roseus
CAB56503.1	AJ238612	Catharanthus roseus
AAB17070.1	U54770	Lycopersicon esculentum
CAB41490.1	AJ238439	Cicer arietinum
AAD44150.1	AF124815	Mentha spicata
BAA74465.1	AB022732	Glycyrrhiza echinata
BAA22422.1	AB001379	Glycyrrhiza echinata
CAA10067.1	AJ012581	Cicer arietinum
BAB40322.1	AB036772	Triticum aestivum
CAB43505.1	AJ239051	Cicer arietinum
CAB56742.1	AJ249800	Cicer arietinum
AAF89209.1	AF279252	Vigna radiata
BAA93634.1	AB025016	Lotus japonicus
CAA04116.1	AJ000477	Helianthus tuberosus
CAA04117.1	AJ000478	Helianthus tuberosus
AAF34534.1	AF195813	Lupinus albus
CAA83941.1	Z33875	Mentha x piperita
AAF34533.1	AF195812	Pisum sativum
AAF45142.1	AF195818	Glycine max

SEQ ID NO. 1313

AAD01804.1	AF026480	Dianthus caryophyllus
AAB07724.1	U55867	Ipomoea nil

SEQ ID NO. 1315

BAA85398.1	AP000615	Oryza sativa
AAF74566.1	AF215852	Nicotiana tabacum
AAG43998.1	AF215837	Apium graveolens var. dulc
AAF74567.1	AF215853	Solanum tuberosum
AAF74568.1	AF215854	Zea mays
AAF74565.1	AF215851	Spinacia oleracea
CAA53192.1	X75440	Chlorella kessleri
CAA68813.1	Y07520	Chlorella kessleri
CAB06079.1	Z83829	Picea abies
CAA39036.1	X55349	Chlorella kessleri
CAA47324.1	X66856	Nicotiana tabacum
CAB07812.1	Z93775	Vicia faba
AAB06594.1	U38651	Medicago truncatula
AAA79761.1	L08196	Ricinus communis
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA09419.1	AJ010942	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris
BAB19863.1	AB052884	Oryza sativa
CAA70777.1	Y09590	Vitis vinifera
CAA04511.1	AJ001061	Vitis vinifera
BAB19864.1	AB052885	Oryza sativa
CAB52690.1	AJ132225	Lycopersicon esculentum
BAB19862.1	AB052883	Oryza sativa
CAB52688.1	AJ132223	Lycopersicon esculentum

SEQ ID NO. 1316

CAA48915.1	X69165	Solanum tuberosum
AAD45391.1	AF167416	Apium graveolens
AAD45390.1	AF167415	Apium graveolens
AAC99332.1	AF063400	Apium graveolens
AAF65765.1	AF242307	Euphorbia esula
CAA57727.1	X82276	Nicotiana tabacum
CAA53390.1	X75764	Plantago major
CAC19689.1	AJ303199	Daucus carota
BAA89458.1	AB036758	Daucus carota
CAA83436.1	Z31561	Ricinus communis
AAF04294.1	AF191024	Asarina barclaiana
CAA76369.1	Y16768	Daucus carota
CAB07811.1	Z93774	Vicia faba
AAD53000.1	U64967	Beta vulgaris

CAA47604.1	X67125	Spinacia oleracea
AAD41024.1	AF109922	Pisum sativum
CAA58730.1	X83850	Beta vulgaris
AAF04295.1	AF191025	Alonsoa meridionalis
AAD34610.1	AF149981	Nicotiana tabacum
CAA59113.1	X84379	Plantago major
CAA57726.1	X82275	Lycopersicon esculentum
CAA76368.1	Y16767	Daucus carota
CAA76367.1	Y16766	Daucus carota
CAC19688.1	AJ303198	Daucus carota
CAA12256.1	AJ224961	Ricinus communis
AAD55269.1	AF182445	Vitis vinifera
AAG09270.1	AF176950	Lycopersicon esculentum
AAG25923.1	AF237780	Solanum tuberosum
CAB75881.1	AJ272308	Hordeum vulgare
CAC33492.1	AJ310643	Ricinus communis
CAB75882.1	AJ272309	Hordeum vulgare
AAF90181.1	AF280050	Oryza sativa subsp. indica
BAA24071.1	D87819	Oryza sativa
BAA83501.1	AB008464	Zea mays
AAD45932.1	AF168771	Betula pendula
AAG12987.1	AF166498	Lycopersicon esculentum
BAA76434.1	AB025006	Cicer arietinum

SEQ ID NO. 1319

AAB65777.1	U97522	Vitis vinifera
AAB65776.1	U97521	Vitis vinifera
CAC17793.1	AJ301671	Nicotiana sylvestris
AAA34070.1	M15173	Nicotiana tabacum
CAA30142.1	X07130	Solanum tuberosum
CAA53626.1	X76041	Triticum aestivum

SEQ ID NO. 1320

CAA11219.1	AJ223281	Manihot esculenta
AAC49184.1	U40402	Hevea brasiliensis
CAA82334.1	Z29091	Manihot esculenta
CAA11428.1	AJ223506	Manihot esculenta

SEQ ID NO. 1322

AAK11255.1	AF329729	Nicotiana tabacum
AAD10245.1	AF030033	Phaseolus vulgaris
CAA62150.1	X90560	Physcomitrella patens
BAA94696.1	AB041711	Chara corallina
BAA96536.1	AB044286	Chara corallina
BAA94697.1	AB041712	Chara corallina
BAA87825.1	AP000815	Oryza sativa
CAA61980.1	X89890	Bidens pilosa
AAA19571.1	U10150	Brassica napus
AAA87347.1	M88307	Brassica juncea
CAA74111.1	Y13784	Mougeotia scalaris
AAA92677.1	U13736	Pisum sativum
AAA33083.1	M20729	Chlamydomonas reinhardtii
AAK25753.1	AF334833	Castanea sativa
AAF73157.1	AF150059	Brassica napus
CAA74307.1	Y13974	Zea mays
AAA34238.1	L20507	Vigna radiata
AAA34237.1	L20691	Vigna radiata
AAC49587.1	U49105	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49585.1	U49103	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum
AAC49580.1	U48689	Triticum aestivum
AAC49579.1	U48688	Triticum aestivum
AAC49578.1	U48242	Triticum aestivum
AAB36130.1	S81594	Vigna radiata
AAA92681.1	U13882	Pisum sativum
AAA33706.1	M80836	Petunia x hybrida
AAA33705.1	M80831	Petunia x hybrida
CAA78287.1	Z12827	Oryza sativa
CAA46150.1	X65016	Oryza sativa
CAA36644.1	X52398	Medicago sativa
CAA43143.1	X60738	Malus x domestica
CAA78301.1	Z12839	Lilium longiflorum
AAB68399.1	U79736	Helianthus annuus
CAA42423.1	X59751	Daucus carota
AAA32938.1	M27303	Hordeum vulgare
BAA88540.1	AP000969	Oryza sativa
AAG27432.1	AF295637	Elaeis guineensis
AAG11418.1	AF292108	Prunus avium
AAC36059.1	AF042840	Oryza sativa

SEQ ID NO. 1324

AAF61440.1	AF138264	Ipomoea batatas
AAF61442.1	AF138266	Ipomoea batatas
AAF61441.1	AF138265	Ipomoea batatas
AAD29084.1	AF082181	Solanum melongena
AAK27969.1	AF242373	Ipomoea batatas
CAA08906.1	AJ009878	Cicer arietinum
CAA78403.1	Z14028	Lycopersicon esculentum
CAB17075.1	Z99953	Phaseolus vulgaris
BAA92495.1	AB038598	Vigna mungo
AAB67878.1	U59465	Vicia faba
CAA82995.1	Z30338	Vicia sativa
BAA08244.1	D45402	Zea mays
CAB17077.1	Z99955	Phaseolus vulgaris
CAB16316.1	Z99172	Vicia sativa
CAA83673.1	Z32795	Glycine max
CAB53397.1	AJ245868	Medicago sativa
AAB62937.1	AF007215	Lavatera thuringiaca
CAA57675.1	X82185	Zea mays
BAA96501.1	AB032168	Nicotiana tabacum
CAB17076.1	Z99954	Phaseolus vulgaris
AAB68374.1	U52970	Phaseolus vulgaris
CAA12118.1	AJ224766	Phaseolus vulgaris
AAD48496.1	AF172856	Lycopersicon esculentum
CAB17074.1	Z99952	Phaseolus vulgaris
CAA05894.1	AJ003137	Lycopersicon esculentum
AAD53012.1	AF089849	Brassica napus
CAB53515.1	AJ245924	Solanum tuberosum
CAA88629.1	Z48736	Lycopersicon esculentum
AAC49455.1	U41902	Pseudotsuga menziesii
AAB70820.2	AF019145	Zea mays
CAB16317.1	Z99173	Nicotiana tabacum
AAK27968.1	AF242372	Ipomoea batatas
BAA88898.1	AB020961	Zea mays
AAD53011.1	AF089848	Brassica napus
AAA79915.1	U17135	Dianthus caryophyllus
AAB88263.1	AF019147	Zea mays
AAB97142.1	U93166	Prunus armeniaca
AAC35211.1	U12637	Hemerocallis hybrid cultivar

SEQ ID NO. 1325

CAA82653.1	Z29554	Helianthus annuus
AAC14577.1	U72396	Lycopersicon esculentum
CAA65020.1	X95716	Petroselinum crispum
AAB39336.1	M99430	Ipomoea nil
AAA33670.1	M33901	Pisum sativum
AAD41409.1	AF159562	Prunus dulcis
CAA67206.1	X98617	Medicago sativa
AAC36312.1	AF090115	Lycopersicon esculentum
CAA38012.1	X54075	Zea mays
CAA38013.1	X54076	Zea mays
CAA41218.1	X58279	Triticum aestivum
AAB26481.1	S59777	Zea mays
AAB01561.1	L47717	Picea glauca
AAB39335.1	M99429	Ipomoea nil
AAB01562.1	L47740	Picea glauca
CAA67726.1	X99346	Picea abies
AAD09184.1	AF089845	Funaria hygrometrica
BAA04841.1	D21817	Lilium longiflorum
BAA04842.1	D21818	Lilium longiflorum
AAD09185.1	AF089846	Funaria hygrometrica
BAA04840.1	D21816	Lilium longiflorum
CAA63570.1	X92983	Pseudotsuga menziesii
CAA63571.1	X92984	Pseudotsuga menziesii
AAD30452.1	AF123255	Lycopersicon esculentum
AAD09178.1	AF087640	Funaria hygrometrica
AAB63311.1	U46545	Helianthus annuus
CAA39603.1	X56138	Lycopersicon esculentum
AAC39360.1	U63631	Fragaria x ananassa
AAA33672.1	M33899	Pisum sativum
AAD30453.1	AF123256	Lycopersicon esculentum
AAD30454.1	AF123257	Lycopersicon esculentum
CAA41547.1	X58711	Medicago sativa
CAA31785.1	X13431	Triticum aestivum
AAB39856.1	U81385	Oryza sativa
CAA41546.1	X58710	Medicago sativa
CAA63901.1	X94191	Pennisetum glaucum
AAA33910.1	M80939	Oryza sativa
AAA33909.1	M80938	Oryza sativa
CAA43210.1	X60820	Oryza sativa
AAB03097.1	U21723	Glycine max
AAC78394.1	U83671	Oryza sativa
AAC78392.1	U83669	Oryza sativa

AAD09182.1	AF089843	Funaria hygrometrica
SEQ ID NO. 1326		
AAB72109.1	AF022217	Brassica rapa
CAA08908.1	AJ009880	Castanea sativa
AAD49336.1	AF166277	Nicotiana tabacum
CAA41547.1	X58711	Medicago sativa
CAB36910.1	AJ000691	Quercus suber
AAC39360.1	U63631	Fragaria x ananassa
BAA33062.1	AB017273	Cuscuta japonica
AAB03893.1	M11318	Glycine max
CAA37847.1	X53851	Daucus carota
AAA61632.1	U08601	Papaver somniferum
AAA33975.1	M11395	Glycine max
AAA33672.1	M33899	Pisum sativum
AAB63311.1	U46545	Helianthus annuus
CAB08441.1	Z95153	Helianthus annuus
CAA42222.1	X59701	Helianthus annuus
CAA25578.1	X01104	Glycine max
CAA37848.1	X53852	Daucus carota
AAA33974.1	M11317	Glycine max
CAB55634.2	AJ237596	Helianthus annuus
AAA33910.1	M80939	Oryza sativa
AAA33909.1	M80938	Oryza sativa
CAA43210.1	X60820	Oryza sativa
AAC78392.1	U83669	Oryza sativa
AAB63310.1	U46544	Helianthus annuus
AAB39856.1	U81385	Oryza sativa
AAD30454.1	AF123257	Lycopersicon esculentum
BAA02160.1	D12635	Oryza sativa
CAA63903.1	X94193	Pennisetum glaucum
CAA37864.1	X53870	Chenopodium rubrum
AAD30452.1	AF123255	Lycopersicon esculentum
CAA46641.1	X65725	Zea mays
CAA63902.1	X94192	Pennisetum glaucum
CAA63901.1	X94191	Pennisetum glaucum
CAA63570.1	X92983	Pseudotsuga menziesii
AAC78393.1	U83670	Oryza sativa
CAA39603.1	X56138	Lycopersicon esculentum
AAC78394.1	U83671	Oryza sativa
AAA33671.1	M33900	Pisum sativum
AAD30453.1	AF123256	Lycopersicon esculentum
CAA63571.1	X92984	Pseudotsuga menziesii
CAA31785.1	X13431	Triticum aestivum
CAA41546.1	X58710	Medicago sativa
SEQ ID NO. 1327		
CAA60120.1	X86222	Pisum sativum
BAA32547.1	AB017134	Lycopersicon esculentum
CAA33388.1	X15333	Chenopodium rubrum
AAB03096.1	U21722	Glycine max
AAC12279.1	AF035460	Zea mays
AAD03604.1	AF104107	Triticum aestivum
AAB01557.1	L47741	Picea glauca
AAD03605.1	AF104108	Triticum aestivum
CAA38037.1	X54103	Plastid Petunia x hybrida
AAF19022.1	AF197942	Funaria hygrometrica
AAB49626.1	U59917	Lycopersicon esculentum
AAB07023.1	U66300	Chloroplast Lycopersicon esculentum
BAA29064.1	D88584	Nicotiana tabacum
AAF19021.1	AF197941	Funaria hygrometrica
BAA78385.1	AB020973	Oryza sativa
CAA41219.1	X58280	Triticum aestivum
AAC96315.1	AF097657	Triticum aestivum
AAC96316.1	AF097658	Triticum aestivum
AAC96314.1	AF097656	Triticum aestivum
CAA47745.1	X67328	Triticum aestivum
AAC96317.1	AF097659	Triticum aestivum
AAA33477.1	L28712	Zea mays
BAA29066.1	AB006043	Nicotiana sylvestris
BAA29067.1	AB006044	Nicotiana tomentosiformis
BAA29065.1	AB006041	Nicotiana tabacum
AAC01570.1	AF019144	Agrostis stolonifera var. palustris
AAD30452.1	AF123255	Lycopersicon esculentum
CAA39603.1	X56138	Lycopersicon esculentum
AAD30453.1	AF123256	Lycopersicon esculentum
AAD30454.1	AF123257	Lycopersicon esculentum
AAD49336.1	AF166277	Nicotiana tabacum
AAF34133.1	AF161179	Malus x domestica
AAC39360.1	U63631	Fragaria x ananassa

AAA61632.1	U08601	Papaver somniferum
CAA08908.1	AJ009880	Castanea sativa
AAA33975.1	M11395	Glycine max
CAA63570.1	X92983	Pseudotsuga menziesii
AAB03893.1	M11318	Glycine max
CAA25578.1	X01104	Glycine max
AAB72109.1	AF022217	Brassica rapa
CAA46641.1	X65725	Zea mays
CAB08441.1	Z95153	Helianthus annuus
AAA33974.1	M11317	Glycine max

SEQ ID NO. 1329

AAG35658.1	AF204925	Petroselinum crispum
CAA88331.1	Z48431	Avena fatua
AAC37515.1	L44134	Cucumis sativus
AAD16138.1	AF096298	Nicotiana tabacum
AAC49529.1	U58540	Petroselinum crispum
BAA77383.1	AB020590	Nicotiana tabacum
BAA82107.1	AB022693	Nicotiana tabacum
AAF23898.1	AF193802	Oryza sativa
AAD16139.1	AF096299	Nicotiana tabacum
BAA86031.1	AB026890	Nicotiana tabacum
CAA88326.1	Z48429	Avena fatua
AAC31956.1	AF080595	Pimpinella brachycarpa
AAD55974.1	AF121353	Petroselinum crispum
AAC49527.1	U48831	Petroselinum crispum
BAB16432.1	AB041520	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
BAA77358.1	AB020023	Nicotiana tabacum
AAG35659.1	AF204926	Petroselinum crispum
AAF61864.1	AF193771	Nicotiana tabacum
AAF61863.1	AF193770	Nicotiana tabacum
BAA87069.1	AB035271	Matricaria chamomilla

SEQ ID NO. 1332

CAB53493.1	AJ245900	Oryza sativa
BAA85440.1	AP000616	Oryza sativa
BAA90626.1	AP001129	Oryza sativa

SEQ ID NO. 1337

AAF43095.1	AF053769	Malus x domestica

AAB81079.1	AF022390	Hordeum vulgare
AAC32817.1	AF050180	Oryza sativa
CAB88029.1	AJ276389	Dendrobium grex Madame Thc
AAB41849.1	U65648	Solanum tuberosum
AAD00252.1	U76408	Lycopersicon esculentum
BAB18584.1	AB043956	Ceratopteris richardii
BAA31700.1	AB016001	Ipomoea nil
BAA31699.1	AB016000	Ipomoea nil
AAD00692.1	U90092	Picea mariana
BAB18582.1	AB043954	Ceratopteris richardii
AAD13611.1	AF100455	Zea mays
BAB18583.1	AB043955	Ceratopteris richardii
BAA31698.1	AB015999	Ipomoea nil
AAC33008.1	AF080104	Pisum sativum
AAG27464.1	AF308454	Medicago truncatula
AAD00251.1	U76407	Lycopersicon esculentum
AAC49917.1	AF000141	Lycopersicon esculentum
AAD09582.1	U76409	Lycopersicon esculentum
AAF23753.2	AF193813	Brassica oleracea
AAD00691.1	U90091	Picea mariana
AAC32818.1	AF050181	Oryza sativa

SEQ ID NO. 1340

AAD11482.1	U51192	Glycine max
AAD11481.1	U51191	Glycine max
AAA65637.1	L13654	Lycopersicon esculentum
CAA76374.2	Y16776	Spinacia oleracea
AAA65636.1	L13653	Lycopersicon esculentum
BAA03644.1	D14997	Oryza sativa
CAA80502.1	Z22920	Spirodela polyrrhiza
BAA07664.1	D42065	Nicotiana tabacum
BAA07663.1	D42064	Nicotiana tabacum
AAA32676.1	M37637	Arachis hypogaea
BAA77387.1	AB024437	Scutellaria baicalensis
CAC21393.1	AJ401276	Zea mays
AAB67737.1	L77080	Stylosanthes humilis
AAF63024.1	AF244921	Spinacia oleracea
BAA82307.1	AB027753	Nicotiana tabacum
CAA64413.1	X94943	Lycopersicon esculentum
AAC98519.1	AF007211	Glycine max
AAD37427.1	AF149277	Phaseolus vulgaris

CAB94692.1	AJ242742	Ipomoea batatas
CAA62226.1	X90693	Medicago sativa
CAA62227.1	X90694	Medicago sativa
AAB41811.1	L36157	Medicago sativa
AAD37429.2	AF149279	Phaseolus vulgaris
CAA71494.1	Y10468	Spinacia oleracea
AAD11484.1	U51194	Glycine max
CAC21391.1	AJ401274	Zea mays
AAA34108.1	J02979	Nicotiana tabacum
AAD37430.1	AF149280	Phaseolus vulgaris
AAF63027.1	AF244924	Spinacia oleracea
CAA62225.1	X90692	Medicago sativa
AAD37375.1	AF145349	Glycine max
CAB67121.1	Y19023	Lycopersicon esculentum
AAB41810.1	L36156	Medicago sativa
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA92500.1	AP001383	Oryza sativa
BAA94962.1	AB042103	Asparagus officinalis
AAB97734.1	AF014502	Glycine max
CAA50597.1	X71593	Lycopersicon esculentum
BAA01992.1	D11396	Nicotiana tabacum
CAA40796.1	X57564	Armoracia rusticana
AAD11483.1	U51193	Glycine max
AAF63026.1	AF244923	Spinacia oleracea
AAF65464.2	AF247700	Oryza sativa
BAA11853.1	D83225	Populus nigra
BAA06335.1	D30653	Populus kitakamiensis

SEQ ID NO. 1342

AAG14455.1	AF283707	Tulipa gesneriana
AAG14454.1	AF283706	Tulipa gesneriana
AAG14456.1	AF283708	Tulipa gesneriana
AAC08401.1	AF053564	Mesembryanthemum crystallinum

SEQ ID NO. 1346

AAB51442.1	U63012	Sophora japonica
CAA93829.1	Z69999	Phaseolus lunatus
BAA36415.1	AB012634	Robinia pseudoacacia
CAA93828.1	Z69998	Phaseolus lunatus
AAC49137.1	U21959	Cladrastis kentukea
AAC49150.1	U21940	Cladrastis kentukea
CAB96391.1	AJ271873	Phaseolus lunatus
CAB96392.1	AJ271874	Phaseolus lunatus
CAA76366.1	Y16754	Medicago sativa
BAA82556.1	AB030083	Populus nigra
CAA93830.1	Z70000	Phaseolus lunatus
AAG16779.1	AF190633	Ulex europaeus
AAC49136.1	U21958	Cladrastis kentukea
AAB39933.1	U65009	Maackia amurensis
AAB39934.1	U65010	Maackia amurensis
AAA33766.1	L26237	Phaseolus lunatus
AAA33143.1	M34270	Dolichos biflorus
CAA57697.1	X82216	Medicago truncatula
BAA36413.1	AB012632	Robinia pseudoacacia
AAA80182.1	U12783	Robinia pseudoacacia
BAA04604.1	D17757	Robinia pseudoacacia
CAA68497.1	Y00440	Pisum sativum
AAC49271.1	U24249	Robinia pseudoacacia
AAA80181.1	U12782	Robinia pseudoacacia
BAA36416.1	AB012635	Robinia pseudoacacia
AAA33676.1	M18160	Pisum sativum
CAA47011.1	X66368	Pisum sativum
AAA33141.1	J02721	Dolichos biflorus
BAA36414.1	AB012633	Robinia pseudoacacia
BAA02049.1	D12481	Bauhinia purpurea
AAA80183.1	U12784	Robinia pseudoacacia
AAC49272.1	U24250	Robinia pseudoacacia
AAA82737.1	U18296	Medicago sativa
AAA74571.1	U22468	Arachis hypogaea
AAB51441.1	U63011	Sophora japonica
AAA74574.1	U22471	Arachis hypogaea
AAG00508.1	AF285121	Sophora flavescens
AAB39932.1	U65008	Maackia amurensis

SEQ ID NO. 1347

BAA85400.1	AP000615	Oryza sativa
CAA74909.1	Y14573	Hordeum vulgare
CAB06083.1	Z83834	Hordeum vulgare
CAA06487.1	AJ005341	Linum usitatissimum

SEQ ID NO. 1349

BAA97124.1	AB016266	Nicotiana sylvestris
BAA97122.1	AB016264	Nicotiana sylvestris
BAA07321.1	D38123	Nicotiana tabacum
BAA87068.1	AB035270	Matricaria chamomilla
AAC62619.1	AF057373	Nicotiana tabacum
AAD00708.1	U91857	Stylosanthes hamata
BAA97123.1	AB016265	Nicotiana sylvestris
BAA76734.1	AB024575	Nicotiana tabacum
AAF05606.1	AF190770	Oryza sativa
BAB03248.1	AB037183	Oryza sativa

SEQ ID NO. 1352

AAC24835.1	AF061870	Helianthus annuus

SEQ ID NO. 1353

CAA75575.1	Y15293	Medicago truncatula
BAA85440.1	AP000616	Oryza sativa
CAB53493.1	AJ245900	Oryza sativa
BAA85424.2	AP000616	Oryza sativa
BAA85439.1	AP000616	Oryza sativa
BAA90641.1	AP001129	Oryza sativa

SEQ ID NO. 1354

AAA80495.1	U20590	Lycopersicon esculentum
BAB39482.1	AB049199	Populus alba
BAA85150.1	AB032830	Pisum sativum
AAC12684.1	U76725	Pinus radiata
AAC62241.1	AF077339	Lycopersicon esculentum
CAA65828.1	X97190	Capsicum annuum
CAB59900.1	AJ010950	Capsicum annuum
BAB32662.1	AB055886	Atriplex lentiformis
BAA77239.1	AB025796	Populus alba
BAB39483.1	AB049200	Populus alba
AAC12685.1	U76756	Pinus radiata
CAA65597.1	X96853	Prunus persica
CAA65600.1	X96856	Prunus persica
AAC95009.1	AF074923	Fragaria x ananassa
CAB43937.1	AJ006348	Fragaria x ananassa
AAA69909.1	U13055	Lycopersicon esculentum
AAA96135.1	L41046	Pisum sativum
CAA65827.1	X97189	Capsicum annuum
CAA72133.1	Y11268	Lycopersicon esculentum
CAA60737.1	X87323	Capsicum annuum
AAC78504.1	U34754	Phaseolus vulgaris
AAA02563.1	M57400	Phaseolus vulgaris
CAA65826.1	X97188	Capsicum annuum
AAD08699.1	AF098292	Lycopersicon esculentum
AAA69908.1	U13054	Lycopersicon esculentum
CAB43938.1	AJ006349	Fragaria x ananassa
BAA96207.1	AP002094	Oryza sativa
BAA96209.1	AP002094	Oryza sativa
CAB51903.1	AJ242807	Brassica napus
BAA94257.1	AB040769	Hordeum vulgare
AAC49704.1	U78526	Lycopersicon esculentum
AAA20082.1	U00730	Glycine max
CAA11301.1	AJ223386	Fragaria x ananassa
CAA11302.1	AJ223387	Fragaria x ananassa
BAA21111.1	D88417	Gossypium hirsutum
CAA65598.1	X96854	Prunus persica

SEQ ID NO. 1355

CAA64798.1	X95552	Cucumis melo
CAA57285.1	X81629	Brassica oleracea
AAA32981.1	L27664	Brassica napus
CAA57284.1	X81628	Brassica oleracea
AAB70883.1	U19856	Pelargonium x hortorum
AAF36484.1	AF129074	Prunus persica
CAA90904.1	Z54199	Lycopersicon esculentum
CAA71738.1	Y10749	Betula pendula
BAA21541.1	AB003514	Actinidia deliciosa
CAA67216.1	X98627	Malus x domestica
CAA04895.1	AJ001646	Malus x domestica
AAC36461.1	AF030859	Malus x domestica
AAC37381.1	L21976	Petunia x hybrida
CAA74328.1	Y14005	Malus x domestica
CAA64799.1	X95553	Cucumis melo
AAB70884.1	U67861	Pelargonium x hortorum
BAA76387.1	D67038	Pyrus pyrifolia
AAB94031.1	AF015787	Malus x domestica
AAC48977.1	U07953	Pelargonium x hortorum
AAC67233.1	AF033582	Cucumis sativus
AAC48922.1	U06047	Vigna radiata

AAA33273.1	L35152	Dianthus caryophyllus
CAA41212.1	X58273	Lycopersicon esculentum
BAA34924.1	AB013101	Lycopersicon esculentum
AAF65472.1	AF252628	Brassica juncea
BAB32502.1	AB044747	Phyllostachys edulis
CAA71140.1	Y10034	Rumex palustris
CAA68538.1	Y00478	Lycopersicon esculentum
AAB71421.1	L29405	Helianthus annuus
AAC98808.1	U68215	Carica papaya
CAA58232.1	X83229	Nicotiana tabacum
CAA86468.1	Z46349	Nicotiana tabacum
AAA99793.1	U54566	Nicotiana glutinosa
AAA33697.1	L21978	Petunia x hybrida
AAF64528.1	AF254125	Carica papaya
AAA33644.1	M98357	Pisum sativum
AAA99792.1	U54565	Nicotiana glutinosa
AAB97368.1	AF041479	Rumex palustris
BAA33378.1	AB006807	Cucumis sativus
AAB05171.1	U62764	Nicotiana glutinosa
CAA59749.1	X85747	Oryza sativa
BAA06526.1	D31727	Cucumis melo

SEQ ID NO. 1359

BAA33810.1	AB018441	Nicotiana tabacum
AAK15505.1	AF325723	Pennisetum ciliare

SEQ ID NO. 1361

AAB01567.1	L47672	Picea glauca

SEQ ID NO. 1365

CAB52689.1	AJ132224	Lycopersicon esculentum
CAA09419.1	AJ010942	Lycopersicon esculentum
BAB19864.1	AB052885	Oryza sativa
CAA47324.1	X66856	Nicotiana tabacum
AAB06594.1	U38651	Medicago truncatula
AAA79761.1	L08196	Ricinus communis
CAA04511.1	AJ001061	Vitis vinifera
CAA70777.1	Y09590	Vitis vinifera
AAA79857.1	L08188	Ricinus communis
CAB06079.1	Z83829	Picea abies
BAB19863.1	AB052884	Oryza sativa
BAA83554.1	AP000399	Oryza sativa
CAA53192.1	X75440	Chlorella kessleri
CAA68813.1	Y07520	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri
BAB19862.1	AB052883	Oryza sativa
CAB52688.1	AJ132223	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris
CAB52690.1	AJ132225	Lycopersicon esculentum
AAG43998.1	AF215837	Apium graveolens var. dulc
AAF74568.1	AF215854	Zea mays
AAF74567.1	AF215853	Solanum tuberosum
AAF74566.1	AF215852	Nicotiana tabacum
AAF74565.1	AF215851	Spinacia oleracea
AAD37424.1	AF149282	Phaseolus vulgaris
AAD45934.1	AF168773	Betula pendula

SEQ ID NO. 1368

AAF20002.1	AF213936	Prunus dulcis
AAD01600.1	AF016713	Lycopersicon esculentum
AAC32034.1	AF023472	Hordeum vulgare
AAF07875.1	AF140606	Oryza sativa
CAC07206.1	AJ278966	Brassica napus
AAB69642.1	AF000392	Lotus japonicus
BAB19760.1	AB052788	Glycine max
CAA93316.1	Z69370	Cucumis sativus
BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 1370

BAB19760.1	AB052788	Glycine max
BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
AAD01600.1	AF016713	Lycopersicon esculentum
AAC32034.1	AF023472	Hordeum vulgare
CAA93316.1	Z69370	Cucumis sativus
AAF20002.1	AF213936	Prunus dulcis
AAF07875.1	AF140606	Oryza sativa
AAB69642.1	AF000392	Lotus japonicus
CAC07206.1	AJ278966	Brassica napus

AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 1371

CAB55409.1	AL117265	Oryza sativa
AAC78593.1	AF053995	Lycopersicon esculentum
AAC78596.1	AF053998	Lycopersicon esculentum
AAC78591.1	AF053993	Lycopersicon esculentum
AAC78592.1	AF053994	Lycopersicon esculentum
AAC78594.1	AF053996	Lycopersicon pimpinellifolium
CAA05276.1	AJ002236	Lycopersicon pimpinellifolium
AAD50430.1	AF166121	Hordeum vulgare
CAA05268.1	AJ002235	Lycopersicon hirsutum
CAA05274.1	AJ002236	Lycopersicon pimpinellifolium
AAA65235.1	U15936	Lycopersicon pimpinellifolium
AAC78595.1	AF053997	Lycopersicon esculentum
CAA05279.1	AJ002237	Lycopersicon esculentum

SEQ ID NO. 1372

AAD48496.1	AF172856	Lycopersicon esculentum
AAC49455.1	U41902	Pseudotsuga menziesii
CAB53515.1	AJ245924	Solanum tuberosum
CAB17076.1	Z99954	Phaseolus vulgaris
BAA88898.1	AB020961	Zea mays
CAA46863.1	X66061	Pisum sativum
AAB88263.1	AF019147	Zea mays
CAA05894.1	AJ003137	Lycopersicon esculentum
AAA79915.1	U17135	Dianthus caryophyllus
AAD28476.1	AF133838	Sandersonia aurantiaca
AAB88262.1	AF019146	Zea mays
CAA53377.1	X75749	Vicia sativa
CAB16317.1	Z99173	Nicotiana tabacum
CAB17074.1	Z99952	Phaseolus vulgaris
CAA12118.1	AJ224766	Phaseolus vulgaris
AAB68374.1	U52970	Phaseolus vulgaris
CAA57538.1	X82011	Cicer arietinum
AAB41816.1	U44947	Pisum sativum
AAD54424.1	AF182079	Matricaria chamomilla
AAK06862.1	AF343446	Actinidia chinensis
CAA52425.1	X74406	Hemerocallis sp.
AAB70820.2	AF019145	Zea mays

AAC62396.1	AF050756	Ricinus communis
AAC35211.1	U12637	Hemerocallis hybrid cultiv
AAD10337.1	U94591	Hordeum vulgare
AAD28477.1	AF133839	Sandersonia aurantiaca
CAB09699.1	Z97023	Hordeum vulgare
CAB09697.1	Z97021	Hordeum vulgare
CAA56844.1	X80876	Oryza sativa
BAA83472.1	AB004648	Oryza sativa
AAB37233.1	U34747	Phalaenopsis sp. SM9108
AAC49406.1	U19267	Zinnia elegans
CAA06243.1	AJ004958	Pisum sativum
AAK27968.1	AF242372	Ipomoea batatas
BAA83473.1	AB004819	Oryza sativa
BAA11170.1	D76415	Oryza sativa
CAA84378.1	Z34895	Vicia sativa

SEQ ID NO. 1373

AAC39318.1	AF029858	Sorghum bicolor
BAB40323.1	AB037244	Asparagus officinalis
AAA32913.1	M32885	Persea americana
BAB40324.1	AB037245	Asparagus officinalis
AAA19701.1	L24438	Thlaspi arvense
AAB94589.1	AF022460	Glycine max
AAB94588.1	AF022459	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
AAD47832.1	AF166332	Nicotiana tabacum
AAB94584.1	AF022157	Glycine max
AAF27282.1	AF122821	Capsicum annuum
CAA50312.1	X70981	Solanum melongena
CAB56503.1	AJ238612	Catharanthus roseus
CAA50645.1	X71654	Solanum melongena
BAA03635.1	D14990	Solanum melongena
AAD44151.1	AF124816	Mentha x piperita
AAD44152.1	AF124817	Mentha x piperita
CAA83941.1	Z33875	Mentha x piperita
AAD44150.1	AF124815	Mentha spicata
BAB40322.1	AB036772	Triticum aestivum
CAC27827.1	AJ295719	Catharanthus roseus
AAG44132.1	AF218296	Pisum sativum
AAD56282.1	AF155332	Petunia x hybrida
AAG14963.1	AF214009	Brassica napus

AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
CAA65580.1	X96784	Nicotiana tabacum
AAG14961.1	AF214007	Brassica napus
AAG14962.1	AF214008	Brassica napus
AAB17562.1	U72654	Eustoma grandiflorum

SEQ ID NO. 1382

CAA70575.1	Y09423	Nepeta racemosa
CAA70576.1	Y09424	Nepeta racemosa
CAA50312.1	X70981	Solanum melongena
AAA32913.1	M32885	Persea americana
BAA03635.1	D14990	Solanum melongena
CAA50645.1	X71654	Solanum melongena
CAA83941.1	Z33875	Mentha x piperita
AAB94584.1	AF022157	Glycine max
BAB40324.1	AB037245	Asparagus officinalis
AAD47832.1	AF166332	Nicotiana tabacum
BAB40323.1	AB037244	Asparagus officinalis
AAB94588.1	AF022459	Glycine max
AAF27282.1	AF122821	Capsicum annuum
CAA50313.1	X70982	Solanum melongena
AAA19701.1	L24438	Thlaspi arvense
BAA12159.1	D83968	Glycine max
BAB40322.1	AB036772	Triticum aestivum
CAA65580.1	X96784	Nicotiana tabacum
CAA72196.1	Y11368	Zea mays
CAA57425.1	X81831	Zea mays
AAC39318.1	AF029858	Sorghum bicolor
AAD56282.1	AF155332	Petunia x hybrida
CAB56503.1	AJ238612	Catharanthus roseus
CAA57421.1	X81827	Zea mays
CAA57422.1	X81828	Zea mays
BAA13076.1	D86351	Glycine max
AAB94589.1	AF022460	Glycine max
AAD38930.1	AF135485	Glycine max
CAA57423.1	X81829	Zea mays
CAA72208.1	Y11404	Zea mays
AAG44132.1	AF218296	Pisum sativum
CAA64635.1	X95342	Nicotiana tabacum

SEQ ID NO. 1384

AAF61647.1	AF190634	Nicotiana tabacum
BAA89009.1	AB027455	Petunia x hybrida
AAF17077.1	AF199453	Sorghum bicolor
AAF98390.1	AF287143	Brassica napus
BAA36423.1	AB013598	Verbena x hybrida
BAA36421.1	AB013596	Perilla frutescens
BAA93039.1	AB033758	Citrus unshiu
BAA36422.1	AB013597	Perilla frutescens
BAA12737.1	D85186	Gentiana triflora
AAB48444.1	U82367	Solanum tuberosum
BAA19659.1	AB002818	Perilla frutescens
CAA54612.1	X77462	Manihot esculenta
BAA89008.1	AB027454	Petunia x hybrida
BAA83484.1	AB031274	Scutellaria baicalensis
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
AAD04166.1	AF101972	Phaseolus lunatus
AAD21086.1	AF127218	Forsythia x intermedia
CAA54611.1	X77461	Manihot esculenta
AAK28303.1	AF346431	Nicotiana tabacum
CAA54609.1	X77459	Manihot esculenta
CAA54613.1	X77463	Manihot esculenta
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
CAA59450.1	X85138	Lycopersicon esculentum
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera

SEQ ID NO. 1385

AAF06347.1	AF195654	Vitis vinifera
BAA28872.1	AB006009	Pyrus pyrifolia
AAB38064.1	U32440	Prunus avium
BAA95017.1	AB031870	Cestrum elegans
BAA74546.2	AB000834	Nicotiana tabacum
AAC36740.1	AF090143	Malus x domestica

CAC10270.1	AJ243427	Malus x domestica
AAB95118.1	U71244	Brassica rapa
CAC09477.1	AL442113	Oryza sativa
CAB62167.1	AJ242828	Castanea sativa
AAF06346.1	AF195653	Vitis vinifera
AAB02259.1	U57787	Avena sativa
AAD55090.1	AF178653	Vitis riparia
CAA10492.1	AJ131731	Pseudotsuga menziesii
CAA09228.1	AJ010501	Cicer arietinum
BAA95165.1	AB029918	Nicotiana tabacum
AAF82264.1	AF227324	Vitis vinifera
AAB53368.1	U77657	Oryza sativa
AAB61590.1	AF003007	Vitis vinifera
AAB53367.1	U77656	Oryza sativa

SEQ ID NO. 1386

AAF61440.1	AF138264	Ipomoea batatas
AAF61442.1	AF138266	Ipomoea batatas
AAF61441.1	AF138265	Ipomoea batatas
AAK27969.1	AF242373	Ipomoea batatas
CAB17075.1	Z99953	Phaseolus vulgaris
AAB67878.1	U59465	Vicia faba
CAA08906.1	AJ009878	Cicer arietinum
CAA82995.1	Z30338	Vicia sativa
BAA92495.1	AB038598	Vigna mungo
AAD29084.1	AF082181	Solanum melongena
CAA78403.1	Z14028	Lycopersicon esculentum
BAA08244.1	D45402	Zea mays
CAA83673.1	Z32795	Glycine max
CAB17077.1	Z99955	Phaseolus vulgaris
CAB16316.1	Z99172	Vicia sativa
CAB53397.1	AJ245868	Medicago sativa
AAB62937.1	AF007215	Lavatera thuringiaca
BAA96501.1	AB032168	Nicotiana tabacum
CAA57675.1	X82185	Zea mays
AAC49455.1	U41902	Pseudotsuga menziesii
CAB17076.1	Z99954	Phaseolus vulgaris
AAD53011.1	AF089848	Brassica napus
CAA88629.1	Z48736	Lycopersicon esculentum
AAK27968.1	AF242372	Ipomoea batatas
AAB68374.1	U52970	Phaseolus vulgaris

CAA12118.1	AJ224766	Phaseolus vulgaris
CAB17074.1	Z99952	Phaseolus vulgaris
AAD48496.1	AF172856	Lycopersicon esculentum
AAD53012.1	AF089849	Brassica napus
CAA05894.1	AJ003137	Lycopersicon esculentum
BAA08245.1	D45403	Zea mays
BAA88898.1	AB020961	Zea mays
CAB16317.1	Z99173	Nicotiana tabacum
AAB88263.1	AF019147	Zea mays
CAA92583.1	Z68291	Pisum sativum
CAA68192.1	X99936	Zea mays
AAC35211.1	U12637	Hemerocallis hybrid cultiv
AAB97142.1	U93166	Prunus armeniaca

SEQ ID NO. 1387

AAA33967.1	M76981	Glycine max
BAA23563.1	D50094	Phaseolus vulgaris
BAA19152.1	AB000585	Phaseolus vulgaris
AAA34020.1	M20037	Glycine max
AAA34022.1	M76980	Glycine max
AAA34021.1	M20038	Glycine max

SEQ ID NO. 1390

BAA87043.1	AB035183	Ipomoea batatas
CAB06427.1	Z84383	Dianthus caryophyllus
CAB06429.1	Z84385	Dianthus caryophyllus
CAB06430.1	Z84386	Dianthus caryophyllus
CAB11466.1	Z98758	Dianthus caryophyllus
CAB06538.1	Z84571	Dianthus caryophyllus
CAB06428.1	Z84384	Dianthus caryophyllus

SEQ ID NO. 1391

AAK01360.1	AF314811	Brassica napus
CAB40834.1	AJ005686	Vitis vinifera
AAC14481.1	U92286	Actinidia deliciosa
AAB67875.1	U60267	Lycopersicon esculentum
CAA67069.1	X98421	Medicago sativa
AAK01361.1	AF314812	Brassica napus
BAA19916.1	D49714	Oryza sativa
AAC18862.1	AF067967	Mesembryanthemum crystallinum
CAA67070.1	X98422	Medicago sativa

AAC84137.1	AF101424	Cichorium intybus
AAB80946.1	AF022914	Triticum aestivum

SEQ ID NO. 1392

AAD10836.1	U52079	Solanum tuberosum

SEQ ID NO. 1400

BAA05648.1	D26601	Nicotiana tabacum
AAF34436.1	AF172282	Oryza sativa
CAA08995.1	AJ010091	Brassica napus
CAA08997.1	AJ010093	Brassica napus
AAF19402.1	AF203480	Lycopersicon esculentum
AAF19403.1	AF203481	Lycopersicon esculentum
AAB70706.1	U82087	Tortula ruralis
AAF19401.1	AF203479	Glycine max
BAA85396.1	AP000615	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
AAF06969.1	AF162661	Kalanchoe fedtschenkoi
CAA57156.1	X81393	Oryza sativa
AAB80692.1	U69173	Glycine max
AAF21062.1	AF216527	Dunaliella tertiolecta
BAA96628.1	AP002482	Oryza sativa
AAG53979.1	AF325168	Nicotiana tabacum
BAA81750.1	AB017516	Marchantia polymorpha
BAA81748.1	AB017515	Marchantia polymorpha
CAA89202.1	Z49233	Chlamydomonas eugametos
AAA33443.1	L15390	Zea mays
BAA81749.1	AB017515	Marchantia polymorpha
BAA81751.1	AB017517	Marchantia polymorpha
AAC49405.1	U08140	Vigna radiata
AAD00239.1	U73938	Nicotiana tabacum
AAD00240.1	U73939	Nicotiana tabacum
AAD17800.1	AF090835	Mesembryanthemum crystallinum
AAB49984.1	U90262	Cucurbita pepo
AAF05112.1	AF158091	Mesembryanthemum crystallinum
AAF27340.1	AF186020	Vicia faba
CAA65244.1	X95997	Solanum tuberosum
CAA39936.1	X56599	Daucus carota
CAA07481.1	AJ007366	Zea mays
AAA69507.1	U28376	Zea mays

SEQ ID NO. 1404

AAB71227.1	AF004809	Glycine max
AAF13743.1	AF109921	Sesamum indicum
CAA61981.1	X89891	Oryza sativa

SEQ ID NO. 1405

AAD10327.1	U63534	Fragaria x ananassa
AAK28509.1	AF320110	Fragaria x ananassa
AAB38503.1	U79770	Mesembryanthemum crystalli
CAA48028.1	X67817	Petroselinum crispum
AAC15467.1	U24561	Apium graveolens
AAC61854.1	AF067082	Apium graveolens
AAC35846.1	AF083333	Medicago sativa
AAA74883.1	L36456	Stylosanthes humilis
AAA74882.1	L36823	Stylosanthes humilis
AAF72100.1	AF146691	Lycopersicon esculentum
CAA86072.1	Z37991	Pinus taeda
CAA05097.1	AJ001926	Picea abies
CAA05096.1	AJ001925	Picea abies
CAA05095.1	AJ001924	Picea abies
CAA51226.1	X72675	Picea abies
AAB38774.1	U62394	Pinus radiata
AAC31166.1	AF060491	Pinus radiata
CAA86073.1	Z37992	Pinus taeda
AAK00679.1	AF229407	Brassica napus
AAK00681.1	AF229409	Brassica napus
CAA44216.1	X62343	Nicotiana tabacum
CAA44217.1	X62344	Nicotiana tabacum
AAK00682.1	AF229410	Brassica oleracea
AAC07987.1	AF038561	Eucalyptus globulus
BAA03099.1	D13991	Aralia cordata
CAA46585.1	X65631	Eucalyptus gunnii
AAK00678.1	AF229406	Brassica napus
AAG15553.1	AF294793	Eucalyptus saligna
AAF43140.1	AF217957	Populus tremuloides
CAC07423.1	AJ295837	Populus balsamifera subsp. trichocarpa
CAA79622.1	Z19568	Populus deltoides
AAK00684.1	AF229412	Brassica rapa
AAB70908.1	AF010290	Lolium perenne

CAA53211.1	X75480	Eucalyptus gunnii
AAK00680.1	AF229408	Brassica napus
CAA74070.1	Y13733	Zea mays
AAK00683.1	AF229411	Brassica rapa
CAA79625.1	Z19573	Medicago sativa
AAC35845.1	AF083332	Medicago sativa
CAA06687.1	AJ005702	Zea mays
CAA13177.1	AJ231135	Saccharum officinarum
BAA19487.1	D86590	Zinnia elegans
BAA04046.1	D16624	Eucalyptus botryoides
AAD18000.1	AF109157	Eucalyptus globulus
AAF23409.1	AF207552	Brassica napus
AAF23411.1	AF207554	Brassica oleracea
AAF23412.1	AF207555	Brassica rapa
AAF23410.1	AF207553	Brassica napus
AAF23416.1	AF207559	Brassica rapa
AAF23415.1	AF207558	Brassica oleracea

SEQ ID NO. 1412

AAK14395.1	AF339732	Dianthus caryophyllus
BAB20580.1	AB042267	Zea mays
BAB20581.1	AB042268	Zea mays
BAB20579.1	AB042261	Zea mays
BAB17300.1	AB042260	Zea mays
BAA82873.1	AB024291	Zea mays
BAA85113.1	AB031012	Zea mays
BAA75253.1	AB004882	Zea mays
BAA85112.1	AB031011	Zea mays
BAB20582.1	AB042269	Zea mays
BAB41137.1	AB060130	Zea mays

SEQ ID NO. 1414

BAB17726.1	AB050900	Raphanus sativus
CAA59138.1	X84448	Brassica oleracea
AAC16325.1	AF061740	Elaeagnus umbellata
CAA08913.1	AJ009952	Phaseolus vulgaris
AAF02775.1	AF190728	Helianthus annuus
AAC49613.1	U77678	Glycine max
AAB81011.1	U89923	Medicago sativa
AAC09952.1	U55874	Glycine max
AAB48058.1	L40327	Medicago sativa

CAA61589.1	X89409	Lotus japonicus
CAA67889.1	X99552	Asparagus officinalis
AAF74755.1	AF263432	Helianthus annuus
AAD05035.1	AF014057	Triphysaria versicolor
AAD05034.1	AF014056	Triphysaria versicolor
AAD05033.1	AF014055	Triphysaria versicolor
CAA96526.1	Z72354	Vicia faba
CAA48141.1	X67958	Asparagus officinalis
CAA61590.1	X89410	Lotus japonicus
CAA36429.1	X52179	Pisum sativum
BAA96252.1	AB035248	Astragalus sinicus
CAA36430.1	X52180	Pisum sativum
BAA96251.1	AB035247	Astragalus sinicus
CAB57292.1	AJ133522	Phaseolus vulgaris
AAC49614.1	U77679	Glycine max
BAA18951.1	D83378	Oryza sativa
AAB03991.1	U55873	Oryza sativa
AAF02776.1	AF190729	Helianthus annuus
AAB71532.1	AF005724	Sandersonia aurantiaca
CAA58052.1	X82849	Zea mays
AAB91481.1	AF037363	Helianthus annuus
CAA73762.1	Y13321	Pisum sativum
CAA73763.1	Y13322	Pisum sativum
BAA96452.1	AB021793	Pyrus pyrifolia
AAA73943.1	L23833	Glycine max

SEQ ID NO. 1415

AAG21985.1	AF271636	Zea mays
AAC18622.2	AF003551	Zea mays
AAG28387.1	AF191667	Brassica oleracea
AAG28386.1	AF191666	Brassica napus
AAB97685.1	AF042184	Brassica napus
AAG14462.1	AF293461	Brassica napus

SEQ ID NO. 1417

AAB03379.1	U27108	Brassica napus
AAB03378.1	U27107	Brassica napus
AAD42937.1	AF084971	Catharanthus roseus
AAC49474.1	U41817	Phaseolus vulgaris
CAA11499.1	AJ223624	Spinacia oleracea
CAA88492.1	Z48602	Nicotiana tabacum

AAC49398.1	U46217	Petroselinum crispum
CAA76555.1	Y16953	Sinapis alba
CAA88493.1	Z48603	Nicotiana tabacum
CAA63073.1	X92102	Raphanus sativus
CAA58772.1	X83920	Brassica napus
AAB00098.1	L01449	Glycine max
AAA80169.1	U10270	Zea mays
AAB40291.1	U42208	Oryza sativa
AAC49556.1	U04295	Oryza sativa
CAA58774.1	X83922	Brassica napus
AAD42938.1	AF084972	Catharanthus roseus
AAB36514.1	U57389	Phaseolus vulgaris
CAC00656.1	AJ292743	Petroselinum crispum
CAA71768.1	Y10809	Petroselinum crispum
CAA71770.1	Y10810	Petroselinum crispum
BAA02304.1	D12920	Triticum aestivum
CAA40101.1	X56781	Triticum aestivum
BAA07289.1	D38111	Triticum aestivum
AAA34293.1	M28704	Triticum aestivum
AAK14790.1	AY027510	Catharanthus roseus
CAA58773.1	X83921	Brassica napus
CAA52897.1	X74943	Lycopersicon esculentum
CAB62402.1	Y15165	Zea mays
BAA10928.1	D64051	Triticum aestivum
CAA52896.1	X74942	Lycopersicon esculentum
AAA17488.1	U07933	Triticum aestivum
CAA66477.1	X97903	Vicia faba
CAA52895.1	X74941	Lycopersicon esculentum
BAA02303.2	D12919	Triticum aestivum
AAA68429.1	M63999	Triticum aestivum
CAA67298.1	X98747	Hordeum vulgare
AAA19103.1	U10466	Triticum aestivum
BAA36492.1	AB021736	Oryza sativa
BAA11431.1	D78609	Oryza sativa

SEQ ID NO. 1425

CAA73333.1	Y12805	Nicotiana tabacum
CAA09420.1	AJ010943	Lycopersicon esculentum

SEQ ID NO. 1428

CAA04703.1	AJ001370	Olea europaea
AAA32990.1	M87514	Brassica oleracea
CAA50575.1	X71441	Nicotiana tabacum
CAA53366.1	X75670	Oryza sativa
CAA04702.1	AJ001369	Olea europaea
AAA62621.1	L22209	Cuscuta reflexa
AAC49701.1	U79011	Borago officinalis
CAA56318.1	X80008	Nicotiana tabacum
CAA48240.1	X68140	Nicotiana tabacum
AAD10774.1	AF098510	Petunia x hybrida
AAF60299.1	AF233640	Petunia x hybrida
CAA11033.1	AJ222981	Physcomitrella patens

SEQ ID NO. 1433

BAA19675.1	D49486	Solidago canadensis
CAA39819.1	X56435	Pisum sativum
AAA33688.1	J04087	Pisum sativum
BAA01088.1	D10244	Spinacia oleracea
CAA32200.1	X14041	Lycopersicon esculentum
AAA34195.1	M37151	Lycopersicon esculentum
BAB21760.1	AB026724	Oryza sativa
BAA12745.1	D85239	Oryza sativa
AAA33728.1	M20792	Petunia x hybrida
AAB67990.1	U69536	Chloroplast Triticum aestivum
AAB67991.1	U69632	Triticum aestivum
AAC08582.1	AF054151	Zantedeschia aethiopica
CAA41455.1	X58579	Pinus sylvestris
BAA24919.1	AB004870	Marchantia paleacea
AAA33659.1	M63003	Pisum sativum
AAC25568.1	AF071112	Brassica rapa subsp. pekinensis
AAB87572.1	AF034630	Panax ginseng
CAA10160.1	AJ012739	Cicer arietinum
CAA10132.1	AJ012691	Cicer arietinum
CAB57992.1	X17565	Zea mays
CAA41454.1	X58578	Pinus sylvestris
AAB40394.1	U80069	Mesembryanthemum crystallinum
CAA60826.1	X87372	Lycopersicon esculentum
AAB92612.1	AF037359	Paulownia kawakamii
AAA33917.1	L36320	Oryza sativa
CAA73929.1	Y13610	Carica papaya
CAA37866.1	X53872	Spinacia oleracea
AAC14464.1	L19435	Oryza sativa

BAA00799.1	D00999	Oryza sativa
AAK06837.1	AF328859	Avicennia marina
AAD01605.1	AF016893	Populus tremuloides
AAD05576.1	AF009735	Raphanus sativus
AAA33510.1	M54936	Zea mays
CAA65043.1	X95728	Brassica juncea
AAC14465.1	L19434	Oryza sativa
BAA00800.1	D01000	Oryza sativa
CAB60191.1	AJ250667	Ananas comosus
CAA39444.1	X55974	Nicotiana plumbaginifolia
AAD48484.1	AF170297	Manihot esculenta
AAC08581.1	AF054150	Zantedeschia aethiopica
AAA34194.1	M37150	Lycopersicon esculentum
CAA32199.1	X14040	Lycopersicon esculentum
AAD01604.1	AF016892	Populus tremuloides
AAB49913.1	U34727	Zea mays

SEQ ID NO. 1434

AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAC10358.1	AJ277086	Nicotiana tabacum
AAF19804.1	AF180355	Brassica oleracea
AAD17804.1	AF092431	Lotus japonicus
CAC10359.1	AJ277087	Nicotiana tabacum
CAC09575.1	AJ298987	Fagus sylvatica
CAA72341.1	Y11607	Medicago sativa
AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAD17805.1	AF092432	Lotus japonicus
AAG43835.1	AF213455	Zea mays
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAC36700.1	AF075582	Mesembryanthemum crystallinum
AAC35951.1	AF079355	Mesembryanthemum crystallinum
CAB90634.1	AJ277744	Fagus sylvatica
AAB93832.1	U81960	Zea mays
AAC26828.1	AF075603	Oryza sativa
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 1435

CAA69600.1	Y08292	Nicotiana plumbaginifolia
CAB94836.1	AJ277949	Nicotiana plumbaginifolia
CAC18730.1	AJ303070	Vitis vinifera
CAA60507.1	X86924	Vitis vinifera
BAA08445.1	D49475	Zea mays
AAB51596.1	U93561	Zea mays
AAB51595.1	U93560	Zea mays
CAB94837.1	AJ277950	Nicotiana plumbaginifolia
CAA09478.1	AJ011096	Asparagus officinalis
CAA69601.2	Y08293	Nicotiana plumbaginifolia
AAB39508.1	U48695	Lycopersicon esculentum
CAA09456.1	AJ011006	Asparagus officinalis
CAA41635.1	X58831	Chlorella sorokiniana
CAA41636.1	X58832	Chlorella sorokiniana

SEQ ID NO. 1438

AAD26332.1	AF120148	Triticum aestivum
AAD26331.1	AF120147	Triticum aestivum
AAD26330.1	AF120146	Triticum aestivum
AAB06756.2	U66307	Brassica napus
AAA91164.1	U38920	Phaseolus vulgaris
AAG01148.1	AF284065	Sesamum indicum
BAA84084.1	AB032073	Nicotiana paniculata
BAA95788.1	AB009881	Nicotiana tabacum
AAB03687.1	U32511	Mesembryanthemum crystallinum
AAG40328.1	AF323175	Zea mays
AAC15756.1	AF056326	Zea mays
AAK21969.1	AY028259	Avicennia marina
CAA77751.1	Z11693	Spirodela polyrrhiza
BAB40956.1	AB059557	Avena sativa
AAC17133.1	AF056325	Hordeum vulgare
BAA25729.1	AB012107	Oryza sativa
AAF97409.1	AY005128	Actinidia arguta
AAG14461.1	AF293460	Lycopersicon esculentum
AAK26439.1	AF357837	Solanum tuberosum

SEQ ID NO. 1439

BAB21545.1	AB042950	Nicotiana tabacum
AAK01938.1	AY026321	Lupinus albus
BAA20522.1	AB004809	Catharanthus roseus
AAF74025.1	AF156696	Nicotiana tabacum
BAB21562.1	AB042951	Nicotiana tabacum
BAB21563.1	AB042956	Nicotiana tabacum
CAA67396.1	X98891	Solanum tuberosum

CAC28218.1	AJ286743	Sesbania rostrata
CAC28219.1	AJ286744	Sesbania rostrata
AAB81346.1	AF000354	Medicago truncatula
AAB81347.1	AF000355	Medicago truncatula
AAD38859.1	AF156695	Solanum tuberosum
CAA67395.1	X98890	Solanum tuberosum
AAB82146.1	AF022873	Lycopersicon esculentum
AAB82147.1	AF022874	Lycopersicon esculentum
CAA74607.1	Y14214	Lycopersicon esculentum
AAF42956.2	AF239619	Oryza sativa
AAD26146.1	AF110180	Triticum aestivum
AAF76345.1	AF271893	Oryza sativa
AAK06857.1	AF337531	Oryza rufipogon
AAK25766.1	AF335588	Oryza sativa
AAF40188.1	AF229169	Oryza sativa
AAG43998.1	AF215837	Apium graveolens var. dulce
CAA68813.1	Y07520	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri
CAA53192.1	X75440	Chlorella kessleri

SEQ ID NO. 1440

AAC49815.1	U87257	Daucus carota
CAA04245.1	AJ000693	Hordeum vulgare

SEQ ID NO. 1441

AAF64525.1	AF253416	Lycopersicon chilense
CAA77867.1	Z11842	Lycopersicon esculentum
AAB03076.1	U01890	Lycopersicon pennellii
AAD41007.1	AF107024	Triticum aestivum
AAK29452.1	AF352249	Lathyrus sativus
AAK29453.1	AF352250	Lathyrus sativus
AAA34246.1	L07947	Volvox carteri
BAA25203.1	D87064	Triticum aestivum
AAK29450.1	AF352247	Pisum sativum
AAK29451.1	AF352248	Pisum sativum
CAA40362.1	X57077	Zea mays
AAK29449.1	AF352246	Pisum sativum
AAD41008.1	AF107026	Triticum aestivum
BAA25204.1	D87065	Triticum aestivum
AAK29454.1	AF352251	Lens culinaris
AAD41005.1	AF107022	Triticum aestivum
CAA42529.2	X59872	Triticum aestivum
AAK29456.1	AF352253	Lens culinaris
AAD41006.1	AF107023	Triticum aestivum
AAA74723.1	L07946	Volvox carteri
CAA12232.1	AJ224933	Lycopersicon esculentum
AAK29455.1	AF352252	Lens culinaris
AAD41009.1	AF107027	Triticum aestivum
AAA50578.1	U03391	Lycopersicon esculentum
AAC41651.1	L29456	Nicotiana tabacum
AAA50303.1	L34578	Pisum sativum
AAA98452.1	U16726	Chlamydomonas reinhardtii
CAA29123.1	X05636	Pisum sativum
AAF27930.1	AF222804	Euphorbia esula
CAA07233.1	AJ006767	Cicer arietinum
BAA87331.1	AB012694	Lilium longiflorum
BAA88671.1	AB029614	Nicotiana tabacum
CAA73171.1	Y12599	Apium graveolens
AAB86857.1	AF031547	Fritillaria agrestis

SEQ ID NO. 1444

AAB62181.1	U95953	Zea mays
AAK00632.1	AF224672	Persea americana
BAB11932.1	AB030293	Vigna unguiculata
AAF26356.1	AF190462	Phaseolus vulgaris

SEQ ID NO. 1445

BAA81762.1	AP000364	Oryza sativa

SEQ ID NO. 1446

BAA21922.1	AB006600	Petunia x hybrida
BAA21923.1	AB006601	Petunia x hybrida
BAA21921.1	AB006599	Petunia x hybrida
BAA19110.1	AB000451	Petunia x hybrida
BAA21925.1	AB006603	Petunia x hybrida
BAA21926.1	AB006604	Petunia x hybrida
BAA21924.1	AB006602	Petunia x hybrida
BAA19111.1	AB000452	Petunia x hybrida
BAA05077.1	D26084	Petunia x hybrida
AAD26942.1	AF119050	Datisca glomerata
BAA05076.1	D26083	Petunia x hybrida
AAC06243.1	AF053077	Nicotiana tabacum

BAA21927.1	AB006605	Petunia x hybrida
BAA96071.1	AB035133	Petunia x hybrida
BAA21920.1	AB006598	Petunia x hybrida
AAB53261.1	U76555	Brassica rapa
AAB53260.1	U76554	Brassica rapa
AAK01713.1	AF332876	Oryza sativa
BAA05079.1	D26086	Petunia x hybrida
BAA96070.1	AB035132	Petunia x hybrida
BAA21919.1	AB006597	Petunia x hybrida
BAA05078.1	D26085	Petunia x hybrida
BAA19112.1	AB000453	Petunia x hybrida
BAA19114.1	AB000455	Petunia x hybrida
BAA21928.1	AB006606	Petunia x hybrida
BAA19926.1	AB000456	Petunia x hybrida

SEQ ID NO. 1453

AAF75791.1	AF271892	Pisum sativum
BAA03763.1	D16247	Nicotiana sylvestris
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays

SEQ ID NO. 1454

BAA92155.1	AB007818	Citrus unshiu
AAF28386.1	AF151215	Nicotiana glauca
CAA32230.1	X14067	Chenopodium rubrum
AAB84194.1	AF029243	Pisum sativum
BAB16425.1	AB041513	Nicotiana tabacum
AAB02879.1	M37152	Nicotiana tabacum

SEQ ID NO. 1457

BAA14143.1	D90115	Armoracia rusticana
BAA14144.1	D90116	Armoracia rusticana
BAA11853.1	D83225	Populus nigra
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
BAA11852.1	D83224	Populus nigra
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
CAA66037.1	X97351	Populus balsamifera subsp trichocarpa
BAA07241.1	D38051	Populus kitakamiensis
AAB47602.1	L07554	Linum usitatissimum
BAA06334.1	D30652	Populus kitakamiensis
AAC98519.1	AF007211	Glycine max
AAB97734.1	AF014502	Glycine max
BAA06335.1	D30653	Populus kitakamiensis
AAD37427.1	AF149277	Phaseolus vulgaris
CAA62226.1	X90693	Medicago sativa
CAA62227.1	X90694	Medicago sativa
AAB41811.1	L36157	Medicago sativa
CAA62225.1	X90692	Medicago sativa
AAB41810.1	L36156	Medicago sativa
AAD37430.1	AF149280	Phaseolus vulgaris
CAB94692.1	AJ242742	Ipomoea batatas
AAA34108.1	J02979	Nicotiana tabacum
CAA40796.1	X57564	Armoracia rusticana
BAA01877.1	D11102	Populus kitakamiensis
BAA01992.1	D11396	Nicotiana tabacum
CAB67121.1	Y19023	Lycopersicon esculentum
CAA50597.1	X71593	Lycopersicon esculentum
AAD43561.1	AF155124	Gossypium hirsutum
BAA92500.1	AP001383	Oryza sativa
AAF63027.1	AF244924	Spinacia oleracea
AAB02554.1	L37790	Stylosanthes humilis
AAB06183.1	M37636	Arachis hypogaea
CAA59487.1	X85230	Triticum aestivum
BAA94962.1	AB042103	Asparagus officinalis
AAF63026.1	AF244923	Spinacia oleracea
CAB99487.1	AJ276227	Hordeum vulgare
CAA71492.1	Y10466	Spinacia oleracea
CAB65334.1	AJ250121	Picea abies
AAA33121.1	M32742	Cucumis sativus
CAA39486.1	X56011	Triticum aestivum
BAA92422.1	AP001366	Oryza sativa
BAA92497.1	AP001383	Oryza sativa
CAA59485.1	X85228	Triticum aestivum
CAA76680.1	Y17192	Cucurbita pepo

SEQ ID NO. 1458

AAA32676.1	M37637	Arachis hypogaea
CAA64413.1	X94943	Lycopersicon esculentum
BAA82307.1	AB027753	Nicotiana tabacum
AAB67737.1	L77080	Stylosanthes humilis
AAD37429.2	AF149279	Phaseolus vulgaris
CAA71494.1	Y10468	Spinacia oleracea
AAD37375.1	AF145349	Glycine max
BAA03644.1	D14997	Oryza sativa
AAD11482.1	U51192	Glycine max
AAD11481.1	U51191	Glycine max
BAA07663.1	D42064	Nicotiana tabacum
AAA65637.1	L13654	Lycopersicon esculentum
BAA94962.1	AB042103	Asparagus officinalis
AAA65636.1	L13653	Lycopersicon esculentum
CAA80502.1	Z22920	Spirodela polyrrhiza
AAF63024.1	AF244921	Spinacia oleracea
BAA07664.1	D42065	Nicotiana tabacum
BAA11853.1	D83225	Populus nigra
BAA92500.1	AP001383	Oryza sativa
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
CAA76374.2	Y16776	Spinacia oleracea
AAF63027.1	AF244924	Spinacia oleracea
CAA40796.1	X57564	Armoracia rusticana
CAA62226.1	X90693	Medicago sativa
CAA71489.1	Y10463	Spinacia oleracea
AAF63026.1	AF244923	Spinacia oleracea
CAA50597.1	X71593	Lycopersicon esculentum
CAB67121.1	Y19023	Lycopersicon esculentum
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
BAA14144.1	D90116	Armoracia rusticana
BAA07241.1	D38051	Populus kitakamiensis
CAA62615.1	X91232	Mercurialis annua
CAC21393.1	AJ401276	Zea mays
BAA06334.1	D30652	Populus kitakamiensis
AAD43561.1	AF155124	Gossypium hirsutum
AAC98519.1	AF007211	Glycine max
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAB97734.1	AF014502	Glycine max
CAA66036.1	X97350	Populus balsamifera subsp trichocarpa
BAA14143.1	D90115	Armoracia rusticana
AAD37427.1	AF149277	Phaseolus vulgaris
CAA59485.1	X85228	Triticum aestivum
CAB65334.1	AJ250121	Picea abies
AAB47602.1	L07554	Linum usitatissimum
AAB41811.1	L36157	Medicago sativa
AAC49820.1	AF014469	Oryza sativa

SEQ ID NO. 1459

BAA11394.1	D78498	Brassica rapa
BAA11388.1	D78491	Brassica rapa
CAA71803.1	Y10850	Brassica juncea
AAA74958.1	L31940	Brassica rapa
BAA11391.1	D78494	Brassica rapa
AAF70556.1	AF200712	Brassica oleracea
CAA71805.1	Y10852	Brassica juncea
CAA71802.1	Y10849	Brassica juncea
CAA71806.1	Y10853	Brassica juncea
CAA71804.1	Y10851	Brassica juncea
AAC27531.1	AF078912	Mesembryanthemum crystallinum
AAB61212.1	AF000935	Mesembryanthemum crystallinum
AAA19611.1	U11423	Coffea arabica
CAA65009.1	X95709	Cicer arietinum
CAA92243.1	Z68138	Lycopersicon esculentum
CAA10232.1	AJ130886	Fagus sylvatica
AAA53074.1	L27813	Actinidia deliciosa
AAG50080.1	AF333385	Avicennia marina
CAA54471.1	X77254	Vicia faba
AAK28022.1	AF279655	Typha latifolia
CAC12823.1	AJ299253	Nicotiana tabacum
CAB77242.1	AJ133145	Persea americana
CAB53392.1	AJ247196	Eichhornia crassipes
CAB53390.1	AJ247090	Eichhornia crassipes
AAK11269.1	AF334141	Avicennia marina
AAG61122.1	AF329968	Avicennia marina
AAG44757.1	AF268391	Musa acuminata
CAB53391.1	AJ247195	Eichhornia crassipes
AAC49627.1	U43530	Oryza sativa
BAA14038.1	D89931	Oryza sativa

AAB70560.1	AF017787	Oenanthe javanica
CAA92652.1	Z68310	Lycopersicon esculentum
AAC72984.1	AF101825	Silene vulgaris
AAB05223.1	U46543	Nicotiana glutinosa
CAB56620.1	AJ243532	Prunus persica
AAB88276.1	U97494	Prunus armeniaca
BAA96444.1	AB021785	Pyrus pyrifolia
AAC62510.1	AF093585	Pimpinella brachycarpa
AAB04674.1	L77963	Lycopersicon esculentum
CAA92651.1	Z68309	Lycopersicon esculentum
BAA31561.1	AB008100	Citrus unshiu

SEQ ID NO. 1461

AAB53099.1	U68217	Brassica napus
AAA33959.1	M64337	Glycine max
AAA34016.1	M72894	Glycine max
CAA65771.1	X97059	Medicago sativa
AAB18928.1	U31648	Glycine max
AAC06026.1	AF052057	Vigna unguiculata
AAC06027.1	AF052058	Vigna unguiculata
CAA41213.1	X58274	Phaseolus vulgaris
AAD50644.1	AF133814	Solanum tuberosum
CAA51786.1	X73369	Pisum sativum
CAA45763.1	X64417	Pisum sativum
CAA43663.1	X61391	Zea mays
CAA58146.1	X83076	Zea mays
CAA58147.1	X83077	Zea mays
CAA43664.1	X61392	Zea mays
AAA33958.1	M58336	Glycine max
AAC15241.1	AF028072	Pinus taeda
CAA47982.1	X67754	Vigna unguiculata
CAA47984.1	X67756	Vigna unguiculata
CAA47983.1	X67755	Vigna unguiculata
AAC12282.1	AF052511	Glycine max
AAC12281.1	AF052513	Glycine max

SEQ ID NO. 1462

CAA09421.1	AJ010944	Helianthus annuus
CAA05713.1	AJ002741	Helianthus annuus
CAA63339.1	X92647	Helianthus annuus
AAD02257.1	AF043091	Hordeum vulgare
AAF01694.1	AF181456	Hordeum vulgare
AAD50291.1	AF172263	Prunus dulcis
CAA33364.1	X15290	Zea mays
CAA44789.1	X63063	Pisum sativum
CAA44787.1	X63061	Pisum sativum
AAB51381.1	U91970	Pisum sativum
AAF01695.1	AF181457	Hordeum vulgare
CAA44788.1	X63062	Pisum sativum
AAC49618.1	U26423	Lycopersicon esculentum
AAB05927.1	U63831	Sorghum bicolor
CAA33362.1	X15288	Hordeum vulgare
AAD02253.1	AF043087	Hordeum vulgare
AAF01689.1	AF181451	Hordeum vulgare
AAC05922.1	AF031248	Lophopyrum elongatum
AAB71225.1	AF004807	Glycine max
CAA33360.1	X15286	Hordeum vulgare
CAA55194.1	X78431	Triticum turgidum subsp. durum
AAF60172.1	AF236067	Elaeis guineensis
CAA66970.1	X98326	Hordeum vulgare
CAA55192.1	X78429	Triticum turgidum subsp. durum
AAD02255.1	AF043089	Hordeum vulgare
AAF01691.1	AF181453	Hordeum vulgare
AAD02254.1	AF043088	Hordeum vulgare
AAF01690.1	AF181452	Hordeum vulgare
CAA33363.1	X15289	Hordeum vulgare
CAA50499.1	X71362	Hordeum vulgare
AAB51380.1	U91969	Pisum sativum

SEQ ID NO. 1463

CAA64636.1	X95343	Nicotiana tabacum

SEQ ID NO. 1464

CAA48706.1	X68807	Oryza sativa

SEQ ID NO. 1465

AAC63057.1	U70076	Lycopersicon esculentum
AAB23482.1	S45035	Glycine max
BAA82254.1	AB029441	Glycine max
AAB23483.1	S45035	Glycine max
CAA45778.1	X64448	Glycine max
CAA56343.1	X80039	Glycine max

AAB23464.1	S45092	Glycine max
BAA03084.1	D13974	Psophocarpus tetragonolobus
CAA45777.1	X64447	Glycine max
AAC60535.1	S96732	Psophocarpus tetragonolobus
AAC60537.1	S96735	Psophocarpus tetragonolobus
AAC60536.1	S96733	Psophocarpus tetragonolobus
AAK20289.1	AF314823	Glycine max
CAA44005.1	X62095	Solanum tuberosum
AAB68964.1	U18995	Brassica oleracea
AAB23733.1	S46970	Psophocarpus tetragonolobus
BAA04151.1	D17331	Solanum tuberosum
BAA04148.1	D17328	Solanum tuberosum
AAA18564.1	M96257	Solanum tuberosum
AAC49602.1	U30814	Solanum tuberosum
CAA52919.1	X74985	Solanum tuberosum
CAA39860.1	X56509	Theobroma cacao
CAA45723.1	X64370	Solanum tuberosum

SEQ ID NO. 1466

CAA04261.2	AJ000728	Lycopersicon esculentum
AAF67262.1	AF165186	Nicotiana tabacum
AAC83393.1	U83625	Zea mays
CAC24705.1	AJ302651	Nicotiana tabacum
AAG40578.1	AF216314	Oryza sativa
BAA06731.1	D31964	Nicotiana tabacum
AAG53979.1	AF325168	Nicotiana tabacum
BAA05648.1	D26601	Nicotiana tabacum
AAF34436.1	AF172282	Oryza sativa
CAA08995.1	AJ010091	Brassica napus
CAA65244.1	X95997	Solanum tuberosum
CAA08997.1	AJ010093	Brassica napus
CAA57898.1	X82548	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
CAA71142.1	Y10036	Cucumis sativus
CAA07813.1	AJ007990	Hordeum vulgare
BAA05649.1	D26602	Nicotiana tabacum
AAF19401.1	AF203479	Glycine max
AAD23582.1	AF128443	Glycine max
CAA46554.1	X65604	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
AAF27340.1	AF186020	Vicia faba
CAA81443.1	Z26846	Mesembryanthemum crystalli
CAA82993.1	Z30332	Spinacia oleracea
AAA34002.1	M67449	Glycine max
BAA96628.1	AP002482	Oryza sativa
BAA83689.1	AB011968	Oryza sativa

SEQ ID NO. 1467

AAG34803.1	AF243368	Glycine max
AAF64450.1	AF239928	Euphorbia esula
AAG34798.1	AF243363	Glycine max
AAG34796.1	AF243361	Glycine max
AAG34797.1	AF243362	Glycine max
AAG34809.1	AF243374	Glycine max
AAG34801.1	AF243366	Glycine max
AAG34807.1	AF243372	Glycine max
AAG34804.1	AF243369	Glycine max
AAG34810.1	AF243375	Glycine max
AAG34802.1	AF243367	Glycine max
AAG34808.1	AF243373	Glycine max
AAG34836.1	AF244693	Zea mays
AAG34844.1	AF244701	Zea mays
AAA68430.1	J03679	Solanum tuberosum
AAC18566.1	AF048978	Glycine max
AAG34805.1	AF243370	Glycine max
AAG34800.1	AF243365	Glycine max
CAA09187.1	AJ010448	Alopecurus myosuroides
CAA71784.1	Y10820	Glycine max
AAG34831.1	AF244688	Zea mays
CAA09188.1	AJ010449	Alopecurus myosuroides
AAG34837.1	AF244694	Zea mays
AAG34832.1	AF244689	Zea mays
AAG34829.1	AF244686	Zea mays
AAG34833.1	AF244690	Zea mays
CAA04391.1	AJ000923	Carica papaya
AAF29773.1	AF159229	Gossypium hirsutum
AAG34795.1	AF243360	Glycine max
AAG34841.1	AF244698	Zea mays
AAG34849.1	AF244706	Zea mays
AAG34838.1	AF244695	Zea mays
AAC32118.1	AF051214	Picea mariana

SEQ ID NO. 1469

AAD38144.1	AF139497	Prunus armeniaca
AAD37699.1	AF145730	Oryza sativa
BAA93461.1	AB028073	Physcomitrella patens
BAA21017.1	D26578	Daucus caróta
BAA93464.1	AB028076	Physcomitrella patens
BAA93460.1	AB028072	Physcomitrella patens
AAF01764.2	AF184277	Glycine max
BAB18171.1	AB042769	Zinnia elegans
AAA63768.2	AF339748	Helianthus annuus
AAF01765.1	AF184278	Glycine max
BAA05624.1	D26575	Daucus carota
BAA93465.1	AB028077	Physcomitrella patens
CAA64417.1	X94947	Lycopersicon esculentum
BAA93466.1	AB028078	Physcomitrella patens
BAA93467.1	AB028079	Physcomitrella patens
AAD37697.1	AF145728	Oryza sativa
BAA93468.1	AB028080	Physcomitrella patens
BAA05625.1	D26576	Daucus carota
BAA05622.1	D26573	Daucus carota
AAD37698.1	AF145729	Oryza sativa
BAA05623.1	D26574	Daucus carota
CAA63222.1	X92489	Glycine max
BAB18162.1	AB042760	Zinnia elegans
CAA64221.1	X94449	Pimpinella brachycarpa
BAA93463.1	AB028075	Physcomitrella patens
CAA64152.1	X94375	Pimpinella brachycarpa
AAD37695.1	AF145726	Oryza sativa
CAA06728.1	AJ005833	Craterostigma plantagineum
CAA64491.1	X95193	Pimpinella brachycarpa
BAB18168.1	AB042766	Zinnia elegans
AAK31270.1	AC079890	Oryza sativa
AAF19980.1	AF211193	Oryza sativa
BAB18170.1	AB042768	Zinnia elegans
CAA65456.2	X96681	Oryza sativa
AAA74017.1	U30475	Glycine max

SEQ ID NO. 1470

CAA70968.1	Y09825	Solanum tuberosum
CAA07563.1	AJ007574	Ricinus communis
AAD16013.1	AF080542	Nepenthes alata
CAA10608.1	AJ132228	Ricinus communis
CAA70778.1	Y09591	Vicia faba
CAA70969.1	Y09826	Solanum tuberosum
AAD16014.1	AF080543	Nepenthes alata
AAD16015.1	AF080544	Nepenthes alata
CAA72006.1	Y11121	Ricinus communis
AAF15944.1	AF061434	Vicia faba
CAA92992.1	Z68759	Ricinus communis
AAF15945.1	AF061435	Vicia faba
AAF15946.1	AF061436	Vicia faba
AAB48944.1	U31932	Nicotiana sylvestris
AAB96830.1	U64823	Nicotiana sylvestris
BAA93437.1	AB022783	Oryza sativa
CAB42599.1	AJ238635	Chlorella protothecoides
CAC12825.1	AJ299255	Nicotiana tabacum

SEQ ID NO. 1471

CAA58466.1	X83440	Petunia x hybrida
CAA49592.1	X69971	Nicotiana tabacum
AAF61238.1	AF241166	Oryza sativa
AAG40581.1	AF216317	Oryza sativa
AAF73257.1	AF154329	Pisum sativum
AAG40580.1	AF216316	Oryza sativa
CAB61889.1	AJ251330	Oryza sativa
BAB18271.1	AB035141	Chlamydomonas reinhardtii
BAB32406.1	AB055515	Nicotiana tabacum
CAA58760.1	X83879	Nicotiana tabacum
CAA47099.1	X66469	Medicago sativa
AAB41548.1	L07042	Medicago sativa
CAA57719.1	X82268	Medicago sativa
CAA58761.1	X83880	Nicotiana tabacum
AAD37790.1	AF149424	Ipomoea batatas
BAA09600.1	D61377	Nicotiana tabacum
CAA50036.1	X70703	Pisum sativum
AAF81420.1	AF247136	Capsicum annuum
AAF65766.1	AF242308	Euphorbia esula
CAB37188.1	AJ224336	Medicago sativa
CAA73323.1	Y12785	Petroselinum crispum
AAB58396.1	U94192	Nicotiana tabacum
AAF81419.1	AF247135	Capsicum annuum

AAF73236.1	AF153061	Pisum sativum
CAA57721.1	X82270	Medicago sativa
BAA74734.1	AB016802	Zea mays
CAA56314.1	X79993	Avena sativa
AAC28850.1	AF079318	Triticum aestivum
AAK01710.1	AF332873	Oryza sativa
AAG40579.1	AF216315	Oryza sativa
CAC13967.1	AJ250311	Oryza sativa
BAA74733.1	AB016801	Zea mays
AAD28617.1	AF129087	Medicago sativa
AAF23902.1	AF194415	Oryza sativa
AAD52659.1	AF177392	Oryza sativa
AAF23903.1	AF194416	Oryza sativa
AAA92823.1	U18365	Brassica napus
AAB57843.1	U96716	Selaginella lepidophylla
CAB61750.1	AJ275316	Cicer arietinum
CAA71242.1	Y10160	Chenopodium rubrum
BAA33152.1	AB008187	Pisum sativum
AAG01534.1	AF289467	Nicotiana tabacum
CAA66233.1	X97637	Antirrhinum majus

SEQ ID NO. 1472

CAA56175.1	X79779	Solanum tuberosum
BAA96150.1	AP002092	Oryza sativa
BAA96192.1	AP002093	Oryza sativa
CAB62555.1	AJ249962	Daucus carota
AAF81251.1	AF267755	Mesembryanthemum crystallinum
CAA70896.1	Y09749	Vicia faba
CAA70894.1	Y09747	Zea mays
CAA70895.1	Y09748	Hordeum vulgare
CAA70900.1	Y09753	Secale cereale
CAA70899.1	Y09752	Secale cereale
AAF33670.1	AF079872	Nicotiana tabacum
CAA70897.1	Y09750	Plantago major
AAF33669.1	AF079871	Nicotiana tabacum

SEQ ID NO. 1473

CAB43505.1	AJ239051	Cicer arietinum
BAA22422.1	AB001379	Glycyrrhiza echinata
BAA93634.1	AB025016	Lotus japonicus
BAA74465.1	AB022732	Glycyrrhiza echinata
CAB41490.1	AJ238439	Cicer arietinum
CAA10067.1	AJ012581	Cicer arietinum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAG09208.1	AF175278	Pisum sativum
AAC49188.2	U29333	Pisum sativum
CAA65580.1	X96784	Nicotiana tabacum
BAA92894.1	AB006790	Petunia x hybrida
AAG44132.1	AF218296	Pisum sativum
CAA64635.1	X95342	Nicotiana tabacum
AAD56282.1	AF155332	Petunia x hybrida
BAA12159.1	D83968	Glycine max
AAA32913.1	M32885	Persea americana
CAA70575.1	Y09423	Nepeta racemosa
AAB94587.1	AF022458	Glycine max
AAC39454.1	AF014802	Eschscholzia californica
CAA70576.1	Y09424	Nepeta racemosa
AAB94590.1	AF022461	Glycine max
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
AAA19701.1	L24438	Thlaspi arvense
BAA84071.1	AB028151	Antirrhinum majus
BAA13076.1	D86351	Glycine max
AAD38930.1	AF135485	Glycine max
AAC32274.1	AF081575	Petunia x hybrida

SEQ ID NO. 1479

AAC36318.1	AF053127	Malus x domestica
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
CAA61510.1	X89226	Oryza sativa
AAF59906.1	AF197947	Glycine max
AAF59905.1	AF197946	Glycine max
AAF91322.1	AF244888	Glycine max
CAC20842.1	AJ250467	Pinus sylvestris
AAB36558.1	U77888	Ipomoea nil
BAA83373.1	AP000391	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
AAF34426.1	AF172282	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata
AAC49123.1	U37133	Oryza sativa

AAB82755.1	U72725	Oryza longistaminata
AAG52992.1	U77888	Ipomoea nil
AAB82756.1	U72724	Oryza sativa
AAB82753.1	U72726	Oryza longistaminata
BAA88636.1	AB029327	Nicotiana tabacum
AAG52994.1	U77888	Ipomoea nil

SEQ ID NO. 1480

AAD21872.1	AF078082	Phaseolus vulgaris
AAC23542.1	U20948	Ipomoea trifida
CAA73134.1	Y12531	Brassica oleracea
CAA74662.1	Y14286	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
AAB93834.1	U82481	Zea mays
AAA33008.1	M97667	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33000.1	M76647	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
CAB41878.1	Y18259	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
AAA62232.1	U00443	Brassica napus
CAA79355.1	Z18921	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
BAA92837.1	AB032474	Brassica oleracea
BAA92836.1	AB032473	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
BAA07577.2	D38564	Brassica rapa
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
AAD52097.1	AF088885	Nicotiana tabacum
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAC27489.1	AF077130	Oryza sativa
AAB61708.1	U93048	Daucus carota
AAF78016.1	AF238472	Oryza sativa
AAC02535.1	AF044260	Oryza sativa
AAC49629.1	U51330	Triticum aestivum
AAA33915.1	L27821	Oryza sativa

SEQ ID NO. 1481

AAK25768.1	AF336307	Malus x domestica
AAA73872.1	L44142	Fragaria x ananassa
CAA36676.1	X52429	Fragaria x ananassa
AAG33924.1	AY009094	Robinia pseudoacacia
AAB84193.1	AF029242	Pisum sativum
AAC62104.1	AF091513	Elaeagnus umbellata

SEQ ID NO. 1482

CAA07563.1	AJ007574	Ricinus communis
CAA10608.1	AJ132228	Ricinus communis
CAA70778.1	Y09591	Vicia faba
AAD16014.1	AF080543	Nepenthes alata
CAA70969.1	Y09826	Solanum tuberosum
AAD16015.1	AF080544	Nepenthes alata
CAA70968.1	Y09825	Solanum tuberosum
CAA92992.1	Z68759	Ricinus communis
AAD16013.1	AF080542	Nepenthes alata
AAF15945.1	AF061435	Vicia faba
CAA72006.1	Y11121	Ricinus communis
AAF15944.1	AF061434	Vicia faba
AAF15946.1	AF061436	Vicia faba
AAB48944.1	U31932	Nicotiana sylvestris
AAB96830.1	U64823	Nicotiana sylvestris
AAD25162.1	AF014810	Lycopersicon esculentum
BAA93437.1	AB022783	Oryza sativa
AAD25161.1	AF014809	Lycopersicon esculentum
AAD25160.1	AF014808	Lycopersicon esculentum
AAF76897.1	AF274032	Atriplex hortensis
CAB42599.1	AJ238635	Chlorella protothecoides

SEQ ID NO. 1484

AAG13408.1	AF297472	Brassica napus
AAG13407.1	AF297471	Brassica napus
AAA32993.1	M81224	Brassica napus
AAA33011.1	L21896	Brassica rapa
CAA80862.1	Z24737	Brassica rapa
CAB39890.1	AJ237582	Armoracia rusticana
CAA10234.1	AJ130888	Fagus sylvatica

SEQ ID NO. 1485

BAA76745.1	D89972	Vigna mungo
CAB64544.1	AJ131718	Zea mays
BAA76744.1	D89971	Vigna mungo
CAB64545.1	AJ131719	Zea mays
BAA04225.1	D17401	Ricinus communis
CAB16318.1	Z99174	Vicia narbonensis
CAA07639.1	AJ007743	Vicia sativa
CAB51545.1	AJ243876	Lycopersicon esculentum

SEQ ID NO. 1486

CAA45701.1	X64349	Nicotiana tabacum
CAA78043.1	Z11999	Lycopersicon esculentum
CAA35601.1	X17578	Solanum tuberosum
BAA96365.2	AB043960	Bruguiera gymnorhiza
AAC04808.1	AF037457	Fritillaria agrestis
BAA02554.1	D13297	Pisum sativum
CAA40670.1	X57408	Triticum aestivum
AAD38521.1	AF139818	Brassica napus
AAD55562.1	AF110780	Volvox carteri f. nagariensis
CAA36674.1	X52427	Lycopersicon esculentum

SEQ ID NO. 1487

CAA71238.1	Y10156	Brassica napus
CAA71237.1	Y10155	Brassica napus
CAB62165.1	AJ223307	Brassica napus
AAC49181.1	U39289	Brassica napus
AAC49182.1	U39319	Brassica napus

SEQ ID NO. 1488

CAA64615.1	X95297	Lycopersicon esculentum
CAA67600.1	X99210	Lycopersicon esculentum
CAB43399.1	AJ006292	Antirrhinum majus
CAA78386.1	Z13996	Petunia x hybrida
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA64614.1	X95296	Lycopersicon esculentum
BAA88224.1	AB028652	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
BAA88221.1	AB028649	Nicotiana tabacum
BAA88222.1	AB028650	Nicotiana tabacum
CAA66952.1	X98308	Lycopersicon esculentum
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays
CAA75509.1	Y15219	Oryza sativa subsp. indica

SEQ ID NO. 1489

BAA08094.1	D45066	Cucurbita maxima
BAA88190.1	AP000836	Oryza sativa
CAA46875.1	X66076	Zea mays
AAB70119.1	U82230	Zea mays
CAA09976.1	AJ012284	Triticum aestivum
CAA04440.1	AJ000991	Hordeum vulgare
CAB89831.1	AJ242853	Solanum tuberosum
CAA66604.1	X97945	Nicotiana tabacum
BAA78574.1	AB028131	Oryza sativa

SEQ ID NO. 1490

CAC10555.1	AJ279059	Lotus japonicus
CAA64475.1	X95098	Lycopersicon esculentum
AAG28780.1	AF306518	Brassica napus
AAG11397.1	AF118858	Lycopersicon esculentum
AAD16012.1	AF080541	Nepenthes alata
AAF01774.1	AF188744	Brassica napus

SEQ ID NO. 1491

AAD02462.1	AF047490	Zea mays
AAG10425.1	AF251013	Tagetes erecta
CAA12062.1	AJ224683	Narcissus pseudonarcissus
AAF13698.1	AF195507	Lycopersicon esculentum
CAA61985.1	X89897	Capsicum annuum
AAG14399.1	AF054629	Oryza sativa
CAA55392.1	X78815	Narcissus pseudonarcissus
CAA42573.1	X59948	Lycopersicon esculentum
AAA68865.1	M88683	Lycopersicon esculentum
CAA55078.1	X78271	Lycopersicon esculentum
CAB59726.1	X71023	Lycopersicon esculentum
AAG10645.1	AF086803	Oryza sativa subsp. japonica
AAG10426.1	AF251014	Tagetes erecta
BAB08179.1	AB046992	Citrus unshiu
AAA99519.1	L39266	Zea mays
CAA48195.1	X68058	Capsicum annuum
AAC12846.1	U37285	Zea mays
CAA75094.1	Y14807	Dunaliella bardawil

AAD02489.1	AF049356	Oryza sativa
CAA60479.1	X86783	Haematococcus pluvialis

SEQ ID NO. 1492

CAC05338.1	AJ293028	Brassica napus
CAA69387.1	Y08210	Nicotiana plumbaginifolia
BAA33382.1	AB008519	Oryza sativa
AAK19519.1	AF332214	Triticum aestivum
AAC49531.1	U34198	Hordeum vulgare
AAG01172.1	AF288688	Triticum aestivum
AAC49532.1	U34290	Hordeum vulgare
AAK02066.1	AY026523	Chlorella sorokiniana
CAA80925.1	Z25438	Chlamydomonas reinhardtii
AAD38794.1	AF153602	Triticum aestivum
CAA80926.1	Z25439	Chlamydomonas reinhardtii
CAA11238.1	AJ223296	Chlamydomonas reinhardtii

SEQ ID NO. 1493

AAC16403.1	U82810	Glycine max
CAA63338.1	X92646	Helianthus annuus
BAA76309.1	AB019617	Triticum aestivum
AAB70536.1	AF017356	Oryza sativa
CAA79273.1	Z18809	Onoclea sensibilis

SEQ ID NO. 1494

CAA67291.1	X98739	Pisum sativum
CAA67290.1	X98738	Pisum sativum

SEQ ID NO. 1496

AAG00510.1	AF285172	Phaseolus vulgaris
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
AAK21965.1	AY028699	Brassica napus
CAB51834.1	00069	Oryza sativa
AAB61708.1	U93048	Daucus carota
CAA61510.1	X89226	Oryza sativa
BAA78764.1	AB023482	Oryza sativa
AAF59906.1	AF197947	Glycine max
AAF91324.1	AF244890	Glycine max
AAF91323.1	AF244889	Glycine max
AAF59905.1	AF197946	Glycine max
BAA06538.1	D31737	Nicotiana tabacum
BAA94509.1	AB041503	Populus nigra
AAF91322.1	AF244888	Glycine max
AAK11566.1	AF318490	Lycopersicon hirsutum
AAB09771.1	U67422	Zea mays
AAC36318.1	AF053127	Malus x domestica
AAB47421.1	U59316	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
AAK11569.1	AF318493	Lycopersicon hirsutum
BAA94510.1	AB041504	Populus nigra
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
AAF34428.1	AF172282	Oryza sativa
AAK11567.1	AF318491	Lycopersicon hirsutum
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAG16628.1	AY007545	Brassica napus

SEQ ID NO. 1497

AAD21872.1	AF078082	Phaseolus vulgaris
AAC23542.1	U20948	Ipomoea trifida
CAA73134.1	Y12531	Brassica oleracea
AAB93834.1	U82481	Zea mays
CAA74662.1	Y14286	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
CAA73133.1	Y12530	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
BAA92836.1	AB032473	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
AAA62232.1	U00443	Brassica napus
BAA92837.1	AB032474	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
BAA07577.2	D38564	Brassica rapa

CAA79355.1	Z18921	Brassica oleracea
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
AAD52097.1	AF088885	Nicotiana tabacum
AAK21965.1	AY028699	Brassica napus
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAG03090.1	AC073405	Oryza sativa

SEQ ID NO. 1498

CAA76374.2	Y16776	Spinacia oleracea
AAD11481.1	U51191	Glycine max
AAD11482.1	U51192	Glycine max
AAA65637.1	L13654	Lycopersicon esculentum
BAA03644.1	D14997	Oryza sativa
CAA80502.1	Z22920	Spirodela polyrrhiza
AAA65636.1	L13653	Lycopersicon esculentum
BAA07664.1	D42065	Nicotiana tabacum
AAA32676.1	M37637	Arachis hypogaea
BAA07663.1	D42064	Nicotiana tabacum
AAB67737.1	L77080	Stylosanthes humilis
CAA64413.1	X94943	Lycopersicon esculentum
BAA82307.1	AB027753	Nicotiana tabacum
AAD11484.1	U51194	Glycine max
BAA77387.1	AB024437	Scutellaria baicalensis
AAD37375.1	AF145349	Glycine max
CAB65334.1	AJ250121	Picea abies
BAA82306.1	AB027752	Nicotiana tabacum
AAD37429.2	AF149279	Phaseolus vulgaris
AAF63024.1	AF244921	Spinacia oleracea
CAB94692.1	AJ242742	Ipomoea batatas
AAD11483.1	U51193	Glycine max
CAC21393.1	AJ401276	Zea mays
AAB97734.1	AF014502	Glycine max
CAA62226.1	X90693	Medicago sativa
BAA08499.1	D49551	Oryza sativa
BAA89584.1	AP001073	Oryza sativa
BAA90365.1	AP001081	Oryza sativa
AAC98519.1	AF007211	Glycine max
AAA34108.1	J02979	Nicotiana tabacum
CAA50597.1	X71593	Lycopersicon esculentum
BAA01992.1	D11396	Nicotiana tabacum
BAA92500.1	AP001383	Oryza sativa
CAA62597.1	X91172	Raphanus sativus
AAD43561.1	AF155124	Gossypium hirsutum
AAD37430.1	AF149280	Phaseolus vulgaris
CAA76376.1	Y16778	Spinacia oleracea
CAB67121.1	Y19023	Lycopersicon esculentum
CAA76680.1	Y17192	Cucurbita pepo
CAA71494.1	Y10468	Spinacia oleracea
BAA94962.1	AB042103	Asparagus officinalis
BAA06335.1	D30653	Populus kitakamiensis
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAA34050.1	M74103	Nicotiana sylvestris
CAA62227.1	X90694	Medicago sativa
AAF63027.1	AF244924	Spinacia oleracea

SEQ ID NO. 1499

AAB94589.1	AF022460	Glycine max
AAA32913.1	M32885	Persea americana
AAA19701.1	L24438	Thlaspi arvense
BAB40324.1	AB037245	Asparagus officinalis
AAC39318.1	AF029858	Sorghum bicolor
BAB40323.1	AB037244	Asparagus officinalis
CAA70575.1	Y09423	Nepeta racemosa
AAD47832.1	AF166332	Nicotiana tabacum
AAB94588.1	AF022459	Glycine max
AAF27282.1	AF122821	Capsicum annuum
CAA50312.1	X70981	Solanum melongena
CAA83941.1	Z33875	Mentha x piperita
AAG44132.1	AF218296	Pisum sativum
CAA70576.1	Y09424	Nepeta racemosa
AAD44151.1	AF124816	Mentha x piperita
BAA03635.1	D14990	Solanum melongena
CAA50645.1	X71654	Solanum melongena
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
CAA65580.1	X96784	Nicotiana tabacum
AAD44152.1	AF124817	Mentha x piperita
CAA64635.1	X95342	Nicotiana tabacum

AAG14962.1	AF214008	Brassica napus
AAG14961.1	AF214007	Brassica napus
CAB56503.1	AJ238612	Catharanthus roseus
AAG14963.1	AF214009	Brassica napus
AAD44150.1	AF124815	Mentha spicata
AAD56282.1	AF155332	Petunia x hybrida
AAB94584.1	AF022157	Glycine max
BAA12159.1	D83968	Glycine max
CAA50155.1	X70824	Solanum melongena

SEQ ID NO. 1500

CAC24844.1	AJ303354	Hordeum vulgare

SEQ ID NO. 1501

BAA33415.1	AB017525	Brassica napus
BAA33417.1	AB017527	Brassica napus
BAA33418.1	AB017528	Brassica rapa
BAA33421.1	AB017531	Brassica oleracea
BAA33419.1	AB017529	Brassica rapa
BAA33416.1	AB017526	Brassica napus
BAA33420.1	AB017530	Brassica oleracea
AAG31808.1	AF316419	Lolium perenne

SEQ ID NO. 1502

AAK35215.1	AF355602	Zea mays
AAK27688.1	AF347614	Lycopersicon esculentum
CAA65291.1	X96431	Hordeum vulgare
AAA97952.1	U52867	Hordeum vulgare
AAK27687.1	AF347613	Lycopersicon esculentum
CAA57711.1	X82256	Stylosanthes hamata
AAG41419.1	AF309643	Solanum tuberosum
CAA57710.1	X82255	Stylosanthes hamata
CAA65536.1	X96761	Sporobolus stapfianus
CAA57831.1	X82454	Stylosanthes hamata
CAA11413.1	AJ223495	Brassica juncea
AAB94543.1	AF016306	Zea mays

SEQ ID NO. 1504

CAB94852.1	AJ404331	Prunus dulcis
CAA34906.1	X17061	Pisum sativum
AAF76207.1	AF271894	Zea mays

AAG61118.1	AF329371	Zea mays
AAB67860.1	U60201	Solanum tuberosum
AAA53184.1	U09026	Lycopersicon esculentum
AAG21691.1	AY008278	Lycopersicon esculentum
CAA64766.1	X95513	Solanum tuberosum
CAB65460.1	Y18548	Solanum tuberosum
AAB67858.1	U60200	Solanum tuberosum
AAB81595.1	AF019614	Solanum tuberosum
CAA55724.1	X79107	Solanum tuberosum
AAB18970.2	U76687	Phaseolus vulgaris
AAB81594.1	AF019613	Solanum tuberosum
AAA64893.1	L35931	Hordeum vulgare
CAA55318.1	X78580	Pisum sativum
AAA79186.1	U36339	Cucumis sativus
CAB83038.1	AJ271161	Cucumis sativus
AAB60715.1	L37359	Hordeum vulgare
CAA58859.1	X84040	Nicotiana tabacum
AAF15296.2	AF204210	Phaseolus vulgaris
AAB31252.1	S73865	Solanum tuberosum
BAA03042.1	D13949	Glycine max
CAA97845.1	Z73498	Vicia faba
AAA33987.1	J03211	Glycine max
AAB67865.1	U60202	Solanum tuberosum
CAA63483.1	X92890	Cucumis sativus
AAC49159.1	U36191	Glycine max
AAC61785.1	U25058	Cucumis sativus
AAD04258.1	AF039651	Solanum tuberosum
CAA75609.1	Y15410	Pisum sativum
AAB71759.1	U84198	Pisum sativum
AAD09202.1	U24232	Solanum tuberosum
AAB67732.1	U50075	Glycine max
CAA39604.1	X56139	Glycine max
CAA64765.1	X95512	Solanum tuberosum
AAA74393.1	U13681	Lycopersicon esculentum
AAA53183.1	U09025	Lycopersicon esculentum
AAB41272.1	U50081	Glycine max
CAA30016.1	X06928	Glycine max
CAA55319.1	X78581	Pisum sativum
CAA47717.1	X67304	Glycine max
CAA45088.1	X63525	Phaseolus vulgaris
AAA33986.1	J02795	Glycine max

AAA03726.1	U04785	Glycine max
CAA64769.1	X95516	Solanum tuberosum

SEQ ID NO. 1505

BAA08479.1	D49535	Citrullus lanatus
BAA12843.1	D85624	Citrullus lanatus
BAA21827.1	AB006530	Citrullus lanatus
BAA13635.1	D88530	Spinacia oleracea
BAA13634.1	D88529	Spinacia oleracea
BAA93050.1	AB040502	Allium tuberosum
AAF19000.1	AF212156	Allium cepa

SEQ ID NO. 1506

AAD48912.1	AF139532	Liquidambar styraciflua
CAC26920.1	AJ295586	Arabidopsis lyrata subsp. petraea
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
CAB65335.1	AJ010324	Populus balsamifera subsp. trichocarpa
AAG49301.1	AF313491	Matthiola incana
AAD56282.1	AF155332	Petunia x hybrida
AAG49299.1	AF313489	Callistephus chinensis
AAG49315.1	AF315465	Pelargonium x hortorum
CAA80266.1	Z22545	Petunia x hybrida
BAA03438.1	D14588	Petunia x hybrida
AAC32274.1	AF081575	Petunia x hybrida
CAA09850.1	AJ011862	Catharanthus roseus
CAA80265.1	Z22544	Petunia x hybrida
AAG49300.1	AF313490	Lycianthes rantonnei
BAA03440.1	D14590	Campanula medium
CAA50645.1	X71654	Solanum melongena
CAA50155.1	X70824	Solanum melongena
CAA50312.1	X70981	Solanum melongena

SEQ ID NO. 1508

AAB37246.1	U58971	Nicotiana tabacum

SEQ ID NO. 1510

AAB61708.1	U93048	Daucus carota
AAK21965.1	AY028699	Brassica napus
AAA33915.1	L27821	Oryza sativa
AAD21872.1	AF078082	Phaseolus vulgaris
AAG03090.1	AC073405	Oryza sativa
BAA94510.1	AB041504	Populus nigra
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
CAA97692.1	Z73295	Catharanthus roseus
CAB51834.1	00069	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
BAA92954.1	AP001551	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
BAA94529.2	AP001800	Oryza sativa
BAA94517.1	AP001800	Oryza sativa
BAA78764.1	AB023482	Oryza sativa
BAA94516.1	AP001800	Oryza sativa
AAB93834.1	U82481	Zea mays
AAB47422.1	U59318	Lycopersicon esculentum
AAF76314.1	AF220603	Lycopersicon esculentum
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
CAA67145.1	X98520	Brassica oleracea

SEQ ID NO. 1511

CAA50498.1	X71360	Malus sp.
AAC49826.1	U71604	Catharanthus roseus
AAC49827.1	U71605	Catharanthus roseus
AAB97311.1	AF008597	Catharanthus roseus
AAD26206.1	AF117270	Malus x domestica
CAA53579.1	X75965	Vitis vinifera
BAA78340.1	AB017153	Atropa belladonna
CAA55628.1	X78994	Medicago sativa
AAC97525.1	U23066	Persea americana
BAA19657.1	AB002816	Perilla frutescens
AAC86820.1	U93210	Pisum sativum
CAA57410.1	X81812	Medicago sativa
AAA91227.1	U04434	Zea mays
AAC15414.1	AF036093	Nicotiana tabacum
AAB97310.1	U86837	Chrysanthemum x morifolium
BAA05630.1	D26583	Hyoscyamus niger

AAA33387.1	M62719	Hyoscyamus niger
AAD56577.1	AF184270	Daucus carota

SEQ ID NO. 1515

AAC32138.1	AF051237	Picea mariana

SEQ ID NO. 1517

AAF61647.1	AF190634	Nicotiana tabacum
BAA89009.1	AB027455	Petunia x hybrida
BAA36421.1	AB013596	Perilla frutescens
BAA36423.1	AB013598	Verbena x hybrida
BAA93039.1	AB033758	Citrus unshiu
BAA36422.1	AB013597	Perilla frutescens
AAF98390.1	AF287143	Brassica napus
AAD21086.1	AF127218	Forsythia x intermedia
BAA12737.1	D85186	Gentiana triflora
BAA90787.1	AB038248	Ipomoea batatas
AAF17077.1	AF199453	Sorghum bicolor
AAD04166.1	AF101972	Phaseolus lunatus
BAA89008.1	AB027454	Petunia x hybrida
AAB86473.1	AF028237	Ipomoea purpurea
BAA19659.1	AB002818	Perilla frutescens
CAA54612.1	X77462	Manihot esculenta
BAA83484.1	AB031274	Scutellaria baicalensis
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
CAA59450.1	X85138	Lycopersicon esculentum
BAB41020.1	AB047093	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera

SEQ ID NO. 1518

CAA64413.1	X94943	Lycopersicon esculentum
AAA32676.1	M37637	Arachis hypogaea
BAA82307.1	AB027753	Nicotiana tabacum
AAB67737.1	L77080	Stylosanthes humilis
AAD37429.2	AF149279	Phaseolus vulgaris
CAA71494.1	Y10468	Spinacia oleracea
AAD37375.1	AF145349	Glycine max
AAF63024.1	AF244921	Spinacia oleracea
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAA65637.1	L13654	Lycopersicon esculentum
CAA40796.1	X57564	Armoracia rusticana
AAD11482.1	U51192	Glycine max
CAA80502.1	Z22920	Spirodela polyrrhiza
BAA77387.1	AB024437	Scutellaria baicalensis
CAA59485.1	X85228	Triticum aestivum
BAA07663.1	D42064	Nicotiana tabacum
BAA11853.1	D83225	Populus nigra
BAA07664.1	D42065	Nicotiana tabacum
AAD37430.1	AF149280	Phaseolus vulgaris
AAD11481.1	U51191	Glycine max
CAB94692.1	AJ242742	Ipomoea batatas
BAA03644.1	D14997	Oryza sativa
AAD43561.1	AF155124	Gossypium hirsutum
BAA06334.1	D30652	Populus kitakamiensis
BAA92500.1	AP001383	Oryza sativa
BAA90365.1	AP001081	Oryza sativa
BAA89584.1	AP001073	Oryza sativa
AAC49820.1	AF014469	Oryza sativa
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
BAA14144.1	D90116	Armoracia rusticana
AAB97734.1	AF014502	Glycine max
CAA37713.1	X53675	Triticum aestivum
AAC05277.1	AF049881	Linum usitatissimum
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
BAA06335.1	D30653	Populus kitakamiensis
CAA39486.1	X56011	Triticum aestivum
BAA03911.1	D16442	Oryza sativa
BAA94962.1	AB042103	Asparagus officinalis
AAC49821.1	AF014470	Oryza sativa
AAD37427.1	AF149277	Phaseolus vulgaris

CAA76374.2	Y16776	Spinacia oleracea
BAA08499.1	D49551	Oryza sativa
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
AAA34108.1	J02979	Nicotiana tabacum
CAA62226.1	X90693	Medicago sativa
CAA59487.1	X85230	Triticum aestivum

SEQ ID NO. 1520

CAA39438.1	X55967	Zea mays
AAC14469.1	L28831	Glycine max
AAF34771.1	AF227626	Euphorbia esula
AAA34006.1	M31024	Glycine max
CAA46835.1	X66036	Dunaliella tertiolecta

SEQ ID NO. 1522

AAA33136.1	L16983	Daucus carota
CAA61158.1	X87931	Beta vulgaris

SEQ ID NO. 1523

AAA80588.1	U20502	Glycine max
CAA54678.1	X77569	Zea mays
CAA76741.1	Y17329	Pisum sativum
CAA84491.1	Z35108	Helianthus tuberosus

SEQ ID NO. 1525

BAA97122.1	AB016264	Nicotiana sylvestris
BAA07321.1	D38123	Nicotiana tabacum
BAA87068.1	AB035270	Matricaria chamomilla
BAA97124.1	AB016266	Nicotiana sylvestris
AAC62619.1	AF057373	Nicotiana tabacum
AAF05606.1	AF190770	Oryza sativa
BAA81845.1	AB026295	Oryza sativa
BAA97123.1	AB016265	Nicotiana sylvestris
BAA76734.1	AB024575	Nicotiana tabacum
BAB03248.1	AB037183	Oryza sativa
AAD00708.1	U91857	Stylosanthes hamata

SEQ ID NO. 1528

CAA61275.1	X88797	Eucalyptus gunnii

SEQ ID NO. 1529

AAC49792.1	AF001219	Pisum sativum
AAC86820.1	U93210	Pisum sativum
AAC49793.1	AF010167	Pisum sativum
AAC96017.1	AF007766	Pisum sativum
AAC96015.1	AF004730	Pisum sativum
AAC49794.1	AF010168	Pisum sativum
BAA89316.1	AB032198	Nicotiana tabacum
BAA37129.1	AB012205	Lactuca sativa
BAA34124.1	AB010991	Lycopersicon esculentum
BAA37130.1	AB012206	Lactuca sativa
BAA34125.1	AB010992	Lycopersicon esculentum
CAB92914.1	AJ006453	Cucurbita maxima
BAB12439.1	AB031203	Lactuca sativa
AAB64347.1	U63650	Cucurbita maxima
BAB32734.1	AB049408	Eustoma grandiflorum
BAB12438.1	AB031202	Lactuca sativa
AAD45425.1	AF100955	Pisum sativum
AAF08609.1	AF056935	Pisum sativum
AAF13735.1	AF101383	Pisum sativum
BAB12442.1	AB031206	Lactuca sativa
CAC26921.1	AJ295607	Arabidopsis lyrata subsp. petraea
AAC49757.1	U70531	Phaseolus vulgaris
CAA50498.1	X71360	Malus sp.
BAA32156.1	AB012856	Nicotiana tabacum
AAG43043.1	AY014277	Lolium perenne
AAD15755.1	AF049898	Lycopersicon esculentum
CAB96202.1	AJ250187	Citrus sinensis x Poncirus trifoliata
AAG43044.1	AY014280	Lolium perenne

SEQ ID NO. 1530

AAG43286.1	AF140228	Oryza sativa

SEQ ID NO. 1536

BAA82556.1	AB030083	Populus nigra
AAB61708.1	U93048	Daucus carota
AAK21965.1	AY028699	Brassica napus
AAB93834.1	U82481	Zea mays
AAD21872.1	AF078082	Phaseolus vulgaris

AAC23542.1	U20948	Ipomoea trifida
CAA73134.1	Y12531	Brassica oleracea
CAB51834.1	00069	Oryza sativa
BAA94509.1	AB041503	Populus nigra
AAG16628.1	AY007545	Brassica napus
BAA92954.1	AP001551	Oryza sativa
BAA94510.1	AB041504	Populus nigra
AAG03090.1	AC073405	Oryza sativa
AAF91322.1	AF244888	Glycine max
BAA94517.1	AP001800	Oryza sativa
CAB51836.1	AJ243961	Oryza sativa
BAA78764.1	AB023482	Oryza sativa
AAA33915.1	L27821	Oryza sativa
AAF91323.1	AF244889	Glycine max
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
AAF91324.1	AF244890	Glycine max
CAA74661.1	Y14285	Brassica oleracea
BAA92953.1	AP001551	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
BAA94516.1	AP001800	Oryza sativa
CAB41878.1	Y18259	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
CAB41879.1	Y18260	Brassica oleracea

SEQ ID NO. 1537

AAD25300.1	AF088276	Lycopersicon esculentum
CAA63704.1	X93301	Oryza sativa
AAD24966.1	AF109150	Lycopersicon esculentum
AAD25225.1	AF088279	Potamogeton crispus

SEQ ID NO. 1538

AAC08525.1	AF020814	Pisum sativum
AAC08526.1	AF020816	Solanum tuberosum
AAC08524.1	AF020813	Zea mays
AAF86908.1	AF223360	Plastid Mesembryanthemum crystallinum
CAA48210.1	X68077	Pisum sativum
AAF86906.1	AF223358	Plastid Mesembryanthemum crystallinum
CAA81386.1	Z26633	Flaveria pringlei
AAA84890.1	U13630	Brassica oleracea
CAA52979.1	X75088	Nicotiana tabacum
CAA32016.1	X13754	Spinacia oleracea
AAK01174.2	AF314182	Triticum aestivum
AAB40649.1	U66403	Zea mays
CAA81349.1	Z26595	Zea mays
AAB40650.1	U66404	Zea mays
CAA47430.1	X67045	Solanum tuberosum
CAA81385.1	Z26632	Flaveria trinervia
AAK27373.1	AY028422	Oryza sativa
AAB40648.1	U66402	Nicotiana tabacum
AAF86907.1	AF223359	Plastid Mesembryanthemum crystallinum
AAA84892.1	U13632	Brassica oleracea
AAB40647.1	U66401	Nicotiana tabacum
AAD55058.1	AF173679	Beta vulgaris

SEQ ID NO. 1539

AAG29748.1	AF172172	Medicago sativa
CAA68405.1	Y00296	Trema tomentosa
AAC28426.1	AF027215	Trema orientalis
AAB86653.1	U27194	Parasponia andersonii
CAB63706.1	AJ131349	Trema virgata
CAB63709.1	AJ131352	Trema virgata
CAA37898.1	X53950	Casuarina glauca
CAB16751.1	Z99635	Trema orientalis
CAB63707.1	AJ131350	Trema virgata
CAB63708.1	AJ131351	Trema virgata
AAA97887.1	U47143	Glycine max
AAB70097.1	U94968	Hordeum vulgare
AAG01183.1	AF291052	Zea mays subsp. parviglumis
AAF44664.1	AF236080	Zea mays
AAC49884.1	U76031	Oryza sativa
AAC49881.1	U76028	Oryza sativa
AAK07676.1	AY026343	Lycopersicon esculentum
AAG01375.1	AY005818	Zea mays subsp. mays
AAC49882.1	U76029	Oryza sativa
AAC49883.1	U76030	Oryza sativa
AAG22831.1	AF309562	Ceratodon purpureus
AAF66104.1	AF218049	Physcomitrella patens

AAK14807.1	AY026342	Physcomitrella patens
CAA07547.1	AJ007507	Cichorium intybus x Cichorium endivia
AAA33018.1	L28826	Casuarina glauca
AAA03005.1	M23313	Sesbania rostrata
BAA31155.1	AB015719	Pisum sativum
BAA31157.1	AB015721	Pisum sativum
AAB48005.1	M91077	Medicago sativa
CAA40900.1	X57733	Medicago truncatula
BAA31156.1	AB015720	Pisum sativum
CAA32492.1	X14311	Medicago sativa
AAA32657.1	M36100	Medicago sativa
BAA24088.1	AB009844	Pisum sativum
CAA31750.1	X13375	Medicago sativa
CAA90870.1	Z54159	Vicia faba
AAA18503.1	U09671	Canavalia lineata
CAA90869.1	Z54158	Vicia faba
CAA90868.1	Z54157	Vicia faba
CAA31859.1	X13505	Sesbania rostrata
CAA32044.1	X13815	Sesbania rostrata
CAA38024.1	X54089	Medicago sativa
AAA03002.1	M23312	Sesbania rostrata

SEQ ID NO. 1540

AAB65776.1	U97521	Vitis vinifera
AAB65777.1	U97522	Vitis vinifera
BAA03751.1	D16223	Oryza sativa
CAA30142.1	X07130	Solanum tuberosum
BAA03749.1	D16221	Oryza sativa

SEQ ID NO. 1541

CAB43505.1	AJ239051	Cicer arietinum
BAA93634.1	AB025016	Lotus japonicus
CAB41490.1	AJ238439	Cicer arietinum
CAA10067.1	AJ012581	Cicer arietinum
BAA22422.1	AB001379	Glycyrrhiza echinata
BAA74465.1	AB022732	Glycyrrhiza echinata
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAA32913.1	M32885	Persea americana
AAG09208.1	AF175278	Pisum sativum
AAC49188.2	U29333	Pisum sativum
AAG44132.1	AF218296	Pisum sativum
CAA65580.1	X96784	Nicotiana tabacum
BAA12159.1	D83968	Glycine max
AAD56282.1	AF155332	Petunia x hybrida
CAA64635.1	X95342	Nicotiana tabacum
AAD38930.1	AF135485	Glycine max
AAB94590.1	AF022461	Glycine max
CAB56742.1	AJ249800	Cicer arietinum
BAA13076.1	D86351	Glycine max
AAC39454.1	AF014802	Eschscholzia californica
BAA74466.1	AB022733	Glycyrrhiza echinata
BAA22423.1	AB001380	Glycyrrhiza echinata
CAA70575.1	Y09423	Nepeta racemosa
CAA50648.1	X71657	Solanum melongena
AAB94587.1	AF022458	Glycine max
BAA84072.1	AB028152	Torenia hybrida
AAC32274.1	AF081575	Petunia x hybrida
BAA92894.1	AB006790	Petunia x hybrida

SEQ ID NO. 1542

AAB63814.1	L46848	Glycine max
AAF34767.1	AF227622	Euphorbia esula
BAA04668.1	D21130	Oryza sativa
CAA63786.1	X93587	Lupinus luteus
CAA69256.1	Y07959	Zea mays

SEQ ID NO. 1544

AAB84222.1	AF030301	Helianthus annuus
CAA39708.1	X56267	Nicotiana tabacum

SEQ ID NO. 1547

AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAC10358.1	AJ277086	Nicotiana tabacum
CAB90633.1	AJ277743	Fagus sylvatica
CAC10359.1	AJ277087	Nicotiana tabacum
AAD17804.1	AF092431	Lotus japonicus
CAC09575.1	AJ298987	Fagus sylvatica
CAA72341.1	Y11607	Medicago sativa
AAD17805.1	AF092432	Lotus japonicus
AAC36698.1	AF075580	Mesembryanthemum crystallinum

AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAG43835.1	AF213455	Zea mays
AAC36700.1	AF075582	Mesembryanthemum crystallinum
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAC35951.1	AF079355	Mesembryanthemum crystallinum
CAB90634.1	AJ277744	Fagus sylvatica
AAB93832.1	U81960	Zea mays
AAC26828.1	AF075603	Oryza sativa
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 1548

CAA09881.1	AJ011939	Trifolium repens
CAA62228.1	X90695	Medicago sativa
CAA71495.1	Y10469	Spinacia oleracea
AAB41812.1	L36158	Medicago sativa
BAA77387.1	AB024437	Scutellaria baicalensis
AAF63024.1	AF244921	Spinacia oleracea
AAD11483.1	U51193	Glycine max
AAB67737.1	L77080	Stylosanthes humilis
BAA07663.1	D42064	Nicotiana tabacum
BAA07664.1	D42065	Nicotiana tabacum
CAB94692.1	AJ242742	Ipomoea batatas
CAB67121.1	Y19023	Lycopersicon esculentum
CAA62226.1	X90693	Medicago sativa
CAA50597.1	X71593	Lycopersicon esculentum
AAD11481.1	U51191	Glycine max
AAD11484.1	U51194	Glycine max
BAA82306.1	AB027752	Nicotiana tabacum
AAA65637.1	L13654	Lycopersicon esculentum
AAD11482.1	U51192	Glycine max
CAA62225.1	X90692	Medicago sativa
AAC98519.1	AF007211	Glycine max
AAD37427.1	AF149277	Phaseolus vulgaris
BAA14144.1	D90116	Armoracia rusticana
AAA98491.1	L36981	Petroselinum crispum
CAA71488.1	Y10462	Spinacia oleracea
AAD43561.1	AF155124	Gossypium hirsutum
BAA14143.1	D90115	Armoracia rusticana
CAA71490.1	Y10464	Spinacia oleracea
AAB02554.1	L37790	Stylosanthes humilis
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA01877.1	D11102	Populus kitakamiensis
CAA62227.1	X90694	Medicago sativa
BAA07241.1	D38051	Populus kitakamiensis
BAA01950.1	D11337	Vigna angularis
AAF65464.2	AF247700	Oryza sativa
AAF63027.1	AF244924	Spinacia oleracea
CAC21393.1	AJ401276	Zea mays
CAA59487.1	X85230	Triticum aestivum
AAD37430.1	AF149280	Phaseolus vulgaris
CAA71491.1	Y10465	Spinacia oleracea
AAB41811.1	L36157	Medicago sativa
BAA03644.1	D14997	Oryza sativa
AAA32676.1	M37637	Arachis hypogaea
CAA71494.1	Y10468	Spinacia oleracea
AAA34050.1	M74103	Nicotiana sylvestris
CAA40796.1	X57564	Armoracia rusticana

SEQ ID NO. 1549

CAA76374.2	Y16776	Spinacia oleracea
AAD11482.1	U51192	Glycine max
AAD11481.1	U51191	Glycine max
BAA07663.1	D42064	Nicotiana tabacum
AAA65637.1	L13654	Lycopersicon esculentum
AAA65636.1	L13653	Lycopersicon esculentum
BAA07664.1	D42065	Nicotiana tabacum
BAA03644.1	D14997	Oryza sativa
AAA32676.1	M37637	Arachis hypogaea
CAA80502.1	Z22920	Spirodela polyrrhiza
AAB67737.1	L77080	Stylosanthes humilis
BAA82307.1	AB027753	Nicotiana tabacum
CAA64413.1	X94943	Lycopersicon esculentum
AAD11484.1	U51194	Glycine max
AAF63024.1	AF244921	Spinacia oleracea
AAD11483.1	U51193	Glycine max
CAA71494.1	Y10468	Spinacia oleracea
AAD37429.2	AF149279	Phaseolus vulgaris
BAA92500.1	AP001383	Oryza sativa
AAC98519.1	AF007211	Glycine max
CAB67121.1	Y19023	Lycopersicon esculentum

CAA62226.1	X90693	Medicago sativa
CAA50597.1	X71593	Lycopersicon esculentum
AAD37375.1	AF145349	Glycine max
AAB97734.1	AF014502	Glycine max
BAA94962.1	AB042103	Asparagus officinalis
CAB65334.1	AJ250121	Picea abies
BAA06335.1	D30653	Populus kitakamiensis
BAA77387.1	AB024437	Scutellaria baicalensis
CAA71490.1	Y10464	Spinacia oleracea
AAD43561.1	AF155124	Gossypium hirsutum
AAF63027.1	AF244924	Spinacia oleracea
BAA14144.1	D90116	Armoracia rusticana
CAA76680.1	Y17192	Cucurbita pepo
BAA89584.1	AP001073	Oryza sativa
BAA90365.1	AP001081	Oryza sativa
CAB94692.1	AJ242742	Ipomoea batatas
AAB41811.1	L36157	Medicago sativa
CAC21393.1	AJ401276	Zea mays
AAD37427.1	AF149277	Phaseolus vulgaris
CAA71488.1	Y10462	Spinacia oleracea
CAA62227.1	X90694	Medicago sativa
CAA62615.1	X91232	Mercurialis annua
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa

SEQ ID NO. 1550

AAD04188.1	AF026217	Medicago sativa
BAA09462.1	D50866	Glycine max
BAA20453.1	AB004271	Glycine max
AAD04259.1	AF049098	Trifolium repens
CAA12395.1	AJ225087	Vigna unguiculata
BAA04815.1	D21349	Hordeum vulgare
BAA08741.1	D49999	Hordeum vulgare
AAC67246.1	AF061204	Hordeum vulgare subsp. spontaneum
AAA33898.1	L10345	Oryza sativa
CAA36556.1	X52321	Hordeum vulgare
AAG25637.1	AF300799	Hordeum vulgare
AAC67245.1	AF061203	Hordeum vulgare
AAK30294.1	AF353207	Castanea crenata
AAG25638.1	AF300800	Hordeum vulgare
BAB39391.1	AB048949	Hordeum vulgare
CAA76131.1	Y16242	Triticum aestivum
AAA33899.1	L10346	Oryza sativa
CAC16789.1	AJ301645	Hordeum vulgare
AAG44882.1	AF284857	Calystegia sepium
CAA67128.1	X98504	Triticum aestivum
AAD15902.1	AF068119	Zea mays
CAA77817.1	Z11772	Secale cereale
CAA81091.1	Z25871	Zea mays
BAA02286.1	D12882	Ipomoea batatas
BAA92921.1	AP001539	Oryza sativa
BAA00828.1	D01022	Ipomoea batatas
AAD38148.1	AF139501	Prunus armeniaca
AAB64177.1	AF012345	Hordeum vulgare
BAA09793.1	D63574	Hordeum vulgare
CAA40105.1	X56785	Secale cereale

SEQ ID NO. 1551

CAA11219.1	AJ223281	Manihot esculenta
AAC49184.1	U40402	Hevea brasiliensis
CAA82334.1	Z29091	Manihot esculenta
CAA11428.1	AJ223506	Manihot esculenta

SEQ ID NO. 1552

AAC34858.1	AF082033	Hemerocallis hybrid cultivar
AAG28600.1	AF247134	Limnanthes douglasii
AAC49186.1	U37088	Simmondsia chinensis
AAB72178.1	AF009563	Brassica napus
AAA96054.1	U50771	Brassica napus
AAK11266.1	AF333040	Dunaliella salina
CAA71898.1	Y11007	Brassica juncea
CAC17746.1	AJ291728	Zea mays
AAC25109.1	AF054497	Brassica napus
AAC25110.1	AF054498	Brassica napus
AAC25111.1	AF054499	Brassica rapa
AAC25112.1	AF054500	Brassica oleracea

SEQ ID NO. 1553

BAA07328.1	D38132	Cucurbita sp.
AAA82743.1	U19481	Citrus maxima
BAA32557.1	AB017159	Daucus carota

CAA59010.1	X84228	Beta vulgaris
CAA59008.1	X84226	Nicotiana tabacum
CAA52976.1	X75082	Solanum tuberosum
BAA82390.1	AP000367	Oryza sativa
CAA59009.1	X84227	Populus x generosa

SEQ ID NO. 1555

AAF67052.1	AF190303	Adiantum raddianum
AAG08959.1	AF122051	Solanum tuberosum
AAF67053.1	AF190304	Adiantum raddianum
AAF67050.1	AF190301	Secale cereale
AAF67051.1	AF190302	Secale cereale
AAG08961.1	AF122053	Solanum tuberosum
AAG08960.1	AF122052	Solanum tuberosum
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
CAA72217.1	Y11414	Oryza sativa
BAA81732.1	AB029161	Glycine max
CAA64615.1	X95297	Lycopersicon esculentum
AAG08962.1	AF122054	Solanum tuberosum
BAA88223.1	AB028651	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
AAB41101.1	U72762	Nicotiana tabacum
BAB40790.1	AB058642	Lilium hybrid division I
AAG13574.1	AC037425	Oryza sativa
BAA88221.1	AB028649	Nicotiana tabacum
CAA72185.1	Y11350	Oryza sativa
BAA88224.1	AB028652	Nicotiana tabacum
BAA88222.1	AB028650	Nicotiana tabacum
BAA81733.2	AB029162	Glycine max
CAA71992.1	Y11105	Pisum sativum
AAK19618.1	AF336285	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
AAF34434.1	AF172282	Oryza sativa
CAA67575.1	X99134	Lycopersicon esculentum
AAK08983.1	AY026332	Oryza sativa
AAK19615.1	AF336282	Gossypium hirsutum

SEQ ID NO. 1556

CAA78386.1	Z13996	Petunia x hybrida
CAB43399.1	AJ006292	Antirrhinum majus
CAA67600.1	X99210	Lycopersicon esculentum
CAA64614.1	X95296	Lycopersicon esculentum
AAF22256.1	AF161711	Pimpinella brachycarpa
BAA88222.1	AB028650	Nicotiana tabacum
CAA67575.1	X99134	Lycopersicon esculentum
CAA78387.1	Z13997	Petunia x hybrida
CAA66952.1	X98308	Lycopersicon esculentum
AAB41101.1	U72762	Nicotiana tabacum
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays
BAA88223.1	AB028651	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum

SEQ ID NO. 1557

BAA03763.1	D16247	Nicotiana sylvestris
AAF40306.1	AF156667	Vigna radiata
AAF75791.1	AF271892	Pisum sativum
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95705.1	AB042644	Oryza sativa
BAA95704.1	AB042643	Oryza sativa
AAG48833.1	AC084218	Oryza sativa

SEQ ID NO. 1559

BAA83689.1	AB011968	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA34675.1	AB011670	Triticum aestivum
CAA73068.1	Y12465	Sorghum bicolor
CAA73067.1	Y12464	Sorghum bicolor
AAB62693.1	AF004947	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
AAD23582.1	AF128443	Glycine max
BAA05649.1	D26602	Nicotiana tabacum
CAA71142.1	Y10036	Cucumis sativus
AAC99329.1	AF062479	Oryza sativa
CAA65244.1	X95997	Solanum tuberosum
CAA57898.1	X82548	Hordeum vulgare
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare

AAB05457.1	U55768	Oryza sativa
CAA46554.1	X65604	Hordeum vulgare
AAD00239.1	U73938	Nicotiana tabacum
AAD00240.1	U73939	Nicotiana tabacum
BAA13608.1	D88399	Oryza sativa
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
AAB68962.1	L38855	Glycine max
AAB58348.1	U29095	Triticum aestivum
AAF27340.1	AF186020	Vicia faba
AAA96325.1	M94726	Triticum aestivum
CAA81443.1	Z26846	Mesembryanthemum crystallinum
CAA06503.1	AJ005373	Craterostigma plantagineum
AAF21062.1	AF216527	Dunaliella tertiolecta
CAA89202.1	Z49233	Chlamydomonas eugametos

SEQ ID NO. 1565

BAA90357.1	AP001080	Oryza sativa
BAA85438.1	AP000616	Oryza sativa
BAA78746.1	AB023482	Oryza sativa
AAG43550.1	AF211532	Nicotiana tabacum
BAA96875.1	AB045121	Oryza sativa

SEQ ID NO. 1570

CAA68234.1	X99972	Brassica oleracea
AAG28435.1	AF195028	Glycine max
AAG28436.1	AF195029	Glycine max
AAD31896.1	AF145478	Mesembryanthemum crystallinum
CAA63790.1	X93592	Dunaliella bioculata
BAA90510.2	AP001111	Oryza sativa
AAD11617.1	AF050495	Lycopersicon esculentum
AAA34138.1	M96324	Lycopersicon esculentum
AAD11618.1	AF050496	Lycopersicon esculentum
AAF73985.1	AF096871	Zea mays
AAB58910.1	U82966	Oryza sativa
AAD46188.1	AF156691	Nicotiana plumbaginifolia
CAA59800.1	X85805	Zea mays
AAB17186.1	U72148	Lycopersicon esculentum
BAA01058.1	D10207	Oryza sativa
AAD46186.1	AF156679	Nicotiana plumbaginifolia
AAB41898.1	U84891	Mesembryanthemum crystallinum
CAA54045.1	X76535	Solanum tuberosum
AAB84202.2	AF029256	Kosteletzkya virginica
CAA47275.1	X66737	Nicotiana plumbaginifolia
BAA37150.1	AB022442	Vicia faba
BAA08134.1	D45189	Zostera marina
CAB69824.1	AJ271439	Prunus persica
CAB69823.1	AJ271438	Prunus persica
AAB35314.2	S79323	Vicia faba
CAB85495.1	AJ132892	Medicago truncatula
CAB85494.1	AJ132891	Medicago truncatula
AAA34173.1	M60166	Lycopersicon esculentum
CAC29436.1	AJ310524	Vicia faba
AAA34098.1	M80490	Nicotiana plumbaginifolia
AAB60276.1	U09989	Zea mays
AAA34094.1	M80489	Nicotiana plumbaginifolia
AAA34052.1	M27888	Nicotiana plumbaginifolia
CAA59799.1	X85804	Phaseolus vulgaris
AAF98344.1	AF275745	Lycopersicon esculentum
AAD55399.1	AF179442	Lycopersicon esculentum
BAA06629.1	D31843	Oryza sativa
CAA54046.1	X76536	Solanum tuberosum
CAC29435.1	AJ310523	Vicia faba
AAD46187.1	AF156683	Nicotiana plumbaginifolia
CAA52107.1	X73901	Dunaliella bioculata
AAB49042.1	U54690	Dunaliella acidophila
AAK31799.1	AY029190	Lilium longiflorum
AAD29712.1	AF140499	Oryza sativa
AAA81348.1	U38965	Vicia faba
AAK32118.1	AF308816	Hordeum vulgare
AAF97591.1	AF263917	Lycopersicon esculentum
AAA34099.1	M80491	Nicotiana plumbaginifolia
AAK32119.1	AF308817	Hordeum vulgare

SEQ ID NO. 1571

AAA34236.1	M94863	Vigna radiata
CAA81749.1	Z27235	Solanum tuberosum
AAF22108.1	AF119410	Lupinus albus
AAF22112.1	AF119414	Lupinus albus
BAA76388.1	AB007639	Pyrus pyrifolia
CAB01401.1	Z77854	Phalaenopsis sp.
CAB86187.1	AJ277161	Carica papaya

AAB05849.1	L07883	Doritaenopsis sp.
AAB05848.1	L07882	Doritaenopsis sp.
BAA31137.1	AB007449	Actinidia deliciosa
CAA81747.1	Z27233	Solanum tuberosum
AAD28181.1	AF109927	Musa acuminata
CAA81748.1	Z27234	Solanum tuberosum
AAC31571.1	AF080258	Musa acuminata
BAA96743.1	AB044662	Prunus persica
AAD22099.2	AF129508	Musa acuminata
BAA94600.1	AB033503	Populus euramericana
BAA35057.1	AB010102	Malus x domestica
BAA33859.1	AB018355	Vigna radiata
AAA03472.1	U03294	Malus sylvestris
BAA19161.1	AB000679	Vigna radiata
AAA78789.1	L34171	Lycopersicon esculentum
AAC05145.1	AF049711	Petunia x hybrida
BAA00839.1	D01033	Cucurbita maxima
CAA60591.1	X87112	Pyrus communis

SEQ ID NO. 1572

AAK07429.1	AF321287	Musa acuminata
AAC69619.1	AF072736	Pinus contorta
AAF04007.1	AF163097	Dalbergia cochinchinensis
BAA78708.1	AB003089	Polygonum tinctorium
AAA91166.1	U39228	Prunus avium
BAA11831.1	D83177	Costus speciosus
AAF34650.1	AF221526	Prunus serotina
AAG25897.1	AF170087	Cucurbita pepo
AAG00614.1	AF293849	Secale cereale
AAB22162.1	S35175	Manihot esculenta
AAF03675.1	AF149311	Rauvolfia serpentina
AAA87339.1	L41869	Hordeum vulgare
AAC49177.1	U33817	Sorghum bicolor
CAA64442.1	X94986	Manihot esculenta
AAD02839.1	AF082991	Avena sativa
AAD09850.1	U44087	Zea mays
AAD10503.1	U33816	Zea mays
AAB03266.1	U44773	Zea mays
AAA65946.1	U25157	Zea mays
CAA52293.1	X74217	Zea mays
AAF28800.1	AF112888	Catharanthus roseus
CAA40057.1	X56733	Trifolium repens
CAA40058.1	X56734	Trifolium repens
CAA55196.1	X78433	Avena sativa
CAA79989.2	Z21977	Brassica napus
AAB71381.1	U95298	Manihot esculenta
CAA57913.1	X82577	Brassica napus
AAB38784.1	U72154	Brassica nigra
AAA84906.1	U28047	Oryza sativa
CAC08209.1	AJ005950	Cicer arietinum

SEQ ID NO. 1573

AAD16138.1	AF096298	Nicotiana tabacum
BAA77383.1	AB020590	Nicotiana tabacum
BAA86031.1	AB026890	Nicotiana tabacum
BAA82107.1	AB022693	Nicotiana tabacum
AAD16139.1	AF096299	Nicotiana tabacum
AAD55974.1	AF121353	Petroselinum crispum
AAF23898.1	AF193802	Oryza sativa
BAB16432.1	AB041520	Nicotiana tabacum
BAA87058.1	AB028022	Nicotiana tabacum
AAG35658.1	AF204925	Petroselinum crispum
AAD27591.1	AF121354	Petroselinum crispum
AAF61863.1	AF193770	Nicotiana tabacum
AAG35659.1	AF204926	Petroselinum crispum
AAF61864.1	AF193771	Nicotiana tabacum

SEQ ID NO. 1574

AAD01600.1	AF016713	Lycopersicon esculentum
AAF20002.1	AF213936	Prunus dulcis
AAC32034.1	AF023472	Hordeum vulgare
AAF07875.1	AF140606	Oryza sativa
CAC07206.1	AJ278966	Brassica napus
AAD16016.1	AF080545	Nepenthes alata
AAB69642.1	AF000392	Lotus japonicus
CAA93316.1	Z69370	Cucumis sativus
BAB19757.1	AB052785	Glycine max
BAB19760.1	AB052788	Glycine max
BAB19756.1	AB052784	Glycine max
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 1576

AAF61647.1	AF190634	Nicotiana tabacum
BAA89009.1	AB027455	Petunia x hybrida
BAA93039.1	AB033758	Citrus unshiu
BAA36423.1	AB013598	Verbena x hybrida
BAA36421.1	AB013596	Perilla frutescens
AAF98390.1	AF287143	Brassica napus
BAA36422.1	AB013597	Perilla frutescens
AAD21086.1	AF127218	Forsythia x intermedia
BAA12737.1	D85186	Gentiana triflora
CAA59450.1	X85138	Lycopersicon esculentum
AAF17077.1	AF199453	Sorghum bicolor
BAA89008.1	AB027454	Petunia x hybrida
AAB81683.1	AF000372	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAA83484.1	AB031274	Scutellaria baicalensis
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAA90787.1	AB038248	Ipomoea batatas
BAA19659.1	AB002818	Perilla frutescens
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
BAB41024.1	AB047097	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
CAA31855.1	X13500	Zea mays
AAB86473.1	AF028237	Ipomoea purpurea
CAA54614.1	X77464	Manihot esculenta

SEQ ID NO. 1577

AAG31141.1	AF305911	Oryza sativa
AAG31142.1	AF305912	Hordeum vulgare
CAA06334.1	AJ005077	Lycopersicon esculentum
AAD46406.1	AF096250	Lycopersicon esculentum
AAD10057.1	AF110519	Lycopersicon esculentum
AAD10056.1	AF110518	Lycopersicon esculentum
AAK30005.1	AY029067	Rosa hybrid cultivar
AAA34002.1	M67449	Glycine max
CAC09580.1	AJ298992	Fagus sylvatica
AAK11734.1	AY027437	Arachis hypogaea
AAF34436.1	AF172282	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum
CAA08995.1	AJ010091	Brassica napus
BAA06538.1	D31737	Nicotiana tabacum
AAK11674.1	AF339747	Lophopyrum elongatum
BAA05648.1	D26601	Nicotiana tabacum
AAF43496.1	AF131222	Lophopyrum elongatum
AAK21965.1	AY028699	Brassica napus
AAB09771.1	U67422	Zea mays
AAF76189.1	AF271206	Rosa hybrid cultivar
AAF59905.1	AF197946	Glycine max
AAF78021.1	AF238477	Oryza sativa
AAF91323.1	AF244889	Glycine max
CAB51834.1	00069	Oryza sativa
AAD46916.1	AF164020	Oryza sativa
CAA08997.1	AJ010093	Brassica napus
AAF91322.1	AF244888	Glycine max
CAA61510.1	X89226	Oryza sativa
AAF59906.1	AF197947	Glycine max
AAF91324.1	AF244890	Glycine max

SEQ ID NO. 1578

BAA24448.1	AB003516	Panax ginseng
CAA06770.1	AJ005928	Brassica napus
CAA06773.1	AJ005931	Brassica napus
CAA06223.1	AJ004923	Lycopersicon esculentum

SEQ ID NO. 1579

AAC60566.1	S68113	Brassica napus
AAD01800.1	AF026382	Fragaria x ananassa
CAA59472.1	X85206	Catharanthus roseus
BAB16431.1	AB041519	Nicotiana tabacum
BAB16428.1	AB041516	Nicotiana tabacum
BAA99575.1	AB037109	Daucus carota
BAA95941.1	AB035125	Nicotiana tabacum
AAC49369.1	U34333	Phaseolus vulgaris
AAF78903.1	AF248055	Glycine max
BAA13150.1	D86629	Nicotiana tabacum

BAA13155.1	D86721	Nicotiana tabacum
CAA42959.1	X60432	Zea mays
AAB18205.1	U73214	Triticum aestivum
CAA57810.1	X82413	Asparagus officinalis
CAA40361.1	X57076	Lycopersicon esculentum
CAA43666.1	X61395	Lycopersicon esculentum
AAD03487.1	AF028841	Medicago sativa
AAA33132.1	L20755	Cuscuta reflexa

SEQ ID NO. 1583

CAA49599.1	X69979	Lycopersicon esculentum

SEQ ID NO. 1584

BAA88198.1	AP000837	Oryza sativa
BAA88195.1	AP000837	Oryza sativa

SEQ ID NO. 1585

AAD28506.1	AF123265	Lycopersicon esculentum
AAB49425.1	U72489	Solanum tuberosum
AAD28507.2	AF123266	Lycopersicon esculentum

SEQ ID NO. 1588

CAA65269.1	X96406	Solanum tuberosum
AAB65767.1	U37840	Lycopersicon esculentum
BAA03102.1	D14000	Oryza sativa
AAC12951.1	U56406	Hordeum vulgare
CAB94852.1	AJ404331	Prunus dulcis
AAG21691.1	AY008278	Lycopersicon esculentum
AAA79186.1	U36339	Cucumis sativus
AAB67858.1	U60200	Solanum tuberosum
CAA64765.1	X95512	Solanum tuberosum
CAB83038.1	AJ271161	Cucumis sativus
CAA58859.1	X84040	Nicotiana tabacum
AAB67865.1	U60202	Solanum tuberosum
CAA55724.1	X79107	Solanum tuberosum
AAB67860.1	U60201	Solanum tuberosum
CAB65460.1	Y16548	Solanum tuberosum
AAD04258.1	AF039651	Solanum tuberosum
AAB81594.1	AF019613	Solanum tuberosum
AAA33986.1	J02795	Glycine max
AAB67732.1	U50075	Glycine max
CAA47717.1	X67304	Glycine max
AAB81595.1	AF019614	Solanum tuberosum
CAA64766.1	X95513	Solanum tuberosum
AAB31252.1	S73865	Solanum tuberosum
AAA53184.1	U09026	Lycopersicon esculentum
AAB65766.1	U37839	Lycopersicon esculentum
CAA65268.1	X96405	Solanum tuberosum
AAF15296.2	AF204210	Phaseolus vulgaris
CAA55319.1	X78581	Pisum sativum
AAA03728.1	U04526	Glycine max
CAA34906.1	X17061	Pisum sativum
CAA55318.1	X78580	Pisum sativum
BAA03042.1	D13949	Glycine max
AAA33987.1	J03211	Glycine max
AAB71759.1	U84198	Pisum sativum
AAB41272.1	U50081	Glycine max
CAA39604.1	X56139	Glycine max
AAA96817.1	U26457	Glycine max
AAG42354.1	AF234983	Phaseolus vulgaris
AAG18376.1	AF283894	Zantedeschia aethiopica
AAD39093.1	AF095895	Oryza sativa
CAC04380.1	AJ293015	Pisum sativum
CAA45088.1	X63525	Phaseolus vulgaris
AAB18970.2	U76687	Phaseolus vulgaris
AAC49159.1	U36191	Glycine max
AAA03726.1	U04785	Glycine max
CAA45086.1	X63521	Phaseolus vulgaris

SEQ ID NO. 1589

CAB39890.1	AJ237582	Armoracia rusticana
CAB39158.1	AJ132906	Brassica napus
CAB39159.1	AJ132905	Brassica rapa
CAB39172.1	AJ132903	Raphanus sativus
CAB39892.1	AJ237584	Capsella bursa-pastoris

SEQ ID NO. 1590

AAK19616.1	AF336283	Gossypium hirsutum
CAA78386.1	Z13996	Petunia x hybrida
CAA72218.1	Y11415	Oryza sativa
CAB43399.1	AJ006292	Antirrhinum majus
AAK19619.1	AF336286	Gossypium hirsutum

CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
BAA23337.1	D88617	Oryza sativa
CAA64614.1	X95296	Lycopersicon esculentum
CAA50221.1	X70876	Hordeum vulgare
AAK19611.1	AF336278	Gossypium hirsutum
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
BAA81733.2	AB029162	Glycine max
BAA88221.1	AB028649	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
BAA88224.1	AB028652	Nicotiana tabacum
BAA23338.1	D88618	Oryza sativa
AAK19617.1	AF336284	Gossypium hirsutum
CAA72217.1	Y11414	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum
AAK19615.1	AF336282	Gossypium hirsutum
BAA81736.1	AB029165	Glycine max
BAA88222.1	AB028650	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
AAK19618.1	AF336285	Gossypium hirsutum
CAA72186.1	Y11351	Oryza sativa
CAA66952.1	X98308	Lycopersicon esculentum
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA64615.1	X95297	Lycopersicon esculentum
CAA67575.1	X99134	Lycopersicon esculentum
AAA19821.1	L19495	Zea mays
CAA65525.1	X96749	Oryza sativa
AAA33500.1	M73028	Zea mays
BAA23339.1	D88619	Oryza sativa

SEQ ID NO. 1594

AAG28435.1	AF195028	Glycine max
AAG28436.1	AF195029	Glycine max
CAA68234.1	X99972	Brassica oleracea
AAD31896.1	AF145478	Mesembryanthemum crystallinum
CAA63790.1	X93592	Dunaliella bioculata
AAD11617.1	AF050495	Lycopersicon esculentum
AAA34138.1	M96324	Lycopersicon esculentum
AAD11618.1	AF050496	Lycopersicon esculentum
BAA90510.2	AP001111	Oryza sativa
AAF73985.1	AF096871	Zea mays
AAB58910.1	U82966	Oryza sativa
CAB69823.1	AJ271438	Prunus persica
CAC29436.1	AJ310524	Vicia faba
AAD46188.1	AF156691	Nicotiana plumbaginifolia
AAD46186.1	AF156679	Nicotiana plumbaginifolia
CAA47275.1	X66737	Nicotiana plumbaginifolia
AAB17186.1	U72148	Lycopersicon esculentum
AAD29712.1	AF140499	Oryza sativa
CAA59800.1	X85805	Zea mays
AAB35314.2	S79323	Vicia faba
AAA34173.1	M60166	Lycopersicon esculentum
CAA54045.1	X76535	Solanum tuberosum
AAB60276.1	U09989	Zea mays
AAB84202.2	AF029256	Kosteletzkya virginica
AAA34098.1	M80490	Nicotiana plumbaginifolia
CAA59799.1	X85804	Phaseolus vulgaris
AAB41898.1	U84891	Mesembryanthemum crystallinum
AAD55399.1	AF179442	Lycopersicon esculentum
AAF98344.1	AF275745	Lycopersicon esculentum
CAA54046.1	X76536	Solanum tuberosum
AAA34052.1	M27888	Nicotiana plumbaginifolia
CAB69824.1	AJ271439	Prunus persica
AAA34094.1	M80489	Nicotiana plumbaginifolia
BAA06629.1	D31843	Oryza sativa
AAB49042.1	U54690	Dunaliella acidophila
AAK31799.1	AY029190	Lilium longiflorum
CAC29435.1	AJ310523	Vicia faba
BAA37150.1	AB022442	Vicia faba
BAA01058.1	D10207	Oryza sativa
CAB85494.1	AJ132891	Medicago truncatula
CAB85495.1	AJ132892	Medicago truncatula
AAD46187.1	AF156683	Nicotiana plumbaginifolia
BAA08134.1	D45189	Zostera marina
CAA52107.1	X73901	Dunaliella bioculata
AAA34099.1	M80491	Nicotiana plumbaginifolia
AAA20601.1	U08985	Zea mays

AAA20600.1	U08984	Zea mays
AAF97591.1	AF263917	Lycopersicon esculentum
AAA81348.1	U38965	Vicia faba

SEQ ID NO. 1595

AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAC10358.1	AJ277086	Nicotiana tabacum
CAB90633.1	AJ277743	Fagus sylvatica
AAD17804.1	AF092431	Lotus japonicus
CAC10359.1	AJ277087	Nicotiana tabacum
CAC09575.1	AJ298987	Fagus sylvatica
CAA72341.1	Y11607	Medicago sativa
AAD17805.1	AF092432	Lotus japonicus
AAG43835.1	AF213455	Zea mays
AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAC36700.1	AF075582	Mesembryanthemum crystallinum
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAD11430.1	AF097667	Mesembryanthemum crystallinum
CAB90634.1	AJ277744	Fagus sylvatica
AAC35951.1	AF079355	Mesembryanthemum crystallinum
AAB93832.1	U81960	Zea mays
AAC26828.1	AF075603	Oryza sativa
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 1596

AAA32676.1	M37637	Arachis hypogaea
CAA64413.1	X94943	Lycopersicon esculentum
BAA82307.1	AB027753	Nicotiana tabacum
AAB67737.1	L77080	Stylosanthes humilis
AAD37429.2	AF149279	Phaseolus vulgaris
CAA71494.1	Y10468	Spinacia oleracea
AAD37375.1	AF145349	Glycine max
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAA65637.1	L13654	Lycopersicon esculentum
AAF63024.1	AF244921	Spinacia oleracea
AAD37430.1	AF149280	Phaseolus vulgaris
BAA07664.1	D42065	Nicotiana tabacum
BAA07663.1	D42064	Nicotiana tabacum
CAB94692.1	AJ242742	Ipomoea batatas
BAA90365.1	AP001081	Oryza sativa
BAA89584.1	AP001073	Oryza sativa
AAD11481.1	U51191	Glycine max
AAD11482.1	U51192	Glycine max
BAA03644.1	D14997	Oryza sativa
CAB67121.1	Y19023	Lycopersicon esculentum
CAA50597.1	X71593	Lycopersicon esculentum
AAA34108.1	J02979	Nicotiana tabacum
BAA06335.1	D30653	Populus kitakamiensis
CAA40796.1	X57564	Armoracia rusticana
BAA94962.1	AB042103	Asparagus officinalis
BAA01992.1	D11396	Nicotiana tabacum
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
CAC21393.1	AJ401276	Zea mays
BAA08499.1	D49551	Oryza sativa
BAA77387.1	AB024437	Scutellaria baicalensis
CAA59485.1	X85228	Triticum aestivum
BAA11853.1	D83225	Populus nigra
BAA01877.1	D11102	Populus kitakamiensis
BAA14144.1	D90116	Armoracia rusticana
AAB47602.1	L07554	Linum usitatissimum
BAA06334.1	D30652	Populus kitakamiensis
CAC21391.1	AJ401274	Zea mays
AAB41811.1	L36157	Medicago sativa
BAA92500.1	AP001383	Oryza sativa
BAA14143.1	D90115	Armoracia rusticana
CAA80502.1	Z22920	Spirodela polyrrhiza
CAA62225.1	X90692	Medicago sativa
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
CAA62226.1	X90693	Medicago sativa

SEQ ID NO. 1597

CAB08111.1	Z94180	Lycopersicon esculentum
CAA81558.1	Z26949	Solanum tuberosum
AAC72195.1	AF069911	Zea mays
AAG43499.1	AF209924	Lycopersicon esculentum
AAA97411.1	U51918	Pisum sativum
CAA10992.1	AJ222787	Hordeum vulgare

SEQ ID NO. 1600

CAA06309.1	AJ005042	Cicer arietinum
CAA54525.1	X77319	Asparagus officinalis
AAF67342.1	AF229795	Vigna radiata
CAA10128.1	AJ012687	Cicer arietinum
AAB61470.1	AF004812	Mangifera indica
AAC77377.1	AF064786	Carica papaya
AAF21626.1	AF023847	Lycopersicon esculentum
CAA10174.1	AJ012797	Lycopersicon esculentum
CAA10175.1	AJ012798	Lycopersicon esculentum
AAF70821.1	AF154420	Lycopersicon esculentum
AAC25984.1	AF020390	Lycopersicon esculentum
CAA59162.1	X84684	Brassica oleracea
CAA10173.1	AJ012796	Lycopersicon esculentum
AAF70822.1	AF154421	Lycopersicon esculentum
BAB21492.1	AB046543	Pyrus pyrifolia
CAA09457.1	AJ011010	Cicer arietinum
AAF67341.1	AF229794	Vigna radiata
CAA07236.1	AJ006771	Cicer arietinum
CAA10064.1	AJ012578	Carica papaya
AAC28739.1	AF079874	Carica papaya
AAG12249.1	AF184080	Prunus armeniaca
CAA06310.1	AJ005043	Cicer arietinum
AAD45349.1	AF159124	Vitis vinifera

SEQ ID NO. 1602

AAA86950.1	U10044	Pisum sativum
AAA86952.1	U10046	Pisum sativum
CAA50035.1	X70702	Pisum sativum
AAA86951.1	U10045	Pisum sativum
BAA96367.1	AB043975	Panax ginseng
CAB57298.1	Z30162	Solanum tuberosum
CAA48289.1	X68202	Pyrobotrys stellata
AAA86949.1	U10043	Pisum sativum

SEQ ID NO. 1603

AAF01250.1	AF188832	Fragaria x ananassa
AAC33305.1	U89609	Gossypium hirsutum
CAA06492.1	AJ005347	Cicer arietinum
CAA63710.1	X93308	Capsicum annuum
CAA10261.1	AJ130956	Capsicum annuum
CAA10210.1	AJ130829	Capsicum annuum

AAC97494.1	AF079232	Lycopersicon esculentum
AAB67993.1	U73746	Gossypium hirsutum
AAD24540.1	AF113545	Nicotiana tabacum
AAB67994.1	U73747	Gossypium hirsutum
AAA79922.1	U19941	Fragaria x ananassa
CAA75213.1	Y14972	Nicotiana tabacum
CAA76769.1	Y17502	Nicotiana tabacum
AAC97493.1	AF079231	Lycopersicon esculentum
CAA75214.1	Y14973	Nicotiana tabacum
CAA76770.1	Y17503	Nicotiana tabacum
CAB92956.1	AJ401032	Solanum tuberosum
AAB71830.1	AF006197	Lavatera thuringiaca
CAA66900.2	X98244	Zea mays
CAA52903.1	X74947	Medicago sativa
CAA75308.1	Y15036	Medicago truncatula
CAA66901.1	X98245	Zea mays
AAG32468.1	AF308589	Ceratopteris richardii
CAA72183.1	Y11348	Medicago sativa
AAG32467.1	AF308588	Ceratopteris richardii

SEQ ID NO. 1604

AAK17067.1	AF254558	Oryza sativa
BAA89800.1	AB028185	Oryza sativa
BAA89799.1	AB028184	Oryza sativa
BAA89798.1	AB028183	Oryza sativa
BAA89797.1	AB028182	Oryza sativa
BAA89801.1	AB028186	Oryza sativa
AAF68626.1	AF254124	Medicago truncatula
BAA89802.1	AB028187	Oryza sativa
BAA78417.1	AB021178	Nicotiana tabacum

SEQ ID NO. 1606

AAD09209.1	U38247	Glycine soja
AAG37440.1	AY007600	Glycine max
AAG37451.1	AY007611	Glycine tomentella
AAG15418.1	AY007515	Glycine tomentella
AAG15412.1	AY007506	Glycine tomentella
AAG37441.1	AY007601	Glycine tabacina
AAG37443.1	AY007603	Glycine tomentella
AAG37444.1	AY007604	Glycine tomentella
AAG15415.1	AY007510	Glycine tabacina

AAG37438.1	AY007598	Glycine canescens
AAG15416.1	AY007511	Glycine tomentella
AAG37448.1	AY007608	Glycine tomentella
AAF91486.1	AF287476	Glycine tomentella
AAG37446.1	AY007606	Glycine tomentella
AAG37445.1	AY007605	Glycine tomentella
AAG37452.1	AY007612	Glycine tomentella
AAG15413.1	AY007507	Glycine tomentella
AAG37442.1	AY007602	Glycine tabacina
AAG37447.1	AY007607	Glycine tomentella
AAG15417.1	AY007514	Glycine tomentella
AAD09208.1	U38246	Glycine soja
AAG37439.1	AY007599	Glycine canescens
AAG15414.1	AY007509	Glycine tabacina
AAG37449.1	AY007609	Glycine tomentella
AAG37450.1	AY007610	Glycine tomentella
AAG37454.1	AY007614	Glycine tomentella
AAG37453.1	AY007613	Glycine tomentella
CAA42221.1	X59700	Helianthus annuus
AAC49862.1	U72767	Phaseolus vulgaris
CAA31590.1	X13202	Gossypium hirsutum
AAG12980.1	AY007517	Glycine tomentella
AAG12981.1	AY007518	Glycine tomentella
AAG12982.1	AY007519	Glycine tomentella
AAG12979.1	AY007516	Glycine tomentella
AAB01552.1	L47607	Picea glauca
AAD01541.1	AF004810	Glycine max
CAA45506.1	X64145	Lemna gibba

SEQ ID NO. 1609

AAC05921.1	AF031247	Lophopyrum elongatum
CAC00637.1	AJ271620	Prunus persica
AAD02262.1	AF043096	Hordeum vulgare
AAA32952.1	M95810	Hordeum vulgare
AAF01693.1	AF181455	Hordeum vulgare
AAC49658.1	U62486	Prunus persica
AAC49657.1	U34809	Prunus persica
AAD50291.1	AF172263	Prunus dulcis
AAC05923.1	AF031249	Lophopyrum elongatum
AAC05924.1	AF031250	Lophopyrum elongatum
AAF01694.1	AF181456	Hordeum vulgare
AAD02257.1	AF043091	Hordeum vulgare
CAC34554.1	Y07600	Pistacia vera
AAF01698.1	AF181460	Hordeum vulgare
AAD02256.1	AF043090	Hordeum vulgare
AAD02261.1	AF043095	Hordeum vulgare
CAA33361.1	X15287	Hordeum vulgare
CAA44787.1	X63061	Pisum sativum
AAD02258.1	AF043092	Hordeum vulgare
CAA44788.1	X63062	Pisum sativum
AAF60172.1	AF236067	Elaeis guineensis
CAA44789.1	X63063	Pisum sativum
AAD02252.1	AF043086	Hordeum vulgare
AAF01699.1	AF181461	Hordeum vulgare
AAF01692.1	AF181454	Hordeum vulgare
AAB51381.1	U91970	Pisum sativum
CAA51278.1	X72748	Hordeum vulgare
AAF01695.1	AF181457	Hordeum vulgare
CAA33360.1	X15286	Hordeum vulgare
AAF01691.1	AF181453	Hordeum vulgare
AAD02255.1	AF043089	Hordeum vulgare

SEQ ID NO. 1612

AAB36543.1	U77935	Phaseolus vulgaris

SEQ ID NO. 1614

AAD10204.1	AF030260	Vicia sativa
AAG33645.1	AF092917	Vicia sativa
AAG17470.1	AF123609	Triticum aestivum
AAK31592.1	AY029178	Brassica rapa subsp. pekinensis
CAB41474.1	AJ238402	Catharanthus roseus
AAB94586.1	AF022457	Glycine max
AAB94588.1	AF022459	Glycine max
CAA89260.1	Z49263	Pisum sativum
AAG09208.1	AF175278	Pisum sativum
AAC49188.2	U29333	Pisum sativum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
BAA22423.1	AB001380	Glycyrrhiza echinata
BAA74466.1	AB022733	Glycyrrhiza echinata
AAA17732.1	L19074	Catharanthus roseus
BAA93634.1	AB025016	Lotus japonicus

AAF27282.1	AF122821	Capsicum annuum
CAB43505.1	AJ239051	Cicer arietinum
CAA50648.1	X71657	Solanum melongena
BAA84072.1	AB028152	Torenia hybrida
BAA76380.1	AB023636	Glycyrrhiza echinata
CAA72208.1	Y11404	Zea mays
CAA57423.1	X81829	Zea mays
BAB12433.1	AB025030	Coptis japonica

SEQ ID NO. 1620

CAA41774.1	X59046	Oryza sativa
BAA89049.1	AB029401	Citrus unshiu
AAA34196.1	L19762	Lycopersicon esculentum
BAA88905.1	AB022092	Citrus unshiu
AAD28641.1	U73588	Gossypium hirsutum
CAA49428.1	X69773	Vicia faba
CAA09681.1	AJ011535	Lycopersicon esculentum
AAA97572.1	U24088	Solanum tuberosum
CAA09593.1	AJ011319	Lycopersicon esculentum
CAB40794.1	AJ131943	Medicago truncatula
AAC17867.1	AF049487	Medicago sativa
CAB40795.1	AJ131964	Medicago truncatula
CAA65640.1	X96939	Tulipa gesneriana
AAA97571.1	U24087	Solanum tuberosum
CAA63122.1	X92378	Alnus glutinosa
AAA33514.1	L22296	Zea mays
CAA65639.1	X96938	Tulipa gesneriana
AAC41682.1	L03366	Oryza sativa
CAA75793.1	Y15802	Hordeum vulgare
CAA49551.1	X69931	Hordeum vulgare
CAA76056.1	Y16090	Daucus carota
CAA53081.1	X75332	Daucus carota
AAA33515.1	L33244	Zea mays
BAB20799.1	AB045710	Pyrus pyrifolia
CAA03935.1	AJ000153	Triticum aestivum
AAC39323.1	AF030231	Glycine max
BAA01108.1	D10266	Vigna radiata
CAA09910.1	AJ012080	Pisum sativum
AAC28107.1	AF079851	Pisum sativum
CAC32462.1	AJ311496	Pisum sativum
CAA57881.1	X82504	Chenopodium rubrum
CAA26229.1	X02382	Zea mays
CAA26247.1	X02400	Zea mays
CAA46017.1	X64770	Oryza sativa
CAB38022.1	AJ132000	Craterostigma plantagineum
CAA78747.1	Z15028	Oryza sativa
AAF85966.1	AF263384	Saccharum officinarum
CAA46701.1	X65871	Hordeum vulgare
CAA04543.1	AJ001117	Triticum aestivum
BAA88904.1	AB022091	Citrus unshiu
BAA88981.1	AB025778	Citrus unshiu
CAA04512.1	AJ001071	Pisum sativum
CAA76057.1	Y16091	Daucus carota
CAB38021.1	AJ131999	Craterostigma plantagineum
CAA57499.1	X81974	Beta vulgaris
CAA47264.1	X66728	Hordeum vulgare

SEQ ID NO. 1621

AAB69317.1	AF012861	Petroselinum crispum
AAF87216.1	AF231351	Nicotiana tabacum
CAA67782.1	X99405	Nicotiana tabacum
CAB52708.1	AJ010712	Solanum tuberosum
CAB52685.1	AJ132346	Dunaliella bioculata
CAA58775.1	X83923	Solanum tuberosum
CAA03941.1	AJ000184	Spinacia oleracea
CAA03939.1	AJ000182	Spinacia oleracea
CAA04994.1	AJ001772	Nicotiana tabacum
CAA03940.1	AJ000183	Spinacia oleracea
AAD11426.1	AF097663	Mesembryanthemum crystallinum
AAB41552.1	U18238	Medicago sativa subsp. sativa
CAA52442.1	X74421	Solanum tuberosum
AAB69318.1	AF012862	Petroselinum crispum
AAB69319.1	AF012863	Petroselinum crispum
CAA04992.1	AJ001769	Nicotiana tabacum
CAA04993.1	AJ001770	Nicotiana tabacum
BAA97662.1	AB029454	Triticum aestivum
BAA97663.1	AB029455	Triticum aestivum
BAA97664.1	AB029456	Triticum aestivum
AAG23802.1	AF260736	Cucurbita pepo
CAB66330.1	AJ279688	Betula pendula
BAA82155.1	AB011441	Triticum aestivum
CAA06200.1	AJ004900	Glycine max

SEQ ID NO. 1623

CAA81689.1	Z27165	Brassica napus
CAA50218.1	X70868	Cucurbita sp.
CAA50217.1	X70867	Cucurbita sp.
CAA78100.1	Z12114	Zea mays
AAA33450.1	L21007	Zea mays
AAA33452.1	L21006	Zea mays
AAA33451.1	L21008	Zea mays
CAA78101.1	Z12115	Zea mays
CAA77645.1	Z11546	Zea mays
AAB39827.1	U46136	Solanum tuberosum
AAA66365.1	U21139	Chloroplast Pisum sativum
BAA92724.1	AP001389	Oryza sativa
AAA32980.1	M35600	Brassica napus
CAA93139.1	Z68903	Secale cereale
AAA32979.1	M35599	Brassica napus
CAA81736.1	Z27222	Brassica napus
AAC68501.1	AF030515	Canavalia lineata
BAB16318.1	AB049590	Avicennia marina
AAB39828.1	U46137	Solanum tuberosum
CAA89836.1	Z49766	Pseudotsuga menziesii
CAA09989.1	AJ012318	Glycine max

SEQ ID NO. 1624

CAA83436.1	Z31561	Ricinus communis
AAD45391.1	AF167416	Apium graveolens
AAD45390.1	AF167415	Apium graveolens
BAA89458.1	AB036758	Daucus carota
CAA76369.1	Y16768	Daucus carota
CAC19689.1	AJ303199	Daucus carota
AAC99332.1	AF063400	Apium graveolens
CAA47604.1	X67125	Spinacia oleracea
AAF65765.1	AF242307	Euphorbia esula
CAA57727.1	X82276	Nicotiana tabacum
AAF04294.1	AF191024	Asarina barclaiana
CAA53390.1	X75764	Plantago major
AAD41024.1	AF109922	Pisum sativum
CAB07811.1	Z93774	Vicia faba
AAF04295.1	AF191025	Alonsoa meridionalis
CAA48915.1	X69165	Solanum tuberosum
CAA58730.1	X83850	Beta vulgaris
AAD53000.1	U64967	Beta vulgaris
CAA59113.1	X84379	Plantago major
AAD34610.1	AF149981	Nicotiana tabacum
CAA57726.1	X82275	Lycopersicon esculentum
AAG09270.1	AF176950	Lycopersicon esculentum
CAA12256.1	AJ224961	Ricinus communis
AAG25923.1	AF237780	Solanum tuberosum
CAA76367.1	Y16766	Daucus carota
CAA76368.1	Y16767	Daucus carota
CAC19688.1	AJ303198	Daucus carota
AAD55269.1	AF182445	Vitis vinifera
CAB75881.1	AJ272308	Hordeum vulgare
CAC33492.1	AJ310643	Ricinus communis
BAA24071.1	D87819	Oryza sativa
AAF90181.1	AF280050	Oryza sativa subsp. indica
AAG12987.1	AF166498	Lycopersicon esculentum
BAA83501.1	AB008464	Zea mays
CAB75882.1	AJ272309	Hordeum vulgare
AAD45932.1	AF168771	Betula pendula
BAA76434.1	AB025006	Cicer arietinum

SEQ ID NO. 1625

CAA72092.1	Y11209	Nicotiana tabacum
AAD55566.1	AF110784	Volvox carteri f. nagariensis
AAC49896.1	AF027727	Chlamydomonas reinhardtii
AAD02069.1	AF036939	Chlamydomonas reinhardtii
AAB05641.1	U41385	Ricinus communis
AAD28260.1	AF131223	Datisca glomerata
CAC21229.1	AJ277378	Triticum turgidum subsp. durum
CAC21231.1	AJ277380	Triticum turgidum subsp. durum
AAA19660.1	U11496	Triticum aestivum
CAC21230.1	AJ277379	Triticum turgidum subsp. durum
CAC21228.1	AJ277377	Triticum turgidum subsp. durum
BAA92322.1	AB039278	Oryza sativa
CAA77575.1	Z11499	Medicago sativa
BAB18780.1	AB047268	Cucumis sativus

SEQ ID NO. 1626

BAA90610.1	AP001129	Oryza sativa
CAA43454.1	X61146	Nicotiana tabacum

SEQ ID NO. 1627

AAF74566.1	AF215852	Nicotiana tabacum
AAF74567.1	AF215853	Solanum tuberosum
AAF74568.1	AF215854	Zea mays
AAF74565.1	AF215851	Spinacia oleracea

SEQ ID NO. 1630

CAA08798.1	AJ009720	Solanum tuberosum
CAA08797.1	AJ009719	Solanum tuberosum
AAG43546.1	AF211528	Nicotiana tabacum
AAG09951.1	AF175388	Glycine max
AAK28808.1	AF310961	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
AAA50763.1	U15605	Nicotiana glutinosa
AAK28809.1	AF310962	Linum usitatissimum
AAK28804.1	AF310959	Linum usitatissimum
AAG09954.1	AF175399	Glycine max
AAD25966.1	AF093639	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91022.1	U27081	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
AAG01051.1	AF175394	Glycine max
AAD25975.1	AF093648	Linum usitatissimum
AAG01052.1	AF175395	Glycine max
AAD25965.1	AF093638	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
AAG01053.1	AF175396	Glycine max
CAC35330.1	AJ310155	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
AAB47618.1	U73916	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35332.1	AJ310157	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
CAC35321.1	AJ310150	Linum usitatissimum
CAC35326.1	AJ310151	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
AAF61452.1	AF139523	Tagetes erecta
AAK28811.1	AF310966	Linum usitatissimum

SEQ ID NO. 1631

AAF20002.1	AF213936	Prunus dulcis
AAD01600.1	AF016713	Lycopersicon esculentum
AAC32034.1	AF023472	Hordeum vulgare
AAF07875.1	AF140606	Oryza sativa
CAC07206.1	AJ278966	Brassica napus
AAD16016.1	AF080545	Nepenthes alata
AAB69642.1	AF000392	Lotus japonicus
CAA93316.1	Z69370	Cucumis sativus
BAB19760.1	AB052788	Glycine max
BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 1632

AAD43561.1	AF155124	Gossypium hirsutum
AAF63027.1	AF244924	Spinacia oleracea
BAA92500.1	AP001383	Oryza sativa
BAA94962.1	AB042103	Asparagus officinalis
AAB97734.1	AF014502	Glycine max
CAA59487.1	X85230	Triticum aestivum
AAC05277.1	AF049881	Linum usitatissimum
BAA08499.1	D49551	Oryza sativa
AAF63026.1	AF244923	Spinacia oleracea
AAD37430.1	AF149280	Phaseolus vulgaris
BAA11853.1	D83225	Populus nigra

CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA82306.1	AB027752	Nicotiana tabacum
CAB94692.1	AJ242742	Ipomoea batatas
BAA92497.1	AP001383	Oryza sativa
BAA92422.1	AP001366	Oryza sativa
CAA40796.1	X57564	Armoracia rusticana
BAA06335.1	D30653	Populus kitakamiensis
AAB48184.1	L24120	Linum usitatissimum
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
CAB65334.1	AJ250121	Picea abies
CAA62597.1	X91172	Raphanus sativus
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
AAF63025.1	AF244922	Spinacia oleracea
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
AAC98519.1	AF007211	Glycine max
AAB06183.1	M37636	Arachis hypogaea
BAA84764.1	D84400	Oryza sativa
AAC49819.1	AF014468	Oryza sativa
CAA71492.1	Y10466	Spinacia oleracea
CAA71493.1	Y10467	Spinacia oleracea
BAA06334.1	D30652	Populus kitakamiensis
BAA11852.1	D83224	Populus nigra
BAA77389.1	AB024439	Scutellaria baicalensis
CAA62615.1	X91232	Mercurialis annua
AAD37427.1	AF149277	Phaseolus vulgaris
CAA62226.1	X90693	Medicago sativa
BAA92967.1	AP001551	Oryza sativa
AAB02554.1	L37790	Stylosanthes humilis
CAA62227.1	X90694	Medicago sativa
BAA14143.1	D90115	Armoracia rusticana
AAC49821.1	AF014470	Oryza sativa
BAA07241.1	D38051	Populus kitakamiensis
CAB99487.1	AJ276227	Hordeum vulgare
CAA50597.1	X71593	Lycopersicon esculentum
BAA03911.1	D16442	Oryza sativa
CAB67121.1	Y19023	Lycopersicon esculentum

SEQ ID NO. 1633

BAA85819.1	AB026500	Cucumis sativus
AAD31396.1	AF118843	Lycopersicon esculentum
AAC31213.3	AF026267	Nicotiana tabacum
BAB13718.1	AB040406	Zea mays
AAD31397.1	AF118844	Lycopersicon esculentum
AAD37577.1	AF141929	Pelargonium x hortorum
AAC31123.1	AF032448	Malus x domestica
AAD37576.1	AF141928	Pelargonium x hortorum
AAB97160.1	AF022727	Nicotiana tabacum
AAC02213.1	AF043084	Lycopersicon esculentum
AAA85479.1	U41103	Lycopersicon esculentum
AAF28893.1	AF124527	Prunus persica
BAA37136.1	AB015496	Passiflora edulis
AAC39497.1	AF047476	Brassica oleracea
AAF61919.1	AF227742	Mangifera indica
AAC02214.1	AF043085	Lycopersicon esculentum
BAB18937.1	AB052228	Cucumis melo var. reticulatus
BAA85817.1	AB026498	Cucumis sativus
AAB39386.1	U47279	Lycopersicon esculentum
AAD03598.1	AF098272	Vigna radiata
AAB72193.1	AF013979	Oryza sativa
AAB94773.1	AF039746	Pisum sativum
CAA06723.1	AJ005829	Pisum sativum
AAD26899.1	AF055894	Phalaenopsis sp. 'True Lady'
BAA37137.1	AB015497	Passiflora edulis
BAA85818.1	AB026499	Cucumis sativus
AAD12777.1	AF051938	Solanum tuberosum
AAB96765.2	AF039921	Nicotiana tabacum
AAF08300.1	AF113748	Musa acuminata
AAG41977.1	AF311942	Carica papaya
AAD38057.1	AF154119	Rosa hybrid cultivar
AAC31157.1	AF047477	Brassica oleracea
CAA69646.1	Y08359	Rumex palustris
AAB68819.1	U63291	Rumex palustris
BAA96745.1	AB035806	Dianthus caryophyllus
CAB76929.1	AJ276294	Citrus sinensis
BAA90551.1	AB031028	Prunus mume
BAA90552.1	AB031029	Prunus mume

SEQ ID NO. 1634

CAB90633.1	AJ277743	Fagus sylvatica
CAC10358.1	AJ277086	Nicotiana tabacum
CAC10359.1	AJ277087	Nicotiana tabacum
CAC09575.1	AJ298987	Fagus sylvatica
AAC36697.1	AF075579	Mesembryanthemum crystallinum
AAD17804.1	AF092431	Lotus japonicus
CAA72341.1	Y11607	Medicago sativa
AAD17805.1	AF092432	Lotus japonicus
AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAG43835.1	AF213455	Zea mays
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAC36700.1	AF075582	Mesembryanthemum crystallinum
CAB90634.1	AJ277744	Fagus sylvatica
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAB93832.1	U81960	Zea mays
AAC35951.1	AF079355	Mesembryanthemum crystallinum
AAC26828.1	AF075603	Oryza sativa
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 1635

AAG34803.1	AF243368	Glycine max
AAG34798.1	AF243363	Glycine max
AAF64450.1	AF239928	Euphorbia esula
AAG34807.1	AF243372	Glycine max
AAG34796.1	AF243361	Glycine max
AAG34797.1	AF243362	Glycine max
AAG34801.1	AF243366	Glycine max
AAG34804.1	AF243369	Glycine max
AAG34809.1	AF243374	Glycine max
AAG34808.1	AF243373	Glycine max
AAG34810.1	AF243375	Glycine max
AAG34844.1	AF244701	Zea mays
AAG34805.1	AF243370	Glycine max
AAG34831.1	AF244688	Zea mays
AAG34832.1	AF244689	Zea mays
AAG34849.1	AF244706	Zea mays
AAG34802.1	AF243367	Glycine max
CAA09187.1	AJ010448	Alopecurus myosuroides
AAG34829.1	AF244686	Zea mays
CAA09188.1	AJ010449	Alopecurus myosuroides
AAA68430.1	J03679	Solanum tuberosum
AAG34836.1	AF244693	Zea mays
AAG34837.1	AF244694	Zea mays
AAG34800.1	AF243365	Glycine max
AAC18566.1	AF048978	Glycine max
AAC32118.1	AF051214	Picea mariana
AAF22517.1	AF118924	Papaver somniferum
AAF22518.1	AF118925	Papaver somniferum
AAG34806.1	AF243371	Glycine max
CAA04391.1	AJ000923	Carica papaya
AAG34833.1	AF244690	Zea mays
CAA71784.1	Y10820	Glycine max
AAG34847.1	AF244704	Zea mays
AAF22519.1	AF118926	Papaver somniferum

SEQ ID NO. 1636

AAD37699.1	AF145730	Oryza sativa
BAA93461.1	AB028073	Physcomitrella patens
AAF01765.1	AF184278	Glycine max
AAF01764.2	AF184277	Glycine max
BAA93466.1	AB028078	Physcomitrella patens
CAB67118.1	Y17306	Lycopersicon esculentum
AAF73482.1	AF268422	Brassica rapa subsp. pekinensis
AAD37697.1	AF145728	Oryza sativa
BAA21017.1	D26578	Daucus carota
BAA05624.1	D26575	Daucus carota
BAA93460.1	AB028072	Physcomitrella patens
BAA93464.1	AB028076	Physcomitrella patens
BAA93467.1	AB028079	Physcomitrella patens
BAA93465.1	AB028077	Physcomitrella patens
BAA05625.1	D26576	Daucus carota
BAA93468.1	AB028080	Physcomitrella patens
BAA05623.1	D26574	Daucus carota
BAA05622.1	D26573	Daucus carota
AAD37698.1	AF145729	Oryza sativa
CAA64221.1	X94449	Pimpinella brachycarpa
CAA64152.1	X94375	Pimpinella brachycarpa
CAA64491.1	X95193	Pimpinella brachycarpa
BAA93463.1	AB028075	Physcomitrella patens
CAA06728.1	AJ005833	Craterostigma plantagineum
AAD37695.1	AF145726	Oryza sativa
CAA65456.2	X96681	Oryza sativa

AAF19980.1	AF211193	Oryza sativa
AAK31270.1	AC079890	Oryza sativa
CAA63222.1	X92489	Glycine max
CAA06717.1	AJ005820	Craterostigma plantagineum

SEQ ID NO. 1637

AAD16016.1	AF080545	Nepenthes alata

SEQ ID NO. 1638

CAA65987.2	X97322	Pisum sativum
BAA07209.1	D38012	Oryza sativa

SEQ ID NO. 1639

AAC49528.1	U56834	Petroselinum crispum
AAD27591.1	AF121354	Petroselinum crispum
BAA77358.1	AB020023	Nicotiana tabacum
AAD16139.1	AF096299	Nicotiana tabacum
AAC49527.1	U48831	Petroselinum crispum
CAA88326.1	Z48429	Avena fatua
AAC49529.1	U58540	Petroselinum crispum
AAD16138.1	AF096298	Nicotiana tabacum
AAC37515.1	L44134	Cucumis sativus
CAA88331.1	Z48431	Avena fatua
AAF61864.1	AF193771	Nicotiana tabacum
BAA87069.1	AB035271	Matricaria chamomilla
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 1640

AAD10386.1	U72255	Oryza sativa
BAA89481.1	AB029462	Salix gilgiana
CAB85903.1	AJ251646	Pisum sativum
CAA49513.1	X69887	Brassica napus
AAB82772.2	AF001523	Musa acuminata
AAF08679.1	AF004838	Musa acuminata
CAA82271.1	Z28697	Nicotiana tabacum
AAA18928.1	U01901	Solanum tuberosum
AAC19114.1	AF067863	Solanum tuberosum
AAA90953.1	U30323	Triticum aestivum
AAA03618.1	M80608	Lycopersicon esculentum
AAA51643.1	M23120	Nicotiana plumbaginifolia
AAA34078.1	M63634	Nicotiana plumbaginifolia
CAA30261.1	X07280	Nicotiana plumbaginifolia
AAD10384.1	U72253	Oryza sativa
AAA88794.1	U01900	Solanum tuberosum
AAA32939.1	M62907	Hordeum vulgare
AAC14399.1	AF030771	Hordeum vulgare
AAA87456.1	U22147	Hevea brasiliensis
AAD10381.1	U72250	Oryza sativa
AAD33881.1	AF141654	Nicotiana tabacum
AAA03617.1	M80604	Lycopersicon esculentum
CAB38443.1	AJ133470	Hevea brasiliensis
AAA63542.1	M59443	Nicotiana tabacum
AAA63539.1	M60402	Nicotiana tabacum
AAA63541.1	M59442	Nicotiana tabacum
AAA63540.1	M60403	Nicotiana tabacum
CAA37289.1	X53129	Phaseolus vulgaris
CAA57255.1	X81560	Nicotiana tabacum
CAB91554.1	AJ277900	Vitis vinifera
AAA19111.1	U01902	Solanum tuberosum
AAB86541.1	AF030166	Oryza sativa
AAC39322.1	U96096	Hordeum vulgare
AAD33880.1	AF141653	Nicotiana tabacum

SEQ ID NO. 1641

AAF97510.1	AF246266	Lycopersicon esculentum
AAD30549.1	AF136580	Lycopersicon esculentum
AAF97509.1	AF246266	Lycopersicon esculentum
AAD30548.1	AF136579	Lycopersicon esculentum
AAC17441.1	AF065444	Pisum sativum
AAF61374.1	AF133267	Thlaspi caerulescens
AAG09635.1	AY007281	Medicago truncatula

SEQ ID NO. 1642

AAG43549.1	AF211531	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
AAF63205.1	AF245119	Mesembryanthemum crystallinum
BAB16083.1	AB036883	Oryza sativa
BAB03248.1	AB037183	Oryza sativa
CAC12822.1	AJ299252	Nicotiana tabacum
BAA07321.1	D38123	Nicotiana tabacum

AAF23899.1	AF193803	Oryza sativa
AAG43545.1	AF211527	Nicotiana tabacum
AAC62619.1	AF057373	Nicotiana tabacum

SEQ ID NO. 1643

AAA74360.1	L33912	Zea mays
AAC05981.1	AF049706	Chloroplast Glycine max
AAC05983.1	AF049708	Glycine max
BAA11417.1	D78573	Oryza sativa
AAA74361.1	L33913	Zea mays
AAA16972.1	L11529	Daucus carota
AAD41796.1	AF135862	Glycine max
BAA95630.1	AB042521	Oryza sativa

SEQ ID NO. 1644

AAG43545.1	AF211527	Nicotiana tabacum
AAF63205.1	AF245119	Mesembryanthemum crystallinum
BAA07321.1	D38123	Nicotiana tabacum
BAA97122.1	AB016264	Nicotiana sylvestris
BAA87068.1	AB035270	Matricaria chamomilla
BAA97124.1	AB016266	Nicotiana sylvestris
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
AAC62619.1	AF057373	Nicotiana tabacum
BAA97123.1	AB016265	Nicotiana sylvestris
AAC24587.1	AF071893	Prunus armeniaca
CAC12822.1	AJ299252	Nicotiana tabacum
AAF76898.1	AF274033	Atriplex hortensis
AAD00708.1	U91857	Stylosanthes hamata
BAA76734.1	AB024575	Nicotiana tabacum
BAB03248.1	AB037183	Oryza sativa
BAB16083.1	AB036883	Oryza sativa
AAF23899.1	AF193803	Oryza sativa
AAF05606.1	AF190770	Oryza sativa
BAA78738.1	AB023482	Oryza sativa
AAG43548.1	AF211530	Nicotiana tabacum
AAG43549.1	AF211531	Nicotiana tabacum
BAA99376.1	AP002526	Oryza sativa
AAK01089.1	AF298231	Hordeum vulgare

SEQ ID NO. 1645

AAC32034.1	AF023472	Hordeum vulgare
AAD01600.1	AF016713	Lycopersicon esculentum
AAF07875.1	AF140606	Oryza sativa
AAF20002.1	AF213936	Prunus dulcis
CAC07206.1	AJ278966	Brassica napus
BAB19760.1	AB052788	Glycine max
BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
AAB69642.1	AF000392	Lotus japonicus
CAA93316.1	Z69370	Cucumis sativus
AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 1646

AAD00829.1	U96736	Selaginella lepidophylla

SEQ ID NO. 1647

AAC49326.1	U19924	Zinnia elegans
AAA21135.1	U13256	Nicotiana alata
CAA10130.1	AJ012689	Cicer arietinum
AAF82615.1	AF157011	Prunus dulcis
AAG09465.1	AF227522	Prunus dulcis
BAA08475.1	D49529	Pyrus pyrifolia
AAC49325.1	U19923	Zinnia elegans
CAA55896.1	X79338	Lycopersicon esculentum
CAB40355.1	Y17446	Lycopersicon esculentum
CAB40353.1	Y17444	Lycopersicon esculentum
CAA55895.1	X79337	Lycopersicon esculentum
AAB58719.1	AF000940	Hordeum vulgare
BAB19803.1	AB052842	Oryza sativa
BAB19804.1	AB052843	Oryza sativa
BAB19805.1	AB052844	Oryza sativa
CAB40354.1	Y17445	Lycopersicon esculentum
AAB58718.1	AF000939	Hordeum vulgare
BAA10891.1	D64011	Luffa cylindrica
BAA10892.1	D64012	Luffa cylindrica
AAG21384.1	AF301533	Petunia integrifolia
BAA08474.1	D49528	Pyrus pyrifolia
AAA60466.1	U07363	Petunia x hybrida
AAK15437.1	AF239910	Petunia axillaris
AAF36980.1	AF232304	Solanum chacoense

AAA60465.1	U07362	Petunia x hybrida
BAA24018.1	D63888	Nicotiana alata
AAF05729.1	AF191732	Solanum chacoense
AAD56217.1	AF176533	Solanum chacoense

SEQ ID NO. 1649

AAC49528.1	U56834	Petroselinum crispum
BAA77358.1	AB020023	Nicotiana tabacum
AAD16139.1	AF096299	Nicotiana tabacum
AAD27591.1	AF121354	Petroselinum crispum
AAC37515.1	L44134	Cucumis sativus
AAC49527.1	U48831	Petroselinum crispum
CAA88326.1	Z48429	Avena fatua
AAC49529.1	U58540	Petroselinum crispum
CAA88331.1	Z48431	Avena fatua
AAD16138.1	AF096298	Nicotiana tabacum
AAF61864.1	AF193771	Nicotiana tabacum
BAA87069.1	AB035271	Matricaria chamomilla
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 1650

BAA85440.1	AP000616	Oryza sativa
CAB53493.1	AJ245900	Oryza sativa

SEQ ID NO. 1654

AAD51854.1	AF178990	Vitis riparia
AAB00555.1	U54704	Phaseolus vulgaris

SEQ ID NO. 1659

AAF62403.1	AF212183	Nicotiana tabacum
CAA68848.1	Y07563	Nicotiana tabacum
AAB97367.1	AF039532	Oryza sativa

SEQ ID NO. 1665

AAF22517.1	AF118924	Papaver somniferum
AAF22518.1	AF118925	Papaver somniferum
AAF22519.1	AF118926	Papaver somniferum
AAF29773.1	AF159229	Gossypium hirsutum
AAG34838.1	AF244695	Zea mays
AAG34795.1	AF243360	Glycine max
AAG34842.1	AF244699	Zea mays
AAG34840.1	AF244697	Zea mays
AAG34848.1	AF244705	Zea mays
AAG34833.1	AF244690	Zea mays
AAC32118.1	AF051214	Picea mariana
AAD10129.1	AF004358	Aegilops tauschii
AAG34850.1	AF244707	Zea mays
AAG34830.1	AF244687	Zea mays
AAG34839.1	AF244696	Zea mays
CAA09188.1	AJ010449	Alopecurus myosuroides
AAG34835.1	AF244692	Zea mays
AAG34828.1	AF244685	Zea mays
CAA09187.1	AJ010448	Alopecurus myosuroides
CAA09189.1	AJ010450	Alopecurus myosuroides
AAG34847.1	AF244704	Zea mays
AAG34846.1	AF244703	Zea mays
AAG34834.1	AF244691	Zea mays
AAG34841.1	AF244698	Zea mays
AAG34845.1	AF244702	Zea mays
AAG34797.1	AF243362	Glycine max
AAG34798.1	AF243363	Glycine max
AAG34809.1	AF243374	Glycine max
AAC32139.1	AF051238	Picea mariana
AAG34844.1	AF244701	Zea mays
AAG34843.1	AF244700	Zea mays
AAG34807.1	AF243372	Glycine max
AAF64450.1	AF239928	Euphorbia esula
AAG34801.1	AF243366	Glycine max

SEQ ID NO. 1667

AAB69642.1	AF000392	Lotus japonicus
AAD01600.1	AF016713	Lycopersicon esculentum
AAC32034.1	AF023472	Hordeum vulgare
AAF20002.1	AF213936	Prunus dulcis
AAF07875.1	AF140606	Oryza sativa
CAC07206.1	AJ278966	Brassica napus
CAA93316.1	Z69370	Cucumis sativus
BAB19757.1	AB052785	Glycine max
BAB19760.1	AB052788	Glycine max
BAB19756.1	AB052784	Glycine max
AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 1668

AAK21965.1	AY028699	Brassica napus
AAD21872.1	AF078082	Phaseolus vulgaris
AAA33915.1	L27821	Oryza sativa
BAA82556.1	AB030083	Populus nigra
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
AAG03090.1	AC073405	Oryza sativa
AAB93834.1	U82481	Zea mays
AAF66615.1	AF142596	Nicotiana tabacum
AAG25966.1	AF302082	Nicotiana tabacum
AAB09771.1	U67422	Zea mays
AAF34428.1	AF172282	Oryza sativa
AAC23542.1	U20948	Ipomoea trifida
BAA94516.1	AP001800	Oryza sativa
CAA73134.1	Y12531	Brassica oleracea
BAA92954.1	AP001551	Oryza sativa
AAG16628.1	AY007545	Brassica napus
CAB51834.1	00069	Oryza sativa
BAA06538.1	D31737	Nicotiana tabacum
CAA73133.1	Y12530	Brassica oleracea
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
BAA92837.1	AB032474	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
AAA62232.1	U00443	Brassica napus
BAA23676.1	AB000970	Brassica rapa
BAA07577.2	D38564	Brassica rapa
CAA74662.1	Y14286	Brassica oleracea
BAA07576.1	D38563	Brassica rapa

SEQ ID NO. 1669

AAG43998.1	AF215837	Apium graveolens var. dulce
AAF74566.1	AF215852	Nicotiana tabacum
AAF74565.1	AF215851	Spinacia oleracea
AAF74567.1	AF215853	Solanum tuberosum
AAF74568.1	AF215854	Zea mays

CAA09419.1	AJ010942	Lycopersicon esculentum
CAA68813.1	Y07520	Chlorella kessleri
CAB52689.1	AJ132224	Lycopersicon esculentum
BAB19864.1	AB052885	Oryza sativa
CAA39036.1	X55349	Chlorella kessleri
CAA47324.1	X66856	Nicotiana tabacum
AAA79761.1	L08196	Ricinus communis
AAA79857.1	L08188	Ricinus communis
CAB06079.1	Z83829	Picea abies
CAA53192.1	X75440	Chlorella kessleri
CAA70777.1	Y09590	Vitis vinifera
CAA04511.1	AJ001061	Vitis vinifera
CAB07812.1	Z93775	Vicia faba
BAB19863.1	AB052884	Oryza sativa
BAB19862.1	AB052883	Oryza sativa
AAB06594.1	U38651	Medicago truncatula
BAA85398.1	AP000615	Oryza sativa
AAD55054.1	AF173655	Beta vulgaris
CAB52690.1	AJ132225	Lycopersicon esculentum

SEQ ID NO. 1673

AAG00510.1	AF285172	Phaseolus vulgaris
CAA97692.1	Z73295	Catharanthus roseus
CAB51834.1	00069	Oryza sativa
AAK21965.1	AY028699	Brassica napus
AAF91323.1	AF244889	Glycine max
AAF59906.1	AF197947	Glycine max
AAF91324.1	AF244890	Glycine max
AAF91322.1	AF244888	Glycine max
AAF59905.1	AF197946	Glycine max
AAK11567.1	AF318491	Lycopersicon hirsutum
AAK11569.1	AF318493	Lycopersicon hirsutum
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAK11566.1	AF318490	Lycopersicon hirsutum
AAC36318.1	AF053127	Malus x domestica
AAB09771.1	U67422	Zea mays
AAB47421.1	U59316	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
AAG03090.1	AC073405	Oryza sativa

BAA94509.1	AB041503	Populus nigra
AAF76314.1	AF220603	Lycopersicon esculentum
BAA94510.1	AB041504	Populus nigra
AAG25966.1	AF302082	Nicotiana tabacum
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
AAB47424.1	U59317	Lycopersicon pimpinellifolium
BAA78764.1	AB023482	Oryza sativa
AAB47422.1	U59318	Lycopersicon esculentum

SEQ ID NO. 1674

AAD10836.1	U52079	Solanum tuberosum
BAA83352.1	AP000391	Oryza sativa
BAA90508.1	AP001111	Oryza sativa
BAA90507.1	AP001111	Oryza sativa

SEQ ID NO. 1675

AAF20931.1	AF206721	Brassica juncea
BAA07734.1	D43624	Nicotiana tabacum
AAA33119.1	J04494	Cucumis sativus
CAA75577.1	Y15295	Medicago truncatula
AAF35911.2	AF233594	Cucumis melo
CAA39300.1	X55779	Cucurbita sp.
BAA09528.1	D55677	Cucurbita maxima
AAF35910.1	AF233593	Cucumis melo
CAA71275.1	Y10226	Cucumis melo
AAF20932.1	AF206722	Brassica juncea
AAF20933.1	AF206723	Brassica juncea
CAA71273.1	Y10224	Cucumis melo
CAA71274.1	Y10225	Cucumis melo
BAA20520.1	AB004799	Oryza sativa
AAF33751.1	AF202460	Capsicum annuum
AAB17193.1	U73105	Liriodendron tulipifera
AAB17191.1	U73103	Liriodendron tulipifera
AAC49536.1	U43542	Nicotiana tabacum
AAB17194.1	U73106	Liriodendron tulipifera
AAB17192.1	U73104	Liriodendron tulipifera
AAB09228.1	U12757	Acer pseudoplatanus
CAA45554.1	X64257	Brassica napus
AAC49538.1	U45243	Nicotiana tabacum
AAC49537.1	U43543	Nicotiana tabacum
AAD02557.1	AF049931	Petunia x hybrida

SEQ ID NO. 1677

AAG08959.1	AF122051	Solanum tuberosum
AAG08960.1	AF122052	Solanum tuberosum
AAG08961.1	AF122053	Solanum tuberosum
AAF67053.1	AF190304	Adiantum raddianum
AAF67052.1	AF190303	Adiantum raddianum
AAF34434.1	AF172282	Oryza sativa
CAA78388.1	Z13998	Petunia x hybrida
AAF67051.1	AF190302	Secale cereale
AAF67050.1	AF190301	Secale cereale
AAG28525.1	AF198498	Nicotiana tabacum
AAK19619.1	AF336286	Gossypium hirsutum
CAA64615.1	X95297	Lycopersicon esculentum
BAA81730.1	AB029159	Glycine max
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
CAB40189.1	AJ133638	Avena sativa
AAG28526.1	AF198499	Nicotiana tabacum
AAD31395.1	AF114162	Lolium temulentum
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
CAA61021.1	X87690	Hordeum vulgare
AAG22863.1	AY008692	Hordeum vulgare
BAA96421.1	AB044084	Triticum aestivum
BAA81733.2	AB029162	Glycine max
BAA81736.1	AB029165	Glycine max
CAA72218.1	Y11415	Oryza sativa
CAA67000.1	X98355	Oryza sativa
CAA78387.1	Z13997	Petunia x hybrida
CAA72217.1	Y11414	Oryza sativa
BAA23341.1	D88621	Oryza sativa
CAA64614.1	X95296	Lycopersicon esculentum
AAK19616.1	AF336283	Gossypium hirsutum
CAA78386.1	Z13996	Petunia x hybrida
CAA67575.1	X99134	Lycopersicon esculentum
BAA88222.1	AB028650	Nicotiana tabacum

SEQ ID NO. 1679

CAA57773.1	X82329	Arachis hypogaea
AAD54935.1	AF141373	Petroselinum crispum

AAD54936.1	AF141374	Petroselinum crispum
AAF00131.1	AF147091	Fragaria x ananassa
AAC95376.1	AF105426	Cynodon dactylon
BAA95846.1	AP002070	Oryza sativa
AAA32986.1	M95835	Brassica napus
AAF69783.1	AF135143	Arabis lemmonii
AAF69775.1	AF135135	Arabis drummondii
AAF69792.1	AF135152	Arabis parishii
AAC95375.1	AF105425	Cynodon dactylon
AAF69785.1	AF135145	Arabis lignifera
AAF69770.1	AF135130	Arabis holboellii
AAF69781.1	AF135141	Arabis gunnisoniana
AAF69777.1	AF135137	Arabis fecunda
AAF69790.1	AF135150	Arabis microphylla
AAF69787.1	AF135147	Arabis lignifera
AAF69772.1	AF135132	Arabis gunnisoniana
AAF69782.1 perplexa	AF135142	Halimolobos perplexa var.
AAF69784.1	AF135144	Arabis lemmonii
AAF69788.1	AF135148	Arabis lyallii
BAA03750.1	D16222	Oryza sativa
AAF69776.1	AF135136	Arabis fecunda
CAA40107.1	X56787	Oryza sativa
BAB13369.1	AB048531	Psophocarpus tetragonolobus
AAF69778.1	AF135138	Arabis glabra
AAF69786.1	AF135146	Arabis lignifera
BAA82826.1	AB023464	Arabis gemmifera
AAF69773.1	AF135133	Arabis blepharophylla
AAF69791.1	AF135151	Arabis microphylla
AAF69793.1	AF135153	Arabis parishii
CAA39535.1	X56063	Oryza sativa
BAA03749.1	D16221	Oryza sativa
AAF69789.1	AF135149	Arabis microphylla
CAA71402.1	Y10373	Medicago truncatula
AAC16010.1	AF061805	Elaeagnus umbellata
CAA53626.1	X76041	Triticum aestivum
BAA33971.1	AB008892	Nicotiana tabacum
CAA47921.1	X67693	Solanum tuberosum
AAF69780.1	AF135140	Arabis glabra
BAB18519.1	AB051578	Secale cereale
AAA51377.1	L37289	Oryza sativa
AAB41324.1	U83591	Medicago sativa
CAC17793.1	AJ301671	Nicotiana sylvestris
AAB41325.1	U83592	Medicago sativa
AAB23263.1	S43926	Phaseolus vulgaris
AAA33756.1	M13968	Phaseolus vulgaris
CAA35945.1	X51599	Nicotiana tabacum
AAA34070.1	M15173	Nicotiana tabacum
CAA45822.1	X64519	Nicotiana tabacum

SEQ ID NO. 1680

BAA85400.1	AP000615	Oryza sativa
CAB06083.1	Z83834	Hordeum vulgare
CAA74909.1	Y14573	Hordeum vulgare
CAA06487.1	AJ005341	Linum usitatissimum

SEQ ID NO. 1681

BAA82107.1	AB022693	Nicotiana tabacum
AAC31956.1	AF080595	Pimpinella brachycarpa
AAD55974.1	AF121353	Petroselinum crispum
BAA77383.1	AB020590	Nicotiana tabacum
AAC49527.1	U48831	Petroselinum crispum
CAA88326.1	Z48429	Avena fatua
AAD16139.1	AF096299	Nicotiana tabacum
BAA86031.1	AB026890	Nicotiana tabacum
AAC37515.1	L44134	Cucumis sativus
AAF23898.1	AF193802	Oryza sativa
AAD16138.1	AF096298	Nicotiana tabacum
AAC49529.1	U58540	Petroselinum crispum
CAA88331.1	Z48431	Avena fatua
AAC49528.1	U56834	Petroselinum crispum
AAG35658.1	AF204925	Petroselinum crispum
BAB16432.1	AB041520	Nicotiana tabacum
BAA77358.1	AB020023	Nicotiana tabacum
AAG35659.1	AF204926	Petroselinum crispum
AAD27591.1	AF121354	Petroselinum crispum
CAB66338.1	AJ279697	Betula pendula
AAF61864.1	AF193771	Nicotiana tabacum
BAA87069.1	AB035271	Matricaria chamomilla
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 1682

CAC19877.1	AJ401089	Brassica napus
CAA96523.1	Z72153	Brassica napus
CAA64327.1	X94624	Brassica napus
CAA06820.1	AJ006025	Cicer arietinum
AAC24504.1	AF041050	Populus tremuloides
AAF37734.1	AF052223	Lolium perenne
BAA08366.2	D49367	Lithospermum erythrorhizon
CAA31696.1	X13324	Petroselinum crispum
AAF91309.1	AF239686	Rubus idaeus
CAA31697.1	X13325	Petroselinum crispum
AAC24503.1	AF041049	Populus tremuloides
AAB42382.1	U39404	Pinus taeda
AAA92669.1	U12013	Pinus taeda
AAB42383.1	U39405	Pinus taeda
AAC39366.1	AF008184	Populus x generosa
AAF37733.1	AF052222	Lolium perenne
AAC39365.1	AF008183	Populus x generosa
CAA36850.1	X52623	Oryza sativa
AAA92668.1	U12012	Pinus taeda
AAF91308.1	AF239685	Rubus idaeus
BAA08365.1	D49366	Lithospermum erythrorhizon
AAA33842.1	M62755	Solanum tuberosum
AAF37732.1	AF052221	Lolium perenne
AAF91310.1	AF239687	Rubus idaeus
CAA49575.1	X69954	Glycine max
CAB97359.1	AJ278455	Juglans nigra
AAF74018.2	AF144525	Tsuga canadensis
AAF74016.2	AF144523	Nothotsuga longibracteata
AAF74019.2	AF144526	Tsuga canadensis
AAF73997.2	AF144504	Picea smithiana
AAF74022.2	AF144529	Cedrus atlantica
AAF73995.2	AF144502	Pinus armandii
AAF73994.2	AF144501	Pinus armandii
AAF73996.2	AF144503	Pinus armandii
AAF74004.2	AF144511	Pseudotsuga sinensis
AAF74002.2	AF144509	Pseudotsuga sinensis
AAF74020.2	AF144527	Pseudolarix amabilis
AAF74017.2	AF144524	Tsuga mertensiana
AAF74008.2	AF144515	Abies firma

SEQ ID NO. 1684

CAA55128.1	X78325	Nicotiana tabacum
CAA54373.1	X77110	Nicotiana tabacum
CAA54374.1	X77111	Nicotiana tabacum

SEQ ID NO. 1685

CAB55394.1	AL117264	Oryza sativa
BAA78563.1	AB024338	Atriplex lentiformis
AAB97470.1	AF042489	Oryza sativa
AAA33030.1	M93041	Mesembryanthemum crystalli
CAB65371.1	AJ250834	Pisum sativum
CAB55559.1	AJ237943	Triticum aestivum
CAB65370.1	AJ250833	Pisum sativum
CAB55558.1	AJ237942	Triticum aestivum
AAD43971.1	AF141878	Oryza sativa
AAD43973.1	AF141880	Oryza sativa
AAC04837.1	AF032976	Oryza sativa
AAG00425.1	AF250933	Hordeum vulgare
AAD43972.1	AF141879	Oryza sativa
CAA63659.1	X93171	Hordeum vulgare
AAC04833.1	AF032972	Oryza sativa
AAC04834.1	AF032973	Oryza sativa
AAC04832.1	AF032971	Oryza sativa
AAG00426.1	AF250934	Hordeum vulgare
AAG00427.1	AF250935	Hordeum vulgare
AAF34811.1	AF005084	Triticum aestivum
AAC04835.1	AF032974	Oryza sativa
BAB39965.1	AP003018	Oryza sativa
BAB39980.1	AP003020	Oryza sativa
AAG00428.1	AF250936	Hordeum vulgare
AAA20245.1	U01963	Hordeum vulgare
CAC19429.1	AJ291825	Lolium perenne
AAA34270.1	M63223	Triticum aestivum
AAA34268.1	M21962	Triticum aestivum
CAA74595.1	Y14203	Hordeum vulgare
AAG00429.1	AF250937	Hordeum vulgare
CAB65369.1	AJ250832	Pisum sativum
AAA32959.1	L15737	Hordeum vulgare
CAA71052.1	Y09917	Triticum aestivum
AAA34271.1	M63224	Triticum aestivum
CAA71050.1	Y09915	Triticum aestivum
BAA86880.1	AB028454	Barbula unguiculata

AAF03355.1	AF132671	Nicotiana plumbaginifolia
BAA25197.1	AB012138	Lycopersicon esculentum
AAC78470.1	AF067731	Solanum tuberosum
AAC25777.1	AF072694	Oryza sativa
AAC99473.1	AF039201	Pinus caribaea
CAA71051.1	Y09916	Triticum aestivum
AAC05146.1	AF049065	Pinus radiata
CAC34417.1	AJ311624	Pisum sativum

SEQ ID NO. 1688

AAA85440.1	U32624	Sorghum bicolor
AAF27289.1	AF140613	Manihot esculenta
AAF27290.1	AF140614	Manihot esculenta
AAD03415.1	AF069494	Sinapis alba
AAF66543.1	AF140609	Triglochin maritimum
AAF66544.1	AF140610	Triglochin maritimum
BAA92894.1	AB006790	Petunia x hybrida
AAB94587.1	AF022458	Glycine max
AAC32274.1	AF081575	Petunia x hybrida
AAD56282.1	AF155332	Petunia x hybrida
CAA64635.1	X95342	Nicotiana tabacum
CAA50155.1	X70824	Solanum melongena
AAG44132.1	AF218296	Pisum sativum
AAA32913.1	M32885	Persea americana
BAA84071.1	AB028151	Antirrhinum majus
AAD38930.1	AF135485	Glycine max
AAB17562.1	U72654	Eustoma grandiflorum
CAA65580.1	X96784	Nicotiana tabacum
BAA93634.1	AB025016	Lotus japonicus
AAB94590.1	AF022461	Glycine max
BAA12159.1	D83968	Glycine max
AAG14962.1	AF214008	Brassica napus
BAA74465.1	AB022732	Glycyrrhiza echinata
BAA22422.1	AB001379	Glycyrrhiza echinata
AAG14961.1	AF214007	Brassica napus
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAB94593.1	AF022464	Glycine max
BAA13076.1	D86351	Glycine max
CAA50647.1	X71656	Solanum melongena

SEQ ID NO. 1689

BAA85400.1	AP000615	Oryza sativa
CAA74909.1	Y14573	Hordeum vulgare
CAB06083.1	Z83834	Hordeum vulgare
CAA06487.1	AJ005341	Linum usitatissimum

SEQ ID NO. 1690

AAA33280.1	L20475	Datura stramonium
AAA33281.1	L20473	Datura stramonium
BAA85844.1	AB026544	Hyoscyamus niger
CAC34420.1	AJ307584	Solanum tuberosum
BAA13547.1	D88156	Hyoscyamus niger
AAA33282.1	L20474	Datura stramonium
BAA85845.1	AB026545	Hyoscyamus niger
AAB09776.1	L20485	Hyoscyamus niger
CAB52307.1	AJ245634	Solanum tuberosum
CAC19810.1	AJ292343	Solanum tuberosum
CAA45866.1	X64566	Cuphea lanceolata
CAA45793.1	X64463	Brassica napus
AAB82767.1	U89509	Zea mays
AAB82766.1	U89510	Hordeum vulgare
AAB20114.2	S60064	Brassica napus
CAA74176.1	Y13861	Nicotiana tabacum
AAB82764.1	U89511	Allium porrum
AAC78100.1	AF093628	Oryza sativa
CAA74177.1	Y13862	Nicotiana tabacum

SEQ ID NO. 1691

AAD55979.1	AF159296	Lycopersicon esculentum
CAA84230.1	Z34465	Zea mays
AAD55980.1	AF159297	Zea mays

SEQ ID NO. 1695

AAG24641.1	AF308736	Daucus carota
AAF68627.1	AF255052	Triticum aestivum
CAA40204.1	X56882	Triticum aestivum
AAA83402.1	U05226	Zea mays
AAD49719.1	AF166485	Glycine max
AAA63614.1	M62989	Craterostigma plantagineum
AAF68628.1	AF255053	Triticum aestivum
CAA03925.1	AJ000100	Hordeum vulgare

AAA85367.1	L42465	Picea glauca
AAA34267.1	M72395	Triticum aestivum

SEQ ID NO. 1696

AAG10793.1	AF296158	Citrus unshiu
AAG33636.1	AF315289	Citrus unshiu
AAG10430.1	AF251018	Tagetes erecta
CAB55625.1	Y14809	Lycopersicon esculentum
CAA70888.1	Y09722	Capsicum annuum
CAB55626.1	Y14810	Lycopersicon esculentum
CAA70427.1	Y09225	Capsicum annuum
CAC06712.1	AJ278882	Narcissus pseudonarcissus
AAD54243.1	AF162276	Haematococcus pluvialis

SEQ ID NO. 1697

CAB63264.1	AJ251808	Lotus japonicus
AAG43547.1	AF211529	Nicotiana tabacum
AAD10245.1	AF030033	Phaseolus vulgaris
AAA92681.1	U13882	Pisum sativum
CAA78301.1	Z12839	Lilium longiflorum
AAA19571.1	U10150	Brassica napus
AAD10244.1	AF030032	Phaseolus vulgaris
AAA85157.1	U20297	Solanum tuberosum
AAA85156.1	U20296	Solanum tuberosum
AAA62351.1	U20295	Solanum tuberosum
AAA85155.1	U20294	Solanum tuberosum
AAC49587.1	U49105	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49585.1	U49103	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum
AAC49580.1	U48689	Triticum aestivum
AAC49579.1	U48688	Triticum aestivum
AAC49578.1	U48242	Triticum aestivum
CAA78287.1	Z12827	Oryza sativa

SEQ ID NO. 1708

AAD21872.1	AF078082	Phaseolus vulgaris
CAA73134.1	Y12531	Brassica oleracea
AAB93834.1	U82481	Zea mays
CAA67145.1	X98520	Brassica oleracea
AAC23542.1	U20948	Ipomoea trifida

CAA73133.1	Y12530	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
CAA74662.1	Y14286	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
AAA33008.1	M97667	Brassica napus
AAA62232.1	U00443	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napu
BAA92836.1	AB032473	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
BAA92837.1	AB032474	Brassica oleracea
BAA07577.2	D38564	Brassica rapa
BAA07576.1	D38563	Brassica rapa
BAB21001.1	AB054061	Brassica rapa
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
AAD52097.1	AF088885	Nicotiana tabacum
CAA79324.1	Z18884	Brassica oleracea
AAK21965.1	AY028699	Brassica napus
AAF66615.1	AF142596	Nicotiana tabacum
AAG03090.1	AC073405	Oryza sativa
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra

SEQ ID NO. 1711

AAF63026.1	AF244923	Spinacia oleracea
AAF63027.1	AF244924	Spinacia oleracea
BAA94962.1	AB042103	Asparagus officinalis
BAA92500.1	AP001383	Oryza sativa
AAF63025.1	AF244922	Spinacia oleracea
CAA62615.1	X91232	Mercurialis annua
BAA92422.1	AP001366	Oryza sativa
BAA92497.1	AP001383	Oryza sativa
CAB65334.1	AJ250121	Picea abies
AAD43561.1	AF155124	Gossypium hirsutum
CAA71492.1	Y10466	Spinacia oleracea
BAA82306.1	AB027752	Nicotiana tabacum
BAA14143.1	D90115	Armoracia rusticana

CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAD37430.1	AF149280	Phaseolus vulgaris
BAA06335.1	D30653	Populus kitakamiensis
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
AAB02554.1	L37790	Stylosanthes humilis
BAA07241.1	D38051	Populus kitakamiensis
BAA06334.1	D30652	Populus kitakamiensis
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
BAA11853.1	D83225	Populus nigra
CAB94692.1	AJ242742	Ipomoea batatas
BAA92967.1	AP001551	Oryza sativa
CAA62226.1	X90693	Medicago sativa
BAA11852.1	D83224	Populus nigra
AAC05277.1	AF049881	Linum usitatissimum
BAA77389.1	AB024439	Scutellaria baicalensis
AAB47602.1	L07554	Linum usitatissimum
AAC98519.1	AF007211	Glycine max
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
CAA40796.1	X57564	Armoracia rusticana
CAA59487.1	X85230	Triticum aestivum
AAB48184.1	L24120	Linum usitatissimum
BAA08499.1	D49551	Oryza sativa
CAA62227.1	X90694	Medicago sativa
AAD37427.1	AF149277	Phaseolus vulgaris
AAB06183.1	M37636	Arachis hypogaea
BAA77388.1	AB024438	Scutellaria baicalensis
AAC49819.1	AF014468	Oryza sativa
CAA71493.1	Y10467	Spinacia oleracea
CAA62597.1	X91172	Raphanus sativus
BAA03911.1	D16442	Oryza sativa
AAC49821.1	AF014470	Oryza sativa
CAA71491.1	Y10465	Spinacia oleracea

SEQ ID NO. 1713

BAA00885.1	D10001	Pisum sativum
AAK15640.1	AF326116	Agastache rugosa
CAB42794.1	AJ238754	Citrus clementina x Citrus reticulata
BAA00886.1	D10002	Pisum sativum
BAA00887.1	D10003	Pisum sativum
AAB67733.1	U43338	Citrus limon
AAF40224.1	AF237955	Rubus idaeus
AAA17993.1	M91192	Trifolium subterraneum
CAA57057.1	X81159	Petroselinum crispum
AAF40223.1	AF237954	Rubus idaeus
CAA68938.1	Y07654	Petroselinum crispum
CAA57056.1	X81158	Petroselinum crispum
CAB60719.1	AJ250836	Cicer arietinum
CAA05251.1	AJ002221	Digitalis lanata
AAC78457.1	AF036948	Prunus avium
BAA23367.1	D85850	Daucus carota
CAA68256.1	X99997	Bromheadia finlaysoniana
AAA33805.1	L11747	Populus x generosa
BAA24928.1	D83075	Lithospermum erythrorhizon
CAA34226.1	X16099	Oryza sativa subsp. japonica
CAA41169.1	X58180	Medicago sativa
AAA34176.1	M90692	Lycopersicon esculentum
BAA07860.1	D43802	Populus kitakamiensis
AAA84889.1	U39792	Pinus taeda
CAA73065.1	Y12461	Helianthus annuus
BAA95629.1	AB042520	Catharanthus roseus
BAA05643.1	D26596	Camellia sinensis
BAA24929.1	D83076	Lithospermum erythrorhizon
BAA21643.1	D30656	Populus kitakamiensis
CAA37129.1	X52953	Glycine max
AAA34122.1	M84466	Nicotiana tabacum
BAA22948.1	AB008200	Nicotiana tabacum
AAA99500.1	L36822	Stylosanthes humilis
CAB42793.1	AJ238753	Citrus clementina x Citrus reticulata
AAG49585.1	AF325496	Ipomoea nil
CAA55075.1	X78269	Nicotiana tabacum
BAA22963.1	D17467	Nicotiana tabacum
BAA22947.1	AB008199	Nicotiana tabacum
AAA34179.2	M83314	Lycopersicon esculentum
BAA11459.1	D78640	Ipomoea batatas
AAA33389.1	M29232	Ipomoea batatas

CAA68036.1	X99705	Triticum aestivum
CAA61198.1	X87946	Oryza sativa
BAA06337.1	D30657	Populus kitakamiensis
AAD45384.1	AF165998	Vigna unguiculata
CAA53733.1	X76130	Cucumis melo
AAA51873.1	U16130	Persea americana
BAB19128.1	AB041361	Dianthus caryophyllus
CAA34715.1	X16772	Petroselinum crispum
BAA07861.1	D43803	Populus kitakamiensis

SEQ ID NO. 1714

CAB94692.1	AJ242742	Ipomoea batatas
AAD37430.1	AF149280	Phaseolus vulgaris
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA06335.1	D30653	Populus kitakamiensis
AAA34108.1	J02979	Nicotiana tabacum
BAA01992.1	D11396	Nicotiana tabacum
CAA50597.1	X71593	Lycopersicon esculentum
CAB67121.1	Y19023	Lycopersicon esculentum
BAA11853.1	D83225	Populus nigra
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
BAA01877.1	D11102	Populus kitakamiensis
BAA11852.1	D83224	Populus nigra
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
AAB47602.1	L07554	Linum usitatissimum
AAD37427.1	AF149277	Phaseolus vulgaris
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
AAB97734.1	AF014502	Glycine max
BAA06334.1	D30652	Populus kitakamiensis
BAA07241.1	D38051	Populus kitakamiensis
CAA62226.1	X90693	Medicago sativa
CAA62225.1	X90692	Medicago sativa
CAA62227.1	X90694	Medicago sativa
AAB41811.1	L36157	Medicago sativa
AAB41810.1	L36156	Medicago sativa
AAC98519.1	AF007211	Glycine max
BAA02840.1	D13683	Populus kitakamiensis
BAA14144.1	D90116	Armoracia rusticana
AAA33129.1	M91372	Cucumis sativus
BAA14143.1	D90115	Armoracia rusticana
BAA08499.1	D49551	Oryza sativa
AAA34101.1	L02124	Nicotiana tabacum
BAA82306.1	AB027752	Nicotiana tabacum
CAA40796.1	X57564	Armoracia rusticana
AAA33121.1	M32742	Cucumis sativus
CAA76680.1	Y17192	Cucurbita pepo
BAA92500.1	AP001383	Oryza sativa
BAA77388.1	AB024438	Scutellaria baicalensis
AAD43561.1	AF155124	Gossypium hirsutum
AAB06183.1	M37636	Arachis hypogaea
AAF63027.1	AF244924	Spinacia oleracea
CAA71492.1	Y10466	Spinacia oleracea
AAB02554.1	L37790	Stylosanthes humilis
BAA94962.1	AB042103	Asparagus officinalis
BAA77389.1	AB024439	Scutellaria baicalensis

SEQ ID NO. 1716

AAG08959.1	AF122051	Solanum tuberosum
AAG08960.1	AF122052	Solanum tuberosum
AAG08961.1	AF122053	Solanum tuberosum
AAF67052.1	AF190303	Adiantum raddianum
AAF67053.1	AF190304	Adiantum raddianum
AAF34434.1	AF172282	Oryza sativa
AAF67051.1	AF190302	Secale cereale
AAF67050.1	AF190301	Secale cereale
CAA66952.1	X98308	Lycopersicon esculentum
AAG13574.1	AC037425	Oryza sativa
CAA72185.1	Y11350	Oryza sativa
CAA78388.1	Z13998	Petunia x hybrida
BAA81733.2	AB029162	Glycine max
CAA72217.1	Y11414	Oryza sativa
BAA88222.1	AB028650	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
BAA81736.1	AB029165	Glycine max
BAA81730.1	AB029159	Glycine max
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
CAA67000.1	X98355	Oryza sativa

CAA67575.1	X99134	Lycopersicon esculentum
CAB40189.1	AJ133638	Avena sativa
AAD31395.1	AF114162	Lolium temulentum
BAA88224.1	AB028652	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
CAA61021.1	X87690	Hordeum vulgare
AAG22863.1	AY008692	Hordeum vulgare
BAA96421.1	AB044084	Triticum aestivum
CAA72218.1	Y11415	Oryza sativa
BAA23341.1	D88621	Oryza sativa
AAG28526.1	AF198499	Nicotiana tabacum
AAG28525.1	AF198498	Nicotiana tabacum
CAA78386.1	Z13996	Petunia x hybrida
CAA72187.1	Y11352	Oryza sativa

SEQ ID NO. 1718

AAA67067.1	U25430	Oryza sativa
BAB20681.1	AB032413	Spinacia oleracea

SEQ ID NO. 1719

BAA92500.1	AP001383	Oryza sativa
AAF63027.1	AF244924	Spinacia oleracea
AAF63026.1	AF244923	Spinacia oleracea
CAA62615.1	X91232	Mercurialis annua
BAA92422.1	AP001366	Oryza sativa
BAA92497.1	AP001383	Oryza sativa
AAF63025.1	AF244922	Spinacia oleracea
BAA94962.1	AB042103	Asparagus officinalis
BAA82306.1	AB027752	Nicotiana tabacum
AAD43561.1	AF155124	Gossypium hirsutum
BAA77389.1	AB024439	Scutellaria baicalensis
BAA07241.1	D38051	Populus kitakamiensis
AAB06183.1	M37636	Arachis hypogaea
CAA71492.1	Y10466	Spinacia oleracea
BAA06334.1	D30652	Populus kitakamiensis
AAB02554.1	L37790	Stylosanthes humilis
AAD37428.1	AF149278	Phaseolus vulgaris
BAA11853.1	D83225	Populus nigra
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
AAB48184.1	L24120	Linum usitatissimum
CAA40796.1	X57564	Armoracia rusticana
BAA11852.1	D83224	Populus nigra
CAA59485.1	X85228	Triticum aestivum
AAB97734.1	AF014502	Glycine max
BAA03911.1	D16442	Oryza sativa
AAC49821.1	AF014470	Oryza sativa
CAA71493.1	Y10467	Spinacia oleracea
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
CAA71491.1	Y10465	Spinacia oleracea
AAD37430.1	AF149280	Phaseolus vulgaris
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
CAA62227.1	X90694	Medicago sativa
CAA46916.1	X66125	Oryza sativa
BAA92967.1	AP001551	Oryza sativa
CAB94692.1	AJ242742	Ipomoea batatas
BAA08499.1	D49551	Oryza sativa
AAC49818.1	AF014467	Oryza sativa
CAA62597.1	X91172	Raphanus sativus
AAC05277.1	AF049881	Linum usitatissimum
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
CAA37713.1	X53675	Triticum aestivum
AAD37427.1	AF149277	Phaseolus vulgaris
AAB97854.1	AF043235	Striga asiatica
BAA77388.1	AB024438	Scutellaria baicalensis
CAA62226.1	X90693	Medicago sativa
BAA14143.1	D90115	Armoracia rusticana
CAA59487.1	X85230	Triticum aestivum

SEQ ID NO. 1720

AAC49008.1	U24188	Lilium longiflorum
AAD52098.1	U70923	Nicotiana tabacum
AAD28791.1	AF145593	Nicotiana tabacum
AAD52092.1	AF087813	Nicotiana tabacum
AAF21450.1	U38446	Nicotiana tabacum
AAC32116.1	AF051211	Picea mariana

AAA92677.1	U13736	Pisum sativum
AAA61682.1	L27484	Zea mays
AAB49984.1	U90262	Cucurbita pepo
AAA85157.1	U20297	Solanum tuberosum
AAA85156.1	U20296	Solanum tuberosum
AAA62351.1	U20295	Solanum tuberosum
AAA85155.1	U20294	Solanum tuberosum
CAA09302.1	AJ010645	Capsicum annuum
AAB88537.1	AF035944	Fragaria x ananassa
AAC49582.1	U48691	Triticum aestivum
AAC49583.1	U48692	Triticum aestivum
CAA78288.1	Z12828	Oryza sativa
AAA33900.1	L18914	Oryza sativa
AAA19571.1	U10150	Brassica napus
AAA85154.1	U20293	Solanum tuberosum
AAA85152.1	U20291	Solanum tuberosum
AAA92681.1	U13882	Pisum sativum
AAC49581.1	U48690	Triticum aestivum

SEQ ID NO. 1721

BAB21153.1	AP002899	Oryza sativa
AAC49181.1	U39289	Brassica napus
AAC49182.1	U39319	Brassica napus
BAA94228.1	AP001633	Oryza sativa
BAA94224.1	AP001633	Oryza sativa
BAA94219.1	AP001633	Oryza sativa
BAA94236.1	AP001633	Oryza sativa
BAA94215.1	AP001633	Oryza sativa

SEQ ID NO. 1722

AAA73945.1	L33904	Brassica oleracea
AAC63372.1	AF093751	Brassica oleracea
AAA73947.1	L33906	Brassica oleracea
AAB37228.1	U22105	Brassica napus
AAA73946.1	L33905	Brassica oleracea
AAA64310.1	U22174	Brassica napus
AAA73948.1	L33907	Brassica oleracea
AAA32995.1	L29767	Brassica oleracea
AAF26449.1	AF221501	Prunus avium
AAF26450.1	AF221502	Malus x domestica
AAF35186.1	AF195865	Gossypium hirsutum
AAF26451.1	AF221503	Pyrus communis
AAG29777.1	AF228333	Gossypium hirsutum
AAF35185.1	AF195864	Gossypium hirsutum
AAK28533.1	AF329829	Corylus avellana
CAA65475.1	X96714	Prunus dulcis
AAC00499.1	AF044204	Gossypium hirsutum
AAA34032.1	M58635	Spinacia oleracea
CAB96874.1	AJ277164	Malus x domestica
CAA65477.1	X96716	Prunus dulcis
AAF35184.1	AF195863	Gossypium hirsutum
CAA05771.1	AJ002958	Cicer arietinum
AAB34774.1	S78173	Gossypium hirsutum
AAA75599.1	U15153	Gossypium hirsutum
AAF28385.1	AF151214	Nicotiana glauca
AAC49860.1	U72765	Phaseolus vulgaris
CAA50660.1	X71667	Sorghum bicolor
AAD09107.1	AF101038	Brassica napus
AAB70539.1	AF017359	Oryza sativa
AAD46683.1	AF171094	Lilium longiflorum
AAA74624.1	U31766	Oryza sativa
CAA44267.1	X62395	Nicotiana tabacum
CAB96876.1	AJ277163	Prunus persica
CAA80809.1	Z23271	Oryza sativa
CAA50661.1	X71668	Sorghum bicolor
AAA33493.1	J04176	Zea mays
CAA85484.1	Z37115	Hordeum vulgare
AAB06443.1	U66105	Zea mays
BAA03044.1	D13952	Nicotiana tabacum
AAA86694.1	U18127	Hordeum vulgare
CAA63407.1	X92748	Beta vulgaris
CAA83459.1	Z31588	Gerbera hybrida
AAF23459.1	AF208833	Capsicum annuum

SEQ ID NO. 1723

CAA34248.1	X16115	Brassica napus
CAA31517.1	X13126	Brassica napus
CAA31516.1	X13125	Brassica napus
CAA31513.1	X13122	Brassica napus
CAA30782.1	X07970	Brassica napus
CAA49802.1	X70336	Brassica rapa
CAA34247.1	X16114	Brassica napus

CAA31519.1	X13128	Brassica napus
CAA49803.1	X70337	Brassica rapa
CAA68475.1	Y00418	Brassica rapa
AAB21541.1	S84968	Brassica rapa
CAA31514.1	X13123	Brassica napus
AAC39495.1	AF041386	Fragaria x ananassa
CAA31518.1	X13127	Brassica napus
AAB05224.1	U48777	Gossypium hirsutum
AAD46394.1	AF083950	Coriandrum sativum
CAA71885.1	Y10994	Casuarina glauca
AAA32921.1	M63799	Hordeum vulgare
CAA54714.1	X77620	Cuphea lanceolata
AAD21198.1	AF127796	Capsicum chinense
AAA32922.1	M58754	Hordeum vulgare
CAA64542.1	X95253	Cuphea lanceolata
AAA32924.1	M24426	Hordeum vulgare
CAA54715.1	X77621	Cuphea lanceolata
AAA32923.1	M24425	Hordeum vulgare
AAA32920.1	M58753	Hordeum vulgare
CAA54716.1	X77622	Cuphea lanceolata
CAA36288.1	X52065	Spinacia oleracea
CAA41024.1	X57956	Zea mays
CAA31515.1	X13124	Brassica napus
AAA34023.1	M17636	Spinacia oleracea
AAK00695.1	AF229423	Brassica rapa
AAK00698.1	AF229426	Brassica oleracea
AAK00690.1	AF229418	Brassica napus
AAK00699.1	AF229427	Brassica oleracea
AAK00696.1	AF229424	Brassica rapa
AAK00697.1	AF229425	Brassica oleracea
CAA65138.1	X95895	Zea mays
AAK00692.1	AF229420	Brassica napus
AAK00693.1	AF229421	Brassica napus
AAK00694.1	AF229422	Brassica rapa
AAK00691.1	AF229419	Brassica napus

SEQ ID NO. 1724

CAA85353.1	Z36879	Flaveria pringlei
CAA91000.1	Z54239	Flaveria pringlei
CAA81076.1	Z25857	Flaveria pringlei
AAB82711.1	AF024589	Hordeum x Triticum
CAA38252.1	X54377	Pisum sativum
AAB99846.1	AF043099	Coffea eugenioides
AAB99844.1	AF043097	Coffea canephora
AAB97081.1	AF042072	Coffea arabica
AAB99845.1	AF043098	Coffea congensis

SEQ ID NO. 1726

CAA51227.1	X72676	Brassica juncea
AAC83147.1	AF057563	Nicotiana glutinosa
CAB60722.1	AJ012551	Citrus sinensis
CAB60721.1	AJ012550	Citrus sinensis
AAF97614.1	U18056	Lycopersicon esculentum
AAF97615.1	U18057	Lycopersicon esculentum
CAA67118.1	X98492	Nicotiana tabacum
AAA33275.1	M66619	Dianthus caryophyllus
BAA34923.1	AB013100	Lycopersicon esculentum
CAB60831.1	AJ012696	Citrus sinensis
CAA41855.1	X59139	Lycopersicon esculentum
CAA41856.1	X59145	Lycopersicon esculentum
AAC98809.1	U68216	Carica papaya
AAB70885.1	U88971	Pelargonium x hortorum
AAD04199.1	AF016459	Pisum sativum
BAA33375.1	AB006804	Cucumis sativus
BAB16433.1	AB041521	Solanum tuberosum
AAC15777.1	AF061605	Nicotiana glutinosa
BAA90549.1	AB031026	Prunus mume
AAF22109.1	AF119411	Lupinus albus
AAC83146.1	AF057562	Nicotiana glutinosa
CAA09477.1	AJ011095	Citrus sinensis

SEQ ID NO. 1727

CAA09853.1	AJ011893	Nicotiana tabacum
CAB60837.1	AJ002589	Lycopersicon esculentum
CAB40540.1	AJ132929	Medicago sativa
CAA61334.1	X88864	Medicago sativa
BAA33153.1	AB008188	Pisum sativum
CAB60836.1	AJ002588	Lycopersicon esculentum
CAB51788.1	AJ245415	Lycopersicon esculentum
CAA09854.1	AJ011894	Nicotiana tabacum
CAB61223.1	AJ250398	Antirrhinum majus
CAB61222.1	AJ250397	Antirrhinum majus

CAB60838.1	AJ002590	Lycopersicon esculentum
CAA09769.1	AJ011776	Chenopodium rubrum
CAB40541.1	AJ132930	Medicago sativa
CAA71244.1	Y10162	Chenopodium rubrum
CAA09852.1	AJ011892	Nicotiana tabacum
CAB61221.1	AJ250396	Antirrhinum majus
CAA63540.1	X92964	Nicotiana tabacum
CAA48675.1	X68741	Medicago sativa
CAB46643.1	AJ243453	Lycopersicon esculentum
BAA86629.1	AB024987	Oryza sativa
BAA20426.1	D89636	Nicotiana tabacum
CAB81558.1	Z37978	Nicotiana tabacum
CAA63541.1	X92965	Nicotiana tabacum
CAB77269.1	AJ133722	Pisum sativum
CAA63753.1	X93467	Nicotiana tabacum
BAA20410.1	D86385	Catharanthus roseus
AAC61889.1	U24194	Lupinus luteus
AAD31790.1	AF126107	Lupinus luteus
CAA81232.1	Z26331	Glycine max
CAA44632.1	X62820	Glycine max
CAA44188.1	X62303	Glycine max
AAC50013.1	U50064	Zea mays
CAA57556.1	X82036	Oryza sativa
BAA09467.1	D50871	Glycine max
CAB46642.1	AJ243452	Lycopersicon esculentum
BAA33154.1	AB008189	Pisum sativum
AAC24245.1	U44857	Lupinus luteus
AAD31791.1	AF126108	Lupinus luteus
CAA44631.1	X62819	Daucus carota
BAA20412.1	D86387	Catharanthus roseus
CAA71243.1	Y10161	Chenopodium rubrum
CAA99990.1	Z75660	Sesbania rostrata
AAA51660.1	L25406	Brassica napus
CAB46644.1	AJ243454	Lycopersicon esculentum
AAA20236.1	U10076	Zea mays
CAB58998.1	AJ250315	Petunia x hybrida

SEQ ID NO. 1728

AAG43550.1	AF211532	Nicotiana tabacum
BAA78746.1	AB023482	Oryza sativa
BAA96875.1	AB045121	Oryza sativa
BAA90357.1	AP001080	Oryza sativa
BAA85438.1	AP000616	Oryza sativa
BAA90806.1	AP001168	Oryza sativa

SEQ ID NO. 1729

AAB94619.1	AF032386	Nicotiana tabacum

SEQ ID NO. 1730

AAB97366.1	AF039531	Oryza sativa

SEQ ID NO. 1731

BAA03094.1	D13987	Brassica napus
AAB80714.1	AF008939	Gossypium hirsutum
CAA88829.1	Z48966	Flaveria pringlei
AAG17619.1	AF248080	Flaveria trinervia
CAA62469.1	X90982	Solanum tuberosum
CAA47437.1	X67053	Solanum tuberosum
CAA45505.1	X64144	Flaveria pringlei
AAG17618.1	AF248079	Flaveria trinervia
CAA41758.1	X59016	Nicotiana tabacum
BAA23419.1	AB008540	Glycine max
CAB65171.1	AJ243417	Lycopersicon esculentum
AAD31452.1	AF135371	Lotus corniculatus
CAB65170.1	AJ243416	Lycopersicon esculentum
BAA01560.1	D10717	Glycine max
AAB18633.1	L49175	Amaranthus hypochondriacus
CAA55700.1	X79090	Picea abies
CAC28225.1	AJ286750	Sesbania rostrata
CAA43601.1	X61304	Flaveria trinervia
CAA09807.1	AJ011844	Solanum tuberosum
CAA81072.1	Z25853	Flaveria australasica
AAC33164.1	M86661	Saccharum sp.
BAA03100.1	D13998	Glycine max
CAA92209.1	Z68125	Amaranthus hypochondriacus
CAA45504.1	X64143	Flaveria trinervia
AAK28444.1	AF288382	Phaseolus vulgaris
CAA31956.1	X13660	Mesembryanthemum crystallinum
AAB46618.1	M83086	Medicago sativa
AAB41903.1	L39371	Medicago sativa
AAG42288.1	AF268091	Chloris gayana
CAA09588.1	AJ011302	Vicia faba

BAA10902.1	D64037	Pisum sativum
CAA07610.1	AJ007705	Triticum aestivum
CAA11414.1	AJ223496	Brassica juncea
CAA42549.1	X59925	Sorghum bicolor
CAA11415.1	AJ223497	Brassica juncea
CAA43709.1	X61489	Zea mays
AAG00180.1	AF271995	Oryza sativa
CAA33317.1	X15239	Zea mays
CAA46267.1	X65137	Sorghum bicolor
CAA39197.1	X55664	Sorghum bicolor
BAA28170.1	AB012228	Zea mays
CAA33316.1	X15238	Zea mays
CAA33663.1	X15642	Zea mays
CAA32728.2	X14588	Mesembryanthemum crystallinum
AAD45696.1	AF159051	Picea abies
CAA60626.1	X87148	Vanilla planifolia
CAA60627.1	X87149	Vanilla planifolia
CAA62747.1	X91404	Welwitschia mirabilis

SEQ ID NO. 1732

AAD26116.1	AF106954	Brassica napus
CAB51533.1	AJ237693	Ajuga reptans
CAB51534.1	AJ237694	Ajuga reptans
AAD55726.1	AF178569	Vitis riparia

SEQ ID NO. 1735

BAA94601.1	AB033504	Populus euramericana
AAA33697.1	L21978	Petunia x hybrida
AAC48977.1	U07953	Pelargonium x hortorum
CAA54449.1	X77232	Prunus persica
AAF36483.1	AF129073	Prunus persica
AAC33524.1	AF026793	Prunus armeniaca
AAB70884.1	U67861	Pelargonium x hortorum
AAG49361.1	AF321533	Citrus sinensis
BAA90550.1	AB031027	Prunus mume
AAA99792.1	U54565	Nicotiana glutinosa
AAB05171.1	U62764	Nicotiana glutinosa
AAC37381.1	L21976	Petunia x hybrida
CAA71738.1	Y10749	Betula pendula
CAA86468.1	Z46349	Nicotiana tabacum
BAA83466.1	AB012857	Nicotiana tabacum

AAC98808.1	U68215	Carica papaya
BAA06526.1	D31727	Cucumis melo
CAA64797.1	X95551	Cucumis melo
CAA58232.1	X83229	Nicotiana tabacum
BAA34924.1	AB013101	Lycopersicon esculentum
AAF64528.1	AF254125	Carica papaya
AAA33698.1	L21979	Petunia x hybrida
CAA41212.1	X58273	Lycopersicon esculentum
BAA21541.1	AB003514	Actinidia deliciosa
AAB71421.1	L29405	Helianthus annuus
AAA99793.1	U54566	Nicotiana glutinosa
AAF36484.1	AF129074	Prunus persica
CAA64799.1	X95553	Cucumis melo
CAA90904.1	Z54199	Lycopersicon esculentum
CAA68538.1	Y00478	Lycopersicon esculentum
AAC12934.1	AF053354	Phaseolus vulgaris
AAB70883.1	U19856	Pelargonium x hortorum
AAC67233.1	AF033582	Cucumis sativus
BAA33377.1	AB006806	Cucumis sativus
BAA33378.1	AB006807	Cucumis sativus
CAA71140.1	Y10034	Rumex palustris
AAA33644.1	M98357	Pisum sativum
AAC48921.1	U06046	Vigna radiata
AAK07883.1	AF315316	Vigna radiata
AAA33273.1	L35152	Dianthus caryophyllus
CAA74328.1	Y14005	Malus x domestica

SEQ ID NO. 1736

AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAB53694.1	U59379	Brassica napus
BAA25681.1	AB010434	Brassica rapa
BAB20886.1	AB053294	Oryza sativa
AAB53695.1	U59380	Brassica napus
AAF88067.1	AF286593	Triticum aestivum
CAA94534.1	Z70677	Ricinus communis
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
BAA13524.1	D87984	Fagopyrum esculentum
CAA41415.1	X58527	Nicotiana tabacum
CAA77847.1	Z11803	Nicotiana tabacum
AAC32111.1	AF051206	Picea mariana

BAA05546.1	D26547	Oryza sativa
BAA04864.1	D21836	Oryza sativa
AAB51522.1	U92541	Oryza sativa
AAD49232.1	AF159387	Lolium perenne
AAD56954.1	AF186240	Secale cereale
AAD49231.1	AF159386	Secale cereale
AAD49230.1	AF159385	Hordeum bulbosum
AAD49234.1	AF159389	Phalaris coerulescens
AAD49233.1	AF159388	Phalaris coerulescens
BAB39913.1	AP002912	Oryza sativa
CAA55399.1	X78822	Chlamydomonas reinhardtii
CAA56850.1	X80887	Chlamydomonas reinhardtii
AAD33596.1	AF133127	Hevea brasiliensis
CAA35826.1	X51462	Spinacia oleracea
CAA35827.1	X51463	Spinacia oleracea
CAA45098.1	X63537	Pisum sativum
AAC49357.1	U35830	Pisum sativum
AAC19392.1	AF069314	Mesembryanthemum crystallinum
AAC04671.1	AF018174	Brassica napus
AAB47556.1	U87141	Mesembryanthemum crystallinum
CAA53900.1	X76269	Pisum sativum
AAC49358.1	U35831	Pisum sativum
CAA33082.1	X14959	Spinacia oleracea
CAA06736.1	AJ005841	Oryza sativa
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii
CAA06735.1	AJ005840	Triticum aestivum
AAB52409.1	U76831	Brassica napus
AAD45358.1	AF160870	Brassica napus

SEQ ID NO. 1738

AAA92013.1	U49454	Prunus persica
CAA54952.1	X77990	Brassica rapa
AAF33405.1	AF230109	Populus x canescens
AAA33946.1	M37753	Glycine max
CAA03908.1	AJ000081	Citrus sinensis
CAB91554.1	AJ277900	Vitis vinifera
AAB03501.1	U41323	Glycine max
AAA34078.1	M63634	Nicotiana plumbaginifolia
CAA30261.1	X07280	Nicotiana plumbaginifolia
AAA51643.1	M23120	Nicotiana plumbaginifolia
AAA87456.1	U22147	Hevea brasiliensis
CAB38443.1	AJ133470	Hevea brasiliensis
AAA03618.1	M80608	Lycopersicon esculentum
AAA18928.1	U01901	Solanum tuberosum
AAC19114.1	AF067863	Solanum tuberosum
CAA92278.1	Z68154	Gossypium hirsutum
AAG24921.1	AF311749	Hevea brasiliensis
AAA63539.1	M60402	Nicotiana tabacum
AAA63540.1	M60403	Nicotiana tabacum
AAA88794.1	U01900	Solanum tuberosum
AAA63541.1	M59442	Nicotiana tabacum
AAB82772.2	AF001523	Musa acuminata
CAA37289.1	X53129	Phaseolus vulgaris
AAF08679.1	AF004838	Musa acuminata
AAD33881.1	AF141654	Nicotiana tabacum
AAD33880.1	AF141653	Nicotiana tabacum
AAA34082.1	M20620	Nicotiana tabacum
AAA19111.1	U01902	Solanum tuberosum
CAA57255.1	X81560	Nicotiana tabacum
AAA34053.1	M60464	Nicotiana tabacum
AAA63542.1	M59443	Nicotiana tabacum
AAB24898.1	S51479	Pisum sativum
AAB41551.1	U27179	Medicago sativa subsp. sativa
AAD10384.1	U72253	Oryza sativa
AAA03617.1	M80604	Lycopersicon esculentum

SEQ ID NO. 1739

BAA19102.1	AB000408	Populus kitakamiensis
AAC28973.1	U20736	Medicago sativa subsp. sativa
CAA12198.1	AJ224894	Populus balsamifera subsp. trichocarpa
CAA11496.1	AJ223621	Populus balsamifera subsp. trichocarpa
AAB80931.1	AF022775	Nicotiana tabacum
CAA83943.1	Z33878	Petroselinum crispum
AAA33851.1	M69184	Petroselinum crispum
CAA90894.1	Z54183	Petroselinum crispum
CAA90969.1	Z54233	Vitis vinifera
AAA59389.1	U13151	Zinnia elegans
CAB05369.1	Z82982	Nicotiana tabacum

AAA80651.1	U27116	Populus tremuloides
AAC08395.1	AF053553	Mesembryanthemum crystallinum
CAA12200.1	AJ224896	Populus balsamifera subsp. trichocarpa
CAA12199.1	AJ224895	Populus balsamifera subsp. trichocarpa
CAA11495.1	AJ223620	Populus balsamifera subsp. trichocarpa
AAD50443.1	AF168780	Eucalyptus globulus
AAF44689.1	AF240466	Populus tomentosa
AAC49913.1	U38612	Nicotiana tabacum
CAA72911.1	Y12228	Eucalyptus gunnii
AAC49916.1	U62736	Nicotiana tabacum
BAA78733.1	AB023482	Oryza sativa
CAA91228.1	Z56282	Nicotiana tabacum
AAC49914.1	U62734	Nicotiana tabacum
AAC26191.1	AF046122	Eucalyptus globulus
AAC49915.1	U62735	Nicotiana tabacum
AAD02050.1	AF036095	Pinus taeda
AAK16714.1	AF327458	Populus alba x Populus glandulosa
CAB45150.1	AJ242981	Zea mays
CAB45149.1	AJ242980	Zea mays
AAB61680.1	L22203	Stellaria longipes
BAA88234.1	AB035144	Citrus natsudaidai
BAA81776.1	AP000364	Oryza sativa
BAA81774.1	AP000364	Oryza sativa
BAA81777.1	AP000364	Oryza sativa
CAA10217.1	AJ130841	Populus balsamifera subsp. trichocarpa
AAD50441.1	AF168778	Eucalyptus globulus
AAD50442.1	AF168779	Eucalyptus globulus
AAC15067.1	AF060180	Nicotiana tabacum

SEQ ID NO. 1741

BAA78764.1	AB023482	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAG16628.1	AY007545	Brassica napus
AAC27894.1	AF023164	Zea mays
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAC27895.1	AF023165	Zea mays
AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max
CAB51834.1	00069	Oryza sativa
AAB09771.1	U67422	Zea mays
AAC61805.1	U28007	Lycopersicon esculentum
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAF34428.1	AF172282	Oryza sativa
AAG25966.1	AF302082	Nicotiana tabacum
AAF66615.1	AF142596	Nicotiana tabacum
CAB51836.1	AJ243961	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
BAA84787.1	AP000559	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
CAA79355.1	Z18921	Brassica oleracea
AAA33915.1	L27821	Oryza sativa
BAA95893.1	AP002071	Oryza sativa
AAC36318.1	AF053127	Malus x domestica

SEQ ID NO. 1742

AAK27157.1	AF349449	Brassica juncea
AAD28177.1	AF109694	Brassica juncea
AAB70837.1	AF019907	Vitis vinifera
CAA53925.1	X76293	Nicotiana tabacum
AAF26175.1	AF105199	Glycine max
AAA33962.1	L11632	Glycine max
CAA42921.1	X60373	Pisum sativum
CAA62482.1	X90996	Pisum sativum
CAA54043.1	X76533	Nicotiana tabacum
CAA53993.1	X76455	Nicotiana tabacum
CAA06835.1	AJ006055	Zea mays
CAA66924.1	X98274	Pisum sativum
BAA36283.1	D85751	Oryza sativa
BAA37092.1	AB009592	Oryza sativa
BAA07108.1	D37870	Spinacia oleracea
AAF67753.1	AF255651	Brassica rapa subsp. pekinensis
AAC49980.2	AF008441	Brassica rapa

CAC13956.1	AJ400816	Mesembryanthemum crystallinum
CAB66332.1	AJ279690	Betula pendula
AAC26053.1	AF074940	Glycine max
AAB30526.1	S70187	Glycine max
AAD53185.1	AF181096	Vigna unguiculata
AAD28178.1	AF109695	Brassica juncea
BAA05408.1	D26392	Cucumis sativus
AAC41654.1	L41345	Lycopersicon esculentum

SEQ ID NO. 1743

CAA82945.1	Z30243	Secale cereale
AAA33748.1	M99431	Ipomoea nil
BAA90487.1	AB037681	Oryza sativa
CAA77978.1	Z11920	Oryza sativa
AAA16785.1	L14594	Catharanthus roseus
AAB01376.1	M96549	Lycopersicon esculentum
AAD11549.1	U55859	Triticum aestivum
AAB26482.2	S59780	Zea mays
CAA44877.1	X63195	Nicotiana tabacum
AAD30456.1	AF123259	Lycopersicon esculentum
AAF31705.1	AF221856	Euphorbia esula
AAC32131.1	AF051230	Picea mariana
AAD11550.1	U55860	Triticum aestivum

SEQ ID NO. 1744

AAD41796.1	AF135862	Glycine max
BAA95630.1	AB042521	Oryza sativa
AAA74361.1	L33913	Zea mays
BAA11417.1	D78573	Oryza sativa
AAC05983.1	AF049708	Glycine max
AAC05981.1	AF049706	Chloroplast Glycine max
AAA74360.1	L33912	Zea mays
AAA16972.1	L11529	Daucus carota

SEQ ID NO. 1745

AAF82791.1	AF275316	Lotus japonicus
CAB45652.1	AJ243308	Pisum sativum
BAA04257.1	D17443	Oryza sativa
CAB40742.1	AJ237751	Nicotiana tabacum
AAF61465.1	AF139816	Triticum aestivum
BAB40142.1	AB058679	Pyrus communis
BAA20074.1	AB002147	Nicotiana excelsior
BAA81820.1	AB029325	Oryza sativa
AAB67870.1	U60149	Beta vulgaris
AAB18228.1	U73467	Mesembryanthemum crystalli:
CAB46350.1	Y18311	Solanum tuberosum
BAA24016.1	AB009665	Oryza sativa
CAA04652.1	AJ001292	Craterostigma plantagineum

SEQ ID NO. 1746

CAB76364.1	AJ133371	Cucumis sativus

SEQ ID NO. 1747

BAB21153.1	AP002899	Oryza sativa
AAC49181.1	U39289	Brassica napus
BAA94228.1	AP001633	Oryza sativa
AAC49182.1	U39319	Brassica napus
BAA94236.1	AP001633	Oryza sativa
BAA94219.1	AP001633	Oryza sativa
BAA94224.1	AP001633	Oryza sativa
BAA94215.1	AP001633	Oryza sativa

SEQ ID NO. 1749

CAA65064.1	X95753	Antirrhinum majus

SEQ ID NO. 1750

AAD21872.1	AF078082	Phaseolus vulgaris
CAA73134.1	Y12531	Brassica oleracea
AAB93834.1	U82481	Zea mays
AAC23542.1	U20948	Ipomoea trifida
CAA73133.1	Y12530	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
AAA62232.1	U00443	Brassica napus
CAA74661.1	Y14285	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
BAA92836.1	AB032473	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
CAA74662.1	Y14286	Brassica oleracea
AAA33008.1	M97667	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
CAB41878.1	Y18259	Brassica oleracea

CAA79355.1	Z18921	Brassica oleracea
BAA21132.1	D88193	Brassica rapa
BAA06285.1	D30049	Brassica rapa
BAA92837.1	AB032474	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
BAA07577.2	D38564	Brassica rapa
BAA07576.1	D38563	Brassica rapa
AAD52097.1	AF088885	Nicotiana tabacum
AAK21965.1	AY028699	Brassica napus
AAG16628.1	AY007545	Brassica napus
AAG03090.1	AC073405	Oryza sativa
CAB51836.1	AJ243961	Oryza sativa
BAA94509.1	AB041503	Populus nigra
AAA33915.1	L27821	Oryza sativa

SEQ ID NO. 1753

AAF37267.1	AF220406	Vitis riparia

SEQ ID NO. 1755

AAF09256.1	AF202179	Capsicum chacoense
CAB50786.1	AJ011801	Solanum tuberosum

SEQ ID NO. 1758

CAA96512.1	Z71980	Malus x domestica
BAA25921.1	AB004797	Nicotiana tabacum
AAD09582.1	U76409	Lycopersicon esculentum
AAC49918.1	AF000142	Lycopersicon esculentum
BAA08552.1	D49704	Oryza sativa
BAB18585.1	AB043957	Ceratopteris richardii
AAD00253.1	U76410	Lycopersicon esculentum
CAA82314.1	Z29073	Brassica napus
BAA77822.1	AB007628	Oryza sativa
BAA77823.1	AB007629	Oryza sativa
AAB81079.1	AF022390	Hordeum vulgare
AAF32399.1	AF224499	Triticum aestivum
BAA76750.1	AB025573	Nicotiana tabacum
AAF32400.1	AF224500	Triticum aestivum
AAC49917.1	AF000141	Lycopersicon esculentum
BAA25546.1	AB004785	Nicotiana tabacum
AAF32398.1	AF224498	Triticum aestivum
AAD13611.1	AF100455	Zea mays
AAC84001.1	AF063248	Picea abies
AAC33008.1	AF080104	Pisum sativum
AAD00692.1	U90092	Picea mariana
AAC32262.1	AF063307	Pisum sativum
BAA03959.1	D16507	Oryza sativa
AAG27464.1	AF308454	Medicago truncatula
AAD00691.1	U90091	Picea mariana
AAC32817.1	AF050180	Oryza sativa
BAA79226.1	AB028885	Oryza sativa
BAA79224.1	AB028883	Oryza sativa
BAA77818.1	AB007624	Oryza sativa
AAF23753.2	AF193813	Brassica oleracea
AAD00251.1	U76407	Lycopersicon esculentum
CAA96510.1	Z71978	Malus x domestica
BAA31688.1	AB016071	Oryza sativa
BAA77817.1	AB007623	Oryza sativa
BAB18582.1	AB043954	Ceratopteris richardii
BAA76903.1	AB025713	Nicotiana tabacum
AAD00252.1	U76408	Lycopersicon esculentum
BAB18584.1	AB043956	Ceratopteris richardii
CAA96511.1	Z71979	Malus x domestica
AAA20882.1	L13663	Glycine max
CAB88029.1	AJ276389	Dendrobium grex Madame Thong-In

SEQ ID NO. 1759

AAB71417.1	U81287	Pisum sativum
BAA22083.1	D28862	Nicotiana sylvestris
CAA05729.1	AJ002894	Oryza sativa
BAA05170.1	D26182	Nicotiana sylvestris
CAA40862.1	X57662	Sorghum bicolor
AAB07749.1	U49482	Hordeum vulgare
AAA75104.1	U32310	Triticum aestivum
AAG23220.1	AF310215	Sorghum bicolor
CAA88558.1	Z48624	Hordeum vulgare
CAA78513.1	Z14143	Brassica napus
AAB88616.1	AF034945	Zea mays
CAA41152.1	X58146	Daucus carota
AAA59213.1	L31377	Sinapis alba
BAA03742.1	D16205	Nicotiana sylvestris
AAC50020.1	AF005359	Nicotiana glutinosa
AAB66884.1	AF010579	Oryza sativa

AAA59212.1	L31374	Sinapis alba
CAA05728.1	AJ002893	Oryza sativa
AAC61786.1	AF036339	Euphorbia esula
AAB63582.1	AF009004	Pelargonium x hortorum
AAB63581.1	AF009003	Pelargonium x hortorum
BAA03741.1	D16204	Nicotiana sylvestris
AAB66885.1	AF010580	Oryza sativa
AAB63589.1	AF009411	Oryza sativa
AAD48471.1	AF169205	Glycine max
CAA43431.1	X61121	Zea mays
BAA92156.1	AB007819	Citrus unshiu
BAA03743.1	D16206	Nicotiana sylvestris
AAC61787.1	AF031933	Euphorbia esula
AAB65412.1	AF011331	Oryza sativa
CAA40863.1	X57663	Sorghum bicolor
AAB61213.1	AF001894	Oryza sativa
AAF06329.1	AF191305	Medicago sativa
AAK01176.1	AF315811	Triticum aestivum
BAA12064.1	D83696	Nicotiana sylvestris
CAA46233.1	X65117	Nicotiana plumbaginifolia
AAA79045.1	U34742	Spinacia oleracea

SEQ ID NO. 1760

CAA69936.1	Y08680	Alnus glutinosa
AAB80947.1	AF022915	Triticum aestivum

SEQ ID NO. 1762

AAD17487.1	AF049347	Berberis stolonifera
AAB20352.1	S65550	Eschscholzia californica
AAC39358.1	AF005655	Eschscholzia californica
AAC61839.1	AF025430	Papaver somniferum

SEQ ID NO. 1763

BAA96221.1	AP002094	Oryza sativa
AAD32141.1	AF123503	Nicotiana tabacum
CAA42636.1	X60033	Glycine max

SEQ ID NO. 1765

AAD17487.1	AF049347	Berberis stolonifera
AAB20352.1	S65550	Eschscholzia californica
AAC39358.1	AF005655	Eschscholzia californica
AAC61839.1	AF025430	Papaver somniferum

SEQ ID NO. 1766

AAF19196.1	AF206320	Musa acuminata
AAF63756.1	AF243475	Vitis vinifera
AAF19195.1	AF206319	Musa acuminata
CAA63496.1	X92943	Musa acuminata
CAA70735.1	Y09541	Zinnia elegans
AAB71208.1	U63550	Fragaria x ananassa
AAA86241.1	U41472	Medicago sativa
CAA47630.1	X67158	Nicotiana tabacum
CAA43414.1	X61102	Nicotiana tabacum
CAA43413.1	X61101	Nicotiana tabacum
CAA47631.1	X67159	Nicotiana tabacum

SEQ ID NO. 1767

AAD55566.1	AF110784	Volvox carteri f. nagariensis
AAD02069.1	AF036939	Chlamydomonas reinhardtii
AAC49896.1	AF027727	Chlamydomonas reinhardtii
AAD28260.1	AF131223	Datisca glomerata
AAA19660.1	U11496	Triticum aestivum
CAC21230.1	AJ277379	Triticum turgidum subsp. durum
CAC21228.1	AJ277377	Triticum turgidum subsp. durum
AAB05641.1	U41385	Ricinus communis
CAA77575.1	Z11499	Medicago sativa
CAC21231.1	AJ277380	Triticum turgidum subsp. durum
CAC21229.1	AJ277378	Triticum turgidum subsp. durum
BAB18780.1	AB047268	Cucumis sativus
BAA92322.1	AB039278	Oryza sativa
CAA72092.1	Y11209	Nicotiana tabacum

SEQ ID NO. 1769

AAF74566.1	AF215852	Nicotiana tabacum
AAG43998.1	AF215837	Apium graveolens var. dulce
AAF74565.1	AF215851	Spinacia oleracea
AAF74568.1	AF215854	Zea mays
AAF74567.1	AF215853	Solanum tuberosum
CAA47324.1	X66856	Nicotiana tabacum
CAA04511.1	AJ001061	Vitis vinifera
AAB06594.1	U38651	Medicago truncatula
CAA09419.1	AJ010942	Lycopersicon esculentum

CAB52689.1	AJ132224	Lycopersicon esculentum
CAA70777.1	Y09590	Vitis vinifera
BAB19864.1	AB052885	Oryza sativa
CAA68813.1	Y07520	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri
CAA53192.1	X75440	Chlorella kessleri
BAB19863.1	AB052884	Oryza sativa
CAB06079.1	Z83829	Picea abies
BAB19862.1	AB052883	Oryza sativa
AAD55054.1	AF173655	Beta vulgaris
CAB52688.1	AJ132223	Lycopersicon esculentum
BAA85398.1	AP000615	Oryza sativa
CAB52690.1	AJ132225	Lycopersicon esculentum
CAC28219.1	AJ286744	Sesbania rostrata
AAB81347.1	AF000355	Medicago truncatula
AAB81346.1	AF000354	Medicago truncatula
AAK01938.1	AY026321	Lupinus albus
BAB21562.1	AB042951	Nicotiana tabacum

SEQ ID NO. 1772

BAB08199.1	AP002539	Oryza sativa
BAA96760.1	AP002521	Oryza sativa

SEQ ID NO. 1776

AAB41526.1	U25696	Sinapis alba
CAA53782.1	X76188	Nicotiana tabacum
AAC33475.1	AF082531	Pimpinella brachycarpa
AAK21257.1	AF335244	Petunia x hybrida
AAK21251.1	AF335238	Petunia x hybrida
AAK21252.1	AF335239	Petunia x hybrida
AAG43199.1	AF112148	Zea mays
AAK21253.1	AF335240	Petunia x hybrida
BAA81886.1	AB003328	Oryza sativa
AAF19968.1	AF207699	Elaeis guineensis
AAD38369.1	AF141965	Oryza sativa
AAB58907.1	U76726	Pinus radiata
AAG43200.1	AF112150	Zea mays
BAA85630.1	AB022665	Gnetum parvifolium
CAB56800.1	AJ011675	Oryza sativa
AAD01266.1	AF006210	Pinus resinosa
AAC97158.1	U69483	Picea mariana
AAC97157.1	U69482	Picea mariana
AAC97146.1	U46582	Picea mariana
AAD09342.1	AF023615	Pinus radiata
AAF04972.1	AF091458	Oryza sativa
AAK21254.1	AF335241	Petunia x hybrida
AAB00081.1	L46400	Zea mays
AAD10626.1	AF035379	Lolium temulentum
CAB97354.1	AJ249146	Hordeum vulgare
AAA99964.1	L37528	Oryza sativa
AAD10625.1	AF035378	Lolium temulentum
AAB64250.1	U78782	Oryza sativa

SEQ ID NO. 1778

CAA56123.1	X79675	Nicotiana tabacum
CAA51273.2	X72743	Populus x generosa
AAA73555.1	L36436	Glycine max
AAA34264.1	M60599	Triticum aestivum
AAA34263.1	M60598	Triticum aestivum
AAB04021.1	U61730	Coix lacryma-jobi
AAF44718.1	L77616	Oryza sativa
CAA37038.1	X52850	Zea mays
CAA55659.1	X79060	Nicotiana sylvestris

SEQ ID NO. 1780

AAD09343.1	AF026538	Hordeum vulgare

SEQ ID NO. 1783

AAC49528.1	U56834	Petroselinum crispum
AAC49527.1	U48831	Petroselinum crispum
AAD27591.1	AF121354	Petroselinum crispum

SEQ ID NO. 1785

AAG35658.1	AF204925	Petroselinum crispum
BAA87058.1	AB028022	Nicotiana tabacum
BAA86031.1	AB026890	Nicotiana tabacum
AAD16139.1	AF096299	Nicotiana tabacum
BAA77383.1	AB020590	Nicotiana tabacum
AAF23898.1	AF193802	Oryza sativa
AAD55974.1	AF121353	Petroselinum crispum
BAA82107.1	AB022693	Nicotiana tabacum
BAB16432.1	AB041520	Nicotiana tabacum

AAD16138.1	AF096298	Nicotiana tabacum
AAD27591.1	AF121354	Petroselinum crispum
AAF61864.1	AF193771	Nicotiana tabacum
AAG35659.1	AF204926	Petroselinum crispum
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 1786

BAA07395.1	D38220	Brassica napus
BAA07394.1	D38219	Brassica napus
CAA32218.1	X14060	Lycopersicon esculentum
AAA33712.1	L11563	Petunia x hybrida
AAG30576.1	AF314093	Ricinus communis
CAA32217.1	X14059	Nicotiana tabacum
CAA32216.1	X14058	Nicotiana tabacum
AAA33114.1	M33154	Cucurbita maxima
AAB52786.1	U95317	Solanum tuberosum
AAB18985.1	U76701	Solanum tuberosum
AAA34033.1	M32600	Spinacia oleracea
BAA13047.1	D86226	Spinacia oleracea
CAA38031.1	X54097	Betula pendula
CAA56696.1	X80670	Lotus japonicus
AAA95940.1	U01029	Phaseolus vulgaris
CAA58909.1	X84103	Cichorium intybus
AAD19790.1	AF055369	Glycine max
AAA96813.1	U13987	Glycine max
CAA40976.1	X57845	Hordeum vulgare
AAA96727.1	L23854	Glycine max
CAA37672.1	X53603	Phaseolus vulgaris
CAA33819.1	X15820	Oryza sativa
AAD38068.1	AF153448	Zea mays
CAA40975.1	X57844	Hordeum vulgare
AAB93560.1	AF022780	Glycine max
AAA62316.1	U20450	Zea mays
CAA42739.1	X60173	Hordeum vulgare
AAF17595.1	AF203033	Chlamydomonas reinhardtii
CAA45497.1	X64136	Volvox carteri
AAC49460.1	U39931	Chlorella vulgaris
AAC49459.1	U39930	Chlorella vulgaris
CAA29497.1	X06134	Nicotiana tabacum
AAA18377.1	U08029	Spinacia oleracea
AAB39553.1	U64308	Agrostemma githago
AAA03202.1	M27821	Zea mays
AAA33483.1	M77792	Zea mays
AAB39555.1	U64310	Agrostemma githago
AAB39554.1	U64309	Agrostemma githago
CAA33817.1	X15819	Oryza sativa
CAA58908.1	X84102	Cichorium intybus
AAA33998.1	L23853	Glycine max
CAA40090.1	X56771	Chlorella vulgaris
CAA45776.1	X64446	Zea mays
AAD17694.1	AF077372	Zea mays
AAA96242.1	L40147	Avena strigosa
AAA96250.1	L40149	Hordeum chilense
AAA96245.1	L40151	Hordeum pusillum
AAA96247.1	L40153	Hordeum stenostachys

SEQ ID NO. 1793

AAB97526.1	AF042321	Camptotheca acuminata
AAB97087.1	AF042320	Camptotheca acuminata
BAA19928.1	AB003491	Oryza sativa
AAA33491.1	M76685	Zea mays
AAA33490.1	M76684	Zea mays
AAC25986.1	AF047024	Chlamydomonas reinhardtii

SEQ ID NO. 1797

AAC09414.1	M68929	Mitochondrion Marchantia polymorpha
AAG32322.1	AF287344	Fuchsia hybrid cultivar Qiu 94208
AAG32321.1	AF287343	Fuchsia hybrid cultivar Qiu 94208

SEQ ID NO. 1799

AAG41777.1	AF212991	Cucurbita maxima
AAB17070.1	U54770	Lycopersicon esculentum
AAK11616.1	AF326277	Hordeum vulgare
AAK00946.1	AF318211	Taxus cuspidata
AAC49659.1	U74319	Sorghum bicolor
CAB41490.1	AJ238439	Cicer arietinum
CAA10067.1	AJ012581	Cicer arietinum
BAA22422.1	AB001379	Glycyrrhiza echinata
BAA74465.1	AB022732	Glycyrrhiza echinata

CAA83941.1	Z33875	Mentha x piperita
CAB56503.1	AJ238612	Catharanthus roseus
AAD44150.1	AF124815	Mentha spicata
CAB43505.1	AJ239051	Cicer arietinum
CAB56742.1	AJ249800	Cicer arietinum
BAB40322.1	AB036772	Triticum aestivum
AAF34530.1	AF195809	Vigna radiata
AAF45142.1	AF195818	Glycine max
AAF34533.1	AF195812	Pisum sativum
BAA93634.1	AB025016	Lotus japonicus
AAF34536.1	AF195815	Trifolium repens
AAD38929.1	AF135484	Glycine max
AAB94591.1	AF022462	Glycine max
AAF45143.1	AF195819	Glycine max
AAF34532.1	AF195811	Trifolium pratense
AAF34531.1	AF195810	Trifolium pratense
AAF34529.1	AF195808	Vigna radiata
AAF34528.1	AF195807	Vigna radiata
AAA17732.1	L19074	Catharanthus roseus

SEQ ID NO. 1802

AAF61647.1	AF190634	Nicotiana tabacum
BAA36423.1	AB013598	Verbena x hybrida
BAA89009.1	AB027455	Petunia x hybrida
BAA36421.1	AB013596	Perilla frutescens
BAA93039.1	AB033758	Citrus unshiu
BAA36422.1	AB013597	Perilla frutescens
AAF98390.1	AF287143	Brassica napus
AAF17077.1	AF199453	Sorghum bicolor
AAB36653.1	U32644	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
BAA83484.1	AB031274	Scutellaria baicalensis
AAD21086.1	AF127218	Forsythia x intermedia
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
BAA12737.1	D85186	Gentiana triflora
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vin
BAA19659.1	AB002818	Perilla frutescens
BAA89008.1	AB027454	Petunia x hybrida
AAB86473.1	AF028237	Ipomoea purpurea

SEQ ID NO. 1807

AAA59212.1	L31374	Sinapis alba
AAA59213.1	L31377	Sinapis alba
CAA78513.1	Z14143	Brassica napus
CAA40862.1	X57662	Sorghum bicolor
AAG23220.1	AF310215	Sorghum bicolor
CAA41152.1	X58146	Daucus carota
AAB66884.1	AF010579	Oryza sativa
AAB63582.1	AF009004	Pelargonium x hortorum
AAB63581.1	AF009003	Pelargonium x hortorum
AAD48471.1	AF169205	Glycine max
AAB07749.1	U49482	Hordeum vulgare
BAA03741.1	D16204	Nicotiana sylvestris
CAA88558.1	Z48624	Hordeum vulgare
AAC61786.1	AF036339	Euphorbia esula
AAA75104.1	U32310	Triticum aestivum
BAA92156.1	AB007819	Citrus unshiu
BAA03742.1	D16205	Nicotiana sylvestris
AAC50020.1	AF005359	Nicotiana glutinosa
AAB63589.1	AF009411	Oryza sativa
CAA05728.1	AJ002893	Oryza sativa
AAB66885.1	AF010580	Oryza sativa
BAA03743.1	D16206	Nicotiana sylvestris
AAC61787.1	AF031933	Euphorbia esula
CAA43431.1	X61121	Zea mays
AAB65412.1	AF011331	Oryza sativa
AAB88616.1	AF034945	Zea mays
AAB61213.1	AF001894	Oryza sativa

AAF06329.1	AF191305	Medicago sativa
BAA12064.1	D83696	Nicotiana sylvestris
AAK01176.1	AF315811	Triticum aestivum
CAA05729.1	AJ002894	Oryza sativa
AAB71417.1	U81287	Pisum sativum
BAA22083.1	D28862	Nicotiana sylvestris

SEQ ID NO. 1808

AAB00554.1	U54703	Phaseolus vulgaris
CAA78515.1	Z14145	Pisum sativum
AAB53203.1	U69633	Solanum tuberosum
AAD02259.1	AF043093	Hordeum vulgare
AAF01696.1	AF181458	Hordeum vulgare
AAB18202.1	U73211	Triticum aestivum
AAB18201.1	U73210	Triticum aestivum
AAC02689.1	AF044584	Lavatera thuringiaca
CAB93666.1	AJ289610	Pinus sylvestris
AAD02252.1	AF043086	Hordeum vulgare
AAF01699.1	AF181461	Hordeum vulgare
AAD50291.1	AF172263	Prunus dulcis
CAA09421.1	AJ010944	Helianthus annuus
CAA05713.1	AJ002741	Helianthus annuus
AAF60172.1	AF236067	Elaeis guineensis
AAA19693.1	U11696	Sorghum bicolor
AAB71225.1	AF004807	Glycine max
AAB05927.1	U63831	Sorghum bicolor
CAA63339.1	X92647	Helianthus annuus
CAA33364.1	X15290	Zea mays
CAA66970.1	X98326	Hordeum vulgare
CAA33363.1	X15289	Hordeum vulgare

SEQ ID NO. 1810

AAA33710.1	L16977	Petunia x hybrida
AAA33709.1	L16797	Petunia x hybrida
AAC24195.1	AF020425	Nicotiana tabacum
AAB40608.1	U54774	Nicotiana tabacum
AAK18620.1	AF352732	Nicotiana tabacum
AAC39483.1	AF020424	Nicotiana tabacum
BAB32870.1	AB056062	Oryza sativa
BAB32868.1	AB056060	Oryza sativa
BAB32869.1	AB056061	Oryza sativa
BAB32871.1	AB056063	Oryza sativa
CAA50719.1	X71900	Lycopersicon esculentum

SEQ ID NO. 1811

AAB50679.1	S80863	Rosa hybrid cultivar
BAA23136.1	D49385	Rosa hybrid cultivar
BAA23135.1	D49384	Rosa hybrid cultivar
BAA23134.1	D49383	Rosa hybrid cultivar
AAG28599.1	AF247133	Limnanthes douglasii

SEQ ID NO. 1812

AAF17077.1	AF199453	Sorghum bicolor
AAF61647.1	AF190634	Nicotiana tabacum
AAF98390.1	AF287143	Brassica napus
BAA93039.1	AB033758	Citrus unshiu
BAA89009.1	AB027455	Petunia x hybrida
BAA36421.1	AB013596	Perilla frutescens
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
BAA83484.1	AB031274	Scutellaria baicalensis
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
AAD21086.1	AF127218	Forsythia x intermedia
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
BAA36423.1	AB013598	Verbena x hybrida
BAA36422.1	AB013597	Perilla frutescens
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAA30760.1	X07937	Zea mays
AAB36653.1	U32644	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
CAA31855.1	X13500	Zea mays
CAA30761.1	X07940	Zea mays
AAK16410.1	AF320086	Zea mays

CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAD26203.1	AF117267	Malus x domestica
BAA89008.1	AB027454	Petunia x hybrida
BAA19659.1	AB002818	Perilla frutescens
BAA12737.1	D85186	Gentiana triflora
AAB86473.1	AF028237	Ipomoea purpurea
CAA33729.1	X15694	Hordeum vulgare

SEQ ID NO. 1813

AAB65822.1	U55838	Populus tremula x Populus tremuloides
AAC49785.1	U55837	Populus tremula x Populus tremuloides
AAD29050.1	AF132855	Gossypium hirsutum
AAA86993.1	U19738	Flaveria linearis
AAD29049.1	AF132854	Gossypium hirsutum
AAA86942.1	U08402	Flaveria brownii
AAA34027.1	J05403	Spinacia oleracea
AAA34057.1	L19255	Nicotiana tabacum
AAA34065.1	M94135	Nicotiana tabacum
AAA86992.1	U19737	Flaveria pringlei
AAA86939.1	U08398	Flaveria bidentis
AAA34026.1	M27295	Spinacia oleracea
AAA33652.1	M63627	Pisum sativum
AAD27876.2	AF139464	Vigna radiata
AAA86994.1	U19740	Flaveria linearis
CAB43571.1	AJ239132	Glycine max
CAA63712.1	X93312	Medicago sativa
AAA86944.1	U08401	Zea mays
BAA31953.1	AB016283	Oryza sativa
AAD56038.1	AF182806	Oryza sativa
AAA86943.1	U08404	Oryza sativa
AAA86945.1	U08403	Zea mays
AAA69027.1	U19739	Urochloa panicoides
AAA69028.1	U19741	Urochloa panicoides
BAA95793.1	AB009887	Nicotiana tabacum
AAF78507.1	AF195204	Pyrus pyrifolia
AAC33484.1	U49976	Coccomyxa sp. PA
AAC49888.1	U80805	Chlamydomonas reinhardtii
AAC49887.1	U80804	Chlamydomonas reinhardtii
AAB19184.1	U41190	Chlamydomonas reinhardtii
AAB19183.1	U41189	Chlamydomonas reinhardtii

SEQ ID NO. 1814

AAK14395.1	AF339732	Dianthus caryophyllus
BAB20581.1	AB042268	Zea mays
BAB20580.1	AB042267	Zea mays
BAB20579.1	AB042261	Zea mays
BAA85113.1	AB031012	Zea mays
BAA82873.1	AB024291	Zea mays
BAB17300.1	AB042260	Zea mays
BAA75253.1	AB004882	Zea mays
BAA85112.1	AB031011	Zea mays
BAB20582.1	AB042269	Zea mays
BAB41137.1	AB060130	Zea mays

SEQ ID NO. 1815

AAB62808.1	U71108	Nicotiana tabacum
AAB62807.1	U71107	Nicotiana tabacum
AAC34989.1	AF042333	Oryza sativa
AAC34951.1	U81312	Nicotiana tabacum
AAB04057.1	U43683	Glycine max
AAB70886.1	U79669	Zea mays
AAC34988.1	AF042332	Oryza sativa subsp. japonica
AAC04265.1	AF045570	Zea mays
AAC35787.1	AF053766	Nicotiana tabacum
AAB49338.1	U60755	Triticum aestivum
AAB37769.1	U60754	Triticum aestivum
AAB62812.1	U81313	Ricinus communis
AAF61950.1	AF237633	Spinacia oleracea
AAG59894.1	AF328858	Lycopersicon esculentum

SEQ ID NO. 1817

AAB26960.1	U63726	Glycine max

SEQ ID NO. 1818

AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAC36697.1	AF075579	Mesembryanthemum crystallinum
AAD17804.1	AF092431	Lotus japonicus
CAC10358.1	AJ277086	Nicotiana tabacum
CAB90634.1	AJ277744	Fagus sylvatica
CAC10359.1	AJ277087	Nicotiana tabacum

CAC09575.1	AJ298987	Fagus sylvatica
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAD17805.1	AF092432	Lotus japonicus
AAC35951.1	AF079355	Mesembryanthemum crystallinum
AAC36698.1	AF075580	Mesembryanthemum crystallinum
CAA72341.1	Y11607	Medicago sativa
AAC36700.1	AF075582	Mesembryanthemum crystallinum
AAG43835.1	AF213455	Zea mays
AAB93832.1	U81960	Zea mays
CAC09576.1	AJ298988	Fagus sylvatica
AAC26828.1	AF075603	Oryza sativa

SEQ ID NO. 1825

CAC17011.1	AJ297967	Fragaria x ananassa
CAA93442.1	Z69596	Fragaria x ananassa
CAA63919.1	X94225	Brassica napus
AAF19789.1	AF162204	Lactuca sativa

SEQ ID NO. 1826

BAA76438.1	AB025047	Oryza sativa
CAA70475.1	Y09291	Triticum aestivum
AAC49659.1	U74319	Sorghum bicolor
CAA70476.1	Y09292	Triticum aestivum
CAB64667.1	AJ251798	Triticum aestivum

SEQ ID NO. 1827

CAB94837.1	AJ277950	Nicotiana plumbaginifolia
CAA69601.2	Y08293	Nicotiana plumbaginifolia
AAB39508.1	U48695	Lycopersicon esculentum
AAB51596.1	U93561	Zea mays
CAA09478.1	AJ011096	Asparagus officinalis
BAA08445.1	D49475	Zea mays
AAB51595.1	U93560	Zea mays
CAC18730.1	AJ303070	Vitis vinifera
CAA60507.1	X86924	Vitis vinifera
CAA69600.1	Y08292	Nicotiana plumbaginifolia
CAB94836.1	AJ277949	Nicotiana plumbaginifolia
CAA09456.1	AJ011006	Asparagus officinalis
CAA41635.1	X58831	Chlorella sorokiniana
CAA41636.1	X58832	Chlorella sorokiniana

SEQ ID NO. 1831

CAA73067.1	Y12464	Sorghum bicolor
CAA73068.1	Y12465	Sorghum bicolor
AAB62693.1	AF004947	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA83688.1	AB011967	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
BAA83689.1	AB011968	Oryza sativa
AAF66639.1	AF143743	Lycopersicon esculentum
AAD23582.1	AF128443	Glycine max
CAA71142.1	Y10036	Cucumis sativus
BAA05649.1	D26602	Nicotiana tabacum
CAA57898.1	X82548	Hordeum vulgare
CAA65244.1	X95997	Solanum tuberosum
AAC99329.1	AF062479	Oryza sativa
AAB52224.1	U83797	Solanum tuberosum
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
CAA46554.1	X65604	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
AAD00239.1	U73938	Nicotiana tabacum
CAA06503.1	AJ005373	Craterostigma plantagineum
BAA19573.1	AB002109	Oryza sativa
BAA13608.1	D88399	Oryza sativa
AAG60195.1	AC084763	Oryza sativa
AAF27340.1	AF186020	Vicia faba
AAB68962.1	L38855	Glycine max
AAD00240.1	U73939	Nicotiana tabacum
CAA89202.1	Z49233	Chlamydomonas eugametos
AAB58348.1	U29095	Triticum aestivum
AAA96325.1	M94726	Triticum aestivum
CAA81443.1	Z26846	Mesembryanthemum crystallinum
AAB80692.1	U69173	Glycine max

SEQ ID NO. 1833

BAB21205.1	AP002913	Oryza sativa
BAA22813.1	D26015	Nicotiana tabacum

SEQ ID NO. 1839

AAF40306.1	AF156667	Vigna radiata

CAA68193.1	X99937	Spinacia oleracea
BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
AAD20980.1	AF079782	Zea mays
BAA95705.1	AB042644	Oryza sativa
BAA95704.1	AB042643	Oryza sativa

SEQ ID NO. 1840

CAA70260.1	Y09057	Helianthus annuus
AAF00549.1	AF189148	Helianthus annuus

SEQ ID NO. 1842

AAG40131.1	AF209484	Brassica napus
AAG40133.1	AF209486	Brassica napus
AAG40132.1	AF209485	Brassica napus
AAG40136.1	AF209490	Brassica napus
AAC31553.1	AF078874	Avena sativa
AAC31552.1	AF078873	Avena sativa
AAB96976.1	AF032679	Hordeum vulgare
AAF14565.1	AF181728	Brassica napus
AAK18300.1	AF338967	Brassica rapa
AAG40139.1	AF209494	Brassica napus
AAB96999.1	AF032702	Oryza sativa
AAG40140.1	AF209495	Brassica napus
AAC40135.1	AF209489	Brassica napus
AAG40142.1	AF209499	Brassica napus
AAK18290.1	AF338954	Brassica oleracea
AAG43187.1	AF107548	Brassica napus
AAK18301.1	AF338968	Brassica rapa
AAD27815.1	AF118127	Lycopersicon esculentum
AAB63275.1	AF004879	Lycopersicon esculentum
AAD03157.1	AF113957	Lactuca sativa
AAD03156.1	AF113948	Lactuca sativa
AAG43188.1	AF107549	Brassica napus
AAD03671.1	AF072271	Lactuca sativa
AAF14567.1	AF181730	Brassica rapa
AAG52749.1	AF263320	Brassica napus
AAC02203.1	AF017752	Lactuca sativa
AAC02202.1	AF017751	Lactuca sativa
AAF14566.1	AF181729	Brassica oleracea
BAA75812.1	AB019186	Oryza sativa

AAD04191.1	AF113950	Lactuca sativa
AAK18295.1	AF338960	Brassica oleracea
AAG43184.1	AF107545	Brassica napus
AAG43186.1	AF107547	Brassica napus
AAK20742.1	AF325198	Triticum aestivum
AAG43189.1	AF107550	Brassica napus
AAK18299.1	AF338966	Brassica rapa
AAG40143.1	AF209500	Brassica napus
AAF19148.1	AF158634	Aegilops ventricosa
AAG52747.1	AF263318	Brassica napus
AAK18288.1	AF338951	Brassica oleracea
CAC29242.1	AJ302293	Hordeum vulgare
CAC29241.1	AJ302292	Hordeum vulgare
AAG52755.1	AF263326	Brassica napus
AAG40134.1	AF209487	Brassica napus
AAK18305.1	AF338972	Brassica rapa
AAK20736.1	AF325196	Triticum aestivum

SEQ ID NO. 1853

AAC78596.1	AF053998	Lycopersicon esculentum
AAC78591.1	AF053993	Lycopersicon esculentum
AAC78593.1	AF053995	Lycopersicon esculentum
AAC78592.1	AF053994	Lycopersicon esculentum
AAC78594.1	AF053996	Lycopersicon pimpinellifolium
CAA05274.1	AJ002236	Lycopersicon pimpinellifolium
AAA65235.1	U15936	Lycopersicon pimpinellifolium
CAA05276.1	AJ002236	Lycopersicon pimpinellifolium
AAC78595.1	AF053997	Lycopersicon esculentum
CAA05268.1	AJ002235	Lycopersicon hirsutum
CAA05279.1	AJ002237	Lycopersicon esculentum
BAB08215.1	AP002539	Oryza sativa
BAA96776.1	AP002521	Oryza sativa
AAD50430.1	AF166121	Hordeum vulgare
CAB55409.1	AL117265	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata
AAC49123.1	U37133	Oryza sativa

SEQ ID NO. 1854

AAF06346.1	AF195653	Vitis vinifera
BAA28872.1	AB006009	Pyrus pyrifolia
CAC10270.1	AJ243427	Malus x domestica

AAC36740.1	AF090143	Malus x domestica
CAB62167.1	AJ242828	Castanea sativa
AAB38064.1	U32440	Prunus avium
BAA74546.2	AB000834	Nicotiana tabacum
AAF06347.1	AF195654	Vitis vinifera
CAC09477.1	AL442113	Oryza sativa
AAB95118.1	U71244	Brassica rapa
CAA10492.1	AJ131731	Pseudotsuga menziesii
BAA95017.1	AB031870	Cestrum elegans
BAA95165.1	AB029918	Nicotiana tabacum
AAB61590.1	AF003007	Vitis vinifera
AAD55090.1	AF178653	Vitis riparia
AAF82264.1	AF227324	Vitis vinifera
AAB02259.1	U57787	Avena sativa
AAB53368.1	U77657	Oryza sativa
CAA09228.1	AJ010501	Cicer arietinum
CAA33293.1	X15224	Nicotiana tabacum
CAA33292.1	X15223	Nicotiana tabacum

SEQ ID NO. 1856

AAB62808.1	U71108	Nicotiana tabacum
AAB62807.1	U71107	Nicotiana tabacum
AAC34989.1	AF042333	Oryza sativa
AAC34951.1	U81312	Nicotiana tabacum
AAB04057.1	U43683	Glycine max
AAB62812.1	U81313	Ricinus communis
AAC35787.1	AF053766	Nicotiana tabacum
AAC34988.1	AF042332	Oryza sativa subsp. japonica
AAB70886.1	U79669	Zea mays
AAC04265.1	AF045570	Zea mays
AAB49338.1	U60755	Triticum aestivum
AAB37769.1	U60754	Triticum aestivum
AAF61950.1	AF237633	Spinacia oleracea
AAG59894.1	AF328858	Lycopersicon esculentum

SEQ ID NO. 1857

AAD05576.1	AF009735	Raphanus sativus
AAC25568.1	AF071112	Brassica rapa subsp. pekinensis
CAA65043.1	X95728	Brassica juncea
CAA65041.1	X95726	Brassica juncea
AAD01605.1	AF016893	Populus tremuloides
AAD01604.1	AF016892	Populus tremuloides
AAB40394.1	U80069	Mesembryanthemum crystallii
CAA51654.1	X73139	Ipomoea batatas
CAA37866.1	X53872	Spinacia oleracea
CAA39444.1	X55974	Nicotiana plumbaginifolia
CAB57992.1	X17565	Zea mays
CAA60826.1	X87372	Lycopersicon esculentum
AAB92612.1	AF037359	Paulownia kawakamii
AAB66812.1	AF009734	Capsicum annuum
AAD48484.1	AF170297	Manihot esculenta
AAA34194.1	M37150	Lycopersicon esculentum
CAA32199.1	X14040	Lycopersicon esculentum
CAB60191.1	AJ250667	Ananas comosus
CAA73929.1	Y13610	Carica papaya
AAC08581.1	AF054150	Zantedeschia aethiopica
CAA10160.1	AJ012739	Cicer arietinum
CAA10132.1	AJ012691	Cicer arietinum
AAK26435.1	AF354748	Solanum tuberosum
AAC14465.1	L19434	Oryza sativa
BAA00800.1	D01000	Oryza sativa
AAB49913.1	U34727	Zea mays
CAB57993.1	X17564	Zea mays
AAA33659.1	M63003	Pisum sativum
AAC14464.1	L19435	Oryza sativa
BAA00799.1	D00999	Oryza sativa
AAK06837.1	AF328859	Avicennia marina
AAA33917.1	L36320	Oryza sativa
BAA19674.1	D49485	Solidago canadensis
AAA33510.1	M54936	Zea mays
CAA41454.1	X58578	Pinus sylvestris
AAB87572.1	AF034630	Panax ginseng
CAC34448.1	AJ307586	Pinus sylvestris
CAA05633.1	AJ002604	Pinus sylvestris
BAA01088.1	D10244	Spinacia oleracea
AAB49912.1	U34726	Zea mays
BAA19675.1	D49486	Solidago canadensis
AAB67991.1	U69632	Triticum aestivum
BAA24919.1	AB004870	Marchantia paleacea
AAB67990.1	U69536	Chloroplast Triticum aestivum
CAB66335.1	AJ279694	Betula pendula

SEQ ID NO. 1859

AAB88537.1	AF035944	Fragaria x ananassa
BAA81751.1	AB017517	Marchantia polymorpha
BAA81749.1	AB017515	Marchantia polymorpha
BAA81750.1	AB017516	Marchantia polymorpha
BAA81748.1	AB017515	Marchantia polymorpha
CAA07481.1	AJ007366	Zea mays
AAB70706.1	U82087	Tortula ruralis
BAA12338.1	D84408	Zea mays
BAA13232.1	D87042	Zea mays
BAA12715.1	D85039	Zea mays
AAC49405.1	U08140	Vigna radiata
CAA57157.1	X81394	Oryza sativa
AAB49984.1	U90262	Cucurbita pepo
AAA69507.1	U28376	Zea mays
AAA61682.1	L27484	Zea mays
AAD17800.1	AF090835	Mesembryanthemum crystallinum
AAB80692.1	U69173	Glycine max
AAB80693.1	U69174	Glycine max
AAA33443.1	L15390	Zea mays
AAC25423.1	AF072908	Nicotiana tabacum
AAD28192.2	AF115406	Solanum tuberosum
BAA13440.1	D87707	Ipomoea batatas
CAA39936.1	X56599	Daucus carota
CAA65500.1	X96723	Medicago sativa
BAA85396.1	AP000615	Oryza sativa
CAA57156.1	X81393	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
AAK26164.1	AY027885	Cucumis sativus
CAB46228.1	Y18055	Arachis hypogaea
AAG46110.1	AC073166	Oryza sativa
BAA02698.1	D13436	Oryza sativa
AAF21062.1	AF216527	Dunaliella tertiolecta
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF23901.2	AF194414	Oryza sativa
AAF23900.1	AF194413	Oryza sativa
AAC78558.1	AF030879	Solanum tuberosum
CAA58750.1	X83869	Daucus carota
BAA12692.1	D84508	Zea mays
AAB47181.1	S82324	Zea mays
BAA12691.1	D84507	Zea mays
AAG01179.1	AF289237	Zea mays
BAA22410.1	D38452	Zea mays
AAC24961.1	AF009337	Tradescantia virginiana
BAA90814.1	AP001168	Oryza sativa
AAC32116.1	AF051211	Picea mariana
AAD52092.1	AF087813	Nicotiana tabacum
AAF21450.1	U38446	Nicotiana tabacum

SEQ ID NO. 1861

CAB82852.1	Z30329	Mesembryanthemum crystallir
CAA50374.1	X71057	Nicotiana tabacum
CAA82991.1	Z30330	Spinacia oleracea
BAB03409.1	AP002816	Oryza sativa
CAA82994.1	Z30333	Mesembryanthemum crystallir
CAA62476.1	X90990	Solanum tuberosum
AAA50304.1	M92989	Pisum sativum
CAA82993.1	Z30332	Spinacia oleracea
BAB18104.1	AB042714	Chlamydomonas reinhardtii
BAB18105.1	AB042715	Chlamydomonas reinhardtii
AAF66637.1	AF143505	Lycopersicon esculentum
CAA66616.1	X97980	Solanum berthaultii
BAA96593.1	AP002481	Oryza sativa
CAA73068.1	Y12465	Sorghum bicolor
CAA73067.1	Y12464	Sorghum bicolor
BAA83689.1	AB011968	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
BAA05649.1	D26602	Nicotiana tabacum
AAF22219.1	AF141378	Zea mays
CAA71142.1	Y10036	Cucumis sativus
AAD23582.1	AF128443	Glycine max

SEQ ID NO. 1862

AAB01085.2	U34402	Triticum aestivum
AAF32492.1	AF091838	Mitochondrion Triticum aestivum

SEQ ID NO. 1863

BAA77358.1	AB020023	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
AAD27591.1	AF121354	Petroselinum crispum
AAC49529.1	U58540	Petroselinum crispum
CAA88326.1	Z48429	Avena fatua

AAC49527.1	U48831	Petroselinum crispum
AAD16139.1	AF096299	Nicotiana tabacum
AAD16138.1	AF096298	Nicotiana tabacum
CAA88331.1	Z48431	Avena fatua
AAC37515.1	L44134	Cucumis sativus
AAF61864.1	AF193771	Nicotiana tabacum
BAA87069.1	AB035271	Matricaria chamomilla
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 1866

CAB40834.1	AJ005686	Vitis vinifera
AAK01360.1	AF314811	Brassica napus
AAC14481.1	U92286	Actinidia deliciosa
AAB67875.1	U60267	Lycopersicon esculentum
CAA67069.1	X98421	Medicago sativa
AAK01361.1	AF314812	Brassica napus
BAA19916.1	D49714	Oryza sativa
AAC18862.1	AF067967	Mesembryanthemum crystallinum
CAA67070.1	X98422	Medicago sativa
AAC84137.1	AF101424	Cichorium intybus
AAB80946.1	AF022914	Triticum aestivum

SEQ ID NO. 1867

AAD56018.1	AF180758	Vitis riparia
AAF34765.1	AF227620	Euphorbia esula

SEQ ID NO. 1868

AAG17470.1	AF123609	Triticum aestivum
AAK31592.1	AY029178	Brassica rapa subsp. pekinensis
AAD10204.1	AF030260	Vicia sativa
AAG33645.1	AF092917	Vicia sativa
CAB41474.1	AJ238402	Catharanthus roseus
AAB94586.1	AF022457	Glycine max
AAD56282.1	AF155332	Petunia x hybrida
AAD03415.1	AF069494	Sinapis alba
CAA89260.1	Z49263	Pisum sativum
AAC32274.1	AF081575	Petunia x hybrida
CAA50155.1	X70824	Solanum melongena
AAF66544.1	AF140610	Triglochin maritimum
AAB94590.1	AF022461	Glycine max
BAA74465.1	AB022732	Glycyrrhiza echinata
AAF27282.1	AF122821	Capsicum annuum
BAA22422.1	AB001379	Glycyrrhiza echinata
AAA17732.1	L19074	Catharanthus roseus
CAA57423.1	X81829	Zea mays
CAA72208.1	Y11404	Zea mays
AAF66543.1	AF140609	Triglochin maritimum
AAC39454.1	AF014802	Eschscholzia californica
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAA32913.1	M32885	Persea americana

SEQ ID NO. 1870

AAF21800.1	AF090836	Brassica rapa subsp. pekin
CAA50004.1	X70666	Triticum aestivum
CAA65313.1	X96446	Triticum aestivum
AAA32978.1	M19048	Hordeum vulgare
AAA32977.1	M19047	Hordeum vulgare
AAA32976.1	M19046	Hordeum vulgare
AAB71137.1	AF004018	Triticum aestivum
BAA12336.1	D84390	Triticum aestivum
CAA65315.1	X96448	Triticum aestivum
CAA50003.1	X70665	Triticum aestivum
CAA65316.1	X96449	Secale cereale
CAA65312.1	X96445	Triticum aestivum
AAA91048.1	L36883	Hordeum vulgare
CAA29330.1	X05901	Hordeum vulgare
AAA32966.1	M23080	Hordeum vulgare
CAA57351.1	X81707	Tulipa gesneriana
CAA78352.1	Z13008	Hordeum vulgare
AAA91047.1	L36882	Hordeum vulgare
CAA29082.1	X05576	Hordeum vulgare
CAA57353.1	X81709	Tulipa gesneriana
CAA57352.1	X81708	Tulipa gesneriana
CAA57350.1	X81706	Tulipa gesneriana
CAA57354.1	X81710	Tulipa gesneriana
CAA65314.1	X96447	Triticum aestivum

SEQ ID NO. 1872

AAD39439.1	AF132001	Petunia x hybrida
AAG32658.1	AF253970	Picea abies
AAG32659.1	AF253971	Picea abies

AAD22495.3	AF134116	Hyacinthus orientalis
AAF76898.1	AF274033	Atriplex hortensis

SEQ ID NO. 1873

AAK21249.1	AF335236	Petunia x hybrida
AAF76381.1	AF068723	Nicotiana tabacum
AAK21254.1	AF335241	Petunia x hybrida
AAF22138.1	AF129875	Capsicum annuum
AAC25922.1	U78947	Malus x domestica
CAA04919.1	AJ001681	Malus x domestica
CAA64741.1	X95467	Antirrhinum majus
AAD51422.1	U78949	Malus x domestica
CAA04323.1	AJ000761	Malus x domestica
AAC78284.1	AF029977	Eucalyptus grandis
CAA04920.1	AJ001682	Malus x domestica
AAK21247.1	AF335234	Petunia x hybrida
AAK21248.1	AF335235	Petunia x hybrida
AAD51423.1	U78950	Malus x domestica
CAA04322.1	AJ000760	Malus x domestica
AAF77579.1	AF072534	Capsicum annuum
CAA48859.1	X69107	Aranda deborah
AAC49817.1	U78892	Oryza sativa
AAC49816.1	U78891	Oryza sativa
CAB97355.1	AJ249147	Hordeum vulgare
AAD39034.1	AF068722	Nicotiana sylvestris
CAA64742.1	X95468	Antirrhinum majus
CAA64743.1	X95469	Antirrhinum majus
CAA69916.1	Y08626	Sinapis alba
CAB95648.1	AJ252070	Betula pendula
AAF13262.1	AF198176	Dendrobium grex Madame Thong-In
CAA11258.1	AJ223318	Pisum sativum
AAB50187.1	U49734	Sorghum bicolor
AAA66187.1	L34271	Oryza sativa
AAG35652.1	AF204063	Oryza sativa
AAC78282.1	AF029975	Eucalyptus grandis
AAD38370.1	AF141966	Oryza sativa
BAA81882.1	AB003324	Oryza sativa
CAA04325.1	AJ000763	Malus x domestica
AAD20816.1	AF107588	Dendrobium grex Madame Thong-In
AAB64250.1	U78782	Oryza sativa
AAF13260.1	AF198174	Dendrobium grex Madame Thong-In

SEQ ID NO. 1875

BAA21921.1	AB006599	Petunia x hybrida

SEQ ID NO. 1876

CAB41987.1	AJ133453	Nicotiana tabacum
CAA75603.1	Y15383	Pisum sativum
AAF81220.1	AF251346	Tagetes erecta
CAB89286.1	AJ271748	Nicotiana tabacum
AAF23770.1	AF205858	Nicotiana tabacum
CAB54558.1	AJ249138	Physcomitrella patens
AAF23771.1	AF205859	Gentiana lutea
CAB76387.1	AJ249140	Physcomitrella patens
CAB76386.1	AJ249139	Physcomitrella patens
CAA04845.2	AJ001586	Physcomitrella patens
CAB89288.1	AJ271750	Nicotiana tabacum
BAA96782.1	AB042101	Lilium longiflorum
AAF87239.1	AF275720	Plastid Neottopteris nidus
AAF19407.1	AF203636	Chlamydomonas reinhardtii

SEQ ID NO. 1877

AAG01147.1	AF283816	Pinus taeda
CAA05161.1	AJ002057	Beta vulgaris
AAB71419.1	U74630	Ricinus communis
AAB71420.1	U74631	Ricinus communis
CAA95999.1	Z71395	Nicotiana plumbaginifolia
AAD17490.1	AF052040	Berberis stolonifera
AAD32207.1	AF134733	Prunus armeniaca
CAA61939.1	X89813	Zea mays
AAA32948.1	L27348	Hordeum vulgare
AAA32949.1	L27349	Hordeum vulgare
AAF01470.1	AF190454	Zea mays
CAB54526.1	AJ000765	Chlamydomonas reinhardtii
AAB70919.1	AF019376	Brassica napus
BAA85118.1	AB018243	Solanum melongena
CAA54975.1	X78057	Zea mays
CAA57914.1	X82578	Parthenium argentatum
AAK15502.1	AF325720	Pennisetum ciliare
BAA77025.1	AB026251	Lithospermum erythrorhizon

SEQ ID NO. 1878

BAA12206.1	D84061	Spinacia oleracea

SEQ ID NO. 1879

CAC21424.1	AJ278332	Lycopersicon esculentum
BAB40340.1	AB044940	Pisum sativum
CAB43506.1	AJ242551	Lycopersicon esculentum

SEQ ID NO. 1880

AAC28907.1	U18349	Phaseolus vulgaris
AAB00686.1	U18348	Phaseolus vulgaris
AAD15818.1	AF061107	Zea mays
AAG25928.1	AF260919	Petunia x hybrida
AAG25927.1	AF260918	Petunia x hybrida
AAC39455.1	AF020545	Petunia x hybrida
AAC49219.1	U39860	Oryza sativa

SEQ ID NO. 1881

CAB57457.2	AJ249786	Nicotiana tabacum
AAB57668.1	U82974	Citrus sinensis

SEQ ID NO. 1882

AAC29516.1	U77655	Solanum tuberosum
AAD00708.1	U91857	Stylosanthes hamata
BAB03248.1	AB037183	Oryza sativa
BAA97123.1	AB016265	Nicotiana sylvestris
BAA97124.1	AB016266	Nicotiana sylvestris
BAA76734.1	AB024575	Nicotiana tabacum
AAC50047.1	U89255	Lycopersicon esculentum
BAA97122.1	AB016264	Nicotiana sylvestris
BAA87068.1	AB035270	Matricaria chamomilla
AAC49741.1	U89257	Lycopersicon esculentum
CAB96899.1	AJ251249	Catharanthus roseus
CAB96900.1	AJ251250	Catharanthus roseus
AAC49740.1	U89256	Lycopersicon esculentum
AAB38748.1	U81157	Nicotiana tabacum
AAC62619.1	AF057373	Nicotiana tabacum
AAD45623.1	AF084185	Brassica napus

SEQ ID NO. 1883

BAA92965.1	AP001551	Oryza sativa

SEQ ID NO. 1887

AAG28780.1	AF306518	Brassica napus
CAC10555.1	AJ279059	Lotus japonicus
CAA64475.1	X95098	Lycopersicon esculentum
AAG11397.1	AF118858	Lycopersicon esculentum
AAD16012.1	AF080541	Nepenthes alata
AAF01774.1	AF188744	Brassica napus

SEQ ID NO. 1888

AAG22044.1	AF305783	Pisum sativum
AAF00610.1	AF156781	Dolichos biflorus
AAG32959.1	AF207687	Glycine soja
AAG32960.1	AF207688	Glycine soja
AAD31285.1	AF139807	Dolichos biflorus
AAF00609.1	AF156780	Lotus japonicus
BAB18896.1	AB038669	Pisum sativum
BAB18895.1	AB038668	Pisum sativum
BAB18894.1	AB038555	Pisum sativum
BAB18893.1	AB038554	Pisum sativum
BAB18900.1	AB027614	Pisum sativum
BAB40230.1	AB027613	Pisum sativum
BAB18890.1	AB023621	Pisum sativum
BAA75506.1	AB022319	Pisum sativum
AAF00611.1	AF156782	Medicago sativa
BAA89275.1	AB027616	Pisum sativum
BAB40231.1	AB027615	Pisum sativum
AAB02720.1	U58597	Solanum tuberosum
BAB18891.1	AB030444	Pisum sativum
BAB18892.1	AB030445	Pisum sativum

SEQ ID NO. 1889

AAF97728.1	AF176035	Eucalyptus camaldulensis
AAD53890.1	AF176036	Eucalyptus camaldulensis
AAG37274.1	AF313388	Oryza sativa
AAA52749.1	U16709	Triticum aestivum

SEQ ID NO. 1890

BAA90507.1	AP001111	Oryza sativa
AAD10836.1	U52079	Solanum tuberosum
BAA90508.1	AP001111	Oryza sativa
BAA83352.1	AP000391	Oryza sativa

CAA94437.1	Z70524	Spirodela polyrrhiza
BAA94511.1	AB041505	Populus nigra

SEQ ID NO. 1894

AAG13131.1	AF193791	Fragaria x ananassa
BAB08208.1	AP002539	Oryza sativa
BAA96769.1	AP002521	Oryza sativa
AAB40530.1	U38199	Oryza sativa
AAA90948.1	U27350	Oryza sativa
CAA57447.1	X81854	Nicotiana tabacum
CAA91445.1	Z66544	Pisum sativum
AAA68290.1	U07339	Oryza sativa
AAC49442.1	U26660	Oryza sativa
CAA35589.1	X17555	Zea mays
CAA42120.1	X59546	Zea mays
AAA68289.1	U07338	Oryza sativa
CAA57448.1	X81855	Nicotiana tabacum
AAG22488.1	AF195868	Vitis vinifera
CAA91444.1	Z66543	Pisum sativum
CAB61763.1	AJ251246	Saccharum officinarum
CAA63404.1	X92743	Oryza sativa
BAA03354.1	D14457	Zea mays
CAA79819.1	Z21722	Zea mays
BAA03353.1	D14456	Zea mays
CAA79818.1	Z21721	Zea mays

SEQ ID NO. 1895

CAA80559.1	Z23023	Solanum tuberosum
CAA12157.1	AJ224847	Zea mays
CAA54986.1	X78069	Flaveria pringlei
CAA45772.1	X64434	Mesembryanthemum crystallinum
AAB08874.1	U67426	Vitis vinifera
AAA67087.1	L34836	Vitis vinifera
CAB66003.1	AJ132257	Apium graveolens
AAA34174.1	L27509	Lycopersicon esculentum
AAD11429.1	AF097666	Mesembryanthemum crystallinum
AAA83963.1	L35306	Lycopersicon esculentum
BAA76435.1	AB025007	Cicer arietinum

SEQ ID NO. 1896

AAB97163.1	AF025667	Gossypium hirsutum
CAA12231.1	AJ224932	Lycopersicon esculentum
CAA12233.1	AJ224934	Lycopersicon esculentum
AAB94923.1	AF038386	Capsicum annuum
CAA72091.1	Y11208	Nicotiana tabacum
CAB88668.1	AJ400863	Cicer arietinum
CAA42530.1	X59873	Triticum aestivum
AAB04688.1	U08226	Zea mays
CAA12230.1	AJ224931	Lycopersicon esculentum
CAA40564.1	X57312	Zea mays
CAA49584.1	X69960	Zea mays
CAA57778.1	X82362	Asparagus officinalis
CAA40565.1	X57313	Zea mays
CAA49585.1	X69961	Zea mays
BAA07156.1	D37942	Triticum aestivum
BAA07157.1	D37943	Triticum aestivum
BAA07159.1	D37945	Triticum aestivum
AAA98454.1	U16726	Chlamydomonas reinhardtii
AAA98450.1	U16725	Chlamydomonas reinhardtii
AAA98446.1	U16724	Chlamydomonas reinhardtii
AAA34248.1	M31921	Volvox carteri
AAA34250.1	M31922	Volvox carteri
AAC05126.1	AF048824	Malus x domestica
CAA64986.1	X95690	Allium cepa
BAA07158.1	D37944	Triticum aestivum
CAA64987.1	X95691	Allium cepa
BAA96095.1	AB003780	Lilium longiflorum

SEQ ID NO. 1909

CAC26921.1	AJ295607	Arabidopsis lyrata subsp. petraea
BAA36553.1	AB011795	Citrus sinensis
AAD56577.1	AF184270	Daucus carota
AAC49929.1	AF022142	Petunia x hybrida
BAA75309.1	AB023790	Ipomoea batatas
BAA75308.1	AB023789	Ipomoea batatas
AAD26206.1	AF117270	Malus x domestica
AAB41102.1	U74081	Ipomoea purpurea
CAA53579.1	X75965	Vitis vinifera
BAA21897.1	D83041	Ipomoea nil
CAA57410.1	X81812	Medicago sativa
CAA55628.1	X78994	Medicago sativa

AAC97525.1	U23066	Persea americana
AAB97310.1	U86837	Chrysanthemum x morifolium
AAC15414.1	AF036093	Nicotiana tabacum
AAA91227.1	U04434	Zea mays
CAA61486.1	X89199	Bromheadia finlaysoniana
BAA19657.1	AB002816	Perilla frutescens
CAA41146.1	X58138	Hordeum vulgare
CAB97360.1	AJ278457	Juglans nigra
AAG31153.1	AF308856	Lotus corniculatus
CAA50498.1	X71360	Malus sp.

SEQ ID NO. 1910

CAC14720.1	Y18219	Populus balsamifera subsp. trichocarpa
AAK37826.1	AF132122	Pinus taeda
AAK37824.1	AF132120	Pinus taeda
CAA74104.1	Y13772	Populus balsamifera subsp. trichocarpa
AAK37825.1	AF132121	Pinus taeda
AAK37830.1	AF132126	Pinus taeda
AAC49536.1	U43542	Nicotiana tabacum
AAB17194.1	U73106	Liriodendron tulipifera
AAB17193.1	U73105	Liriodendron tulipifera
AAK37829.1	AF132125	Pinus taeda
AAK37823.1	AF132119	Pinus taeda
AAB17191.1	U73103	Liriodendron tulipifera
AAK37827.1	AF132123	Pinus taeda
AAB17192.1	U73104	Liriodendron tulipifera
AAK37828.1	AF132124	Pinus taeda
CAA74105.1	Y13773	Populus balsamifera subsp. trichocarpa
AAB09228.1	U12757	Acer pseudoplatanus
CAA74103.1	Y13771	Populus balsamifera subsp. trichocarpa
CAC14719.1	Y18218	Populus balsamifera subsp. trichocarpa
CAA74102.1	Y13770	Populus balsamifera subsp. trichocarpa
AAC49538.1	U45243	Nicotiana tabacum
CAA74101.1	Y13769	Populus balsamifera subsp. trichocarpa
CAC14718.1	Y18217	Populus balsamifera subsp. trichocarpa
AAC49537.1	U43543	Nicotiana tabacum

SEQ ID NO. 1911

AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAG16628.1	AY007545	Brassica napus
AAB61708.1	U93048	Daucus carota
BAA94509.1	AB041503	Populus nigra
AAA33915.1	L27821	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
BAA78764.1	AB023482	Oryza sativa
BAA94510.1	AB041504	Populus nigra
BAA92954.1	AP001551	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum
CAB51834.1	00069	Oryza sativa
CAA73134.1	Y12531	Brassica oleracea
CAA97692.1	Z73295	Catharanthus roseus
AAF91323.1	AF244889	Glycine max
AAF76313.1	AF220603	Lycopersicon esculentum
AAF91324.1	AF244890	Glycine max
AAB47421.1	U59316	Lycopersicon esculentum
BAA92953.1	AP001551	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum
AAF91337.1	AF249318	Glycine max
AAF91322.1	AF244888	Glycine max
CAC20842.1	AJ250467	Pinus sylvestris
AAB93834.1	U82481	Zea mays
AAF91336.1	AF249317	Glycine max
AAC23542.1	U20948	Ipomoea trifida
AAF59905.1	AF197946	Glycine max

SEQ ID NO. 1912

AAG08959.1	AF122051	Solanum tuberosum
AAG08960.1	AF122052	Solanum tuberosum
AAG08961.1	AF122053	Solanum tuberosum
AAF34434.1	AF172282	Oryza sativa
AAF67053.1	AF190304	Adiantum raddianum
AAF67052.1	AF190303	Adiantum raddianum

AAF67050.1	AF190301	Secale cereale
AAF67051.1	AF190302	Secale cereale
CAA78388.1	Z13998	Petunia x hybrida
CAA72218.1	Y11415	Oryza sativa
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
CAA72217.1	Y11414	Oryza sativa
BAA81736.1	AB029165	Glycine max
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
BAA23340.1	D88620	Oryza sativa
BAA81733.2	AB029162	Glycine max
BAA88222.1	AB028650	Nicotiana tabacum
CAB43399.1	AJ006292	Antirrhinum majus
BAA81732.1	AB029161	Glycine max
AAG28525.1	AF198498	Nicotiana tabacum
CAA50226.1	X70881	Hordeum vulgare
CAA50223.1	X70878	Hordeum vulgare
CAA78387.1	Z13997	Petunia x hybrida
CAA67000.1	X98355	Oryza sativa
AAK19616.1	AF336283	Gossypium hirsutum
AAG28526.1	AF198499	Nicotiana tabacum
CAA78386.1	Z13996	Petunia x hybrida
CAA66952.1	X98308	Lycopersicon esculentum
BAA23341.1	D88621	Oryza sativa
CAA50221.1	X70876	Hordeum vulgare
AAK19611.1	AF336278	Gossypium hirsutum
CAA61021.1	X87690	Hordeum vulgare
AAG22863.1	AY008692	Hordeum vulgare

SEQ ID NO. 1915

AAA50763.1	U15605	Nicotiana glutinosa
AAK28809.1	AF310962	Linum usitatissimum
AAK28810.1	AF310964	Linum usitatissimum
AAK28812.1	AF310968	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum
CAA08798.1	AJ009720	Solanum tuberosum
AAK28811.1	AF310966	Linum usitatissimum
AAK28806.1	AF310960	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
AAK28804.1	AF310959	Linum usitatissimum
AAG09951.1	AF175388	Glycine max
CAC35337.1	AJ310162	Linum usitatissimum
CAC35330.1	AJ310155	Linum usitatissimum
CAA08797.1	AJ009719	Solanum tuberosum
CAC35326.1	AJ310151	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35332.1	AJ310157	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
AAD25966.1	AF093639	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
AAG43546.1	AF211528	Nicotiana tabacum
CAC35321.1	AJ310150	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAG01052.1	AF175395	Glycine max
CAC35331.1	AJ310156	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91022.1	U27081	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum
AAB47618.1	U73916	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25965.1	AF093638	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
AAG01051.1	AF175394	Glycine max
AAG09954.1	AF175399	Glycine max
AAG09953.1	AF175398	Glycine max

SEQ ID NO. 1918

AAF76897.1	AF274032	Atriplex hortensis
AAD25162.1	AF014810	Lycopersicon esculentum
AAD25161.1	AF014809	Lycopersicon esculentum
AAD25160.1	AF014808	Lycopersicon esculentum
CAA70778.1	Y09591	Vicia faba
AAB96830.1	U64823	Nicotiana sylvestris
AAB48944.1	U31932	Nicotiana sylvestris
AAD16015.1	AF080544	Nepenthes alata
CAA70969.1	Y09826	Solanum tuberosum
CAA70968.1	Y09825	Solanum tuberosum
AAD16014.1	AF080543	Nepenthes alata
AAD16013.1	AF080542	Nepenthes alata
AAF15945.1	AF061435	Vicia faba
AAF15946.1	AF061436	Vicia faba
AAF15944.1	AF061434	Vicia faba

SEQ ID NO. 1919

CAA08798.1	AJ009720	Solanum tuberosum
AAA50763.1	U15605	Nicotiana glutinosa
AAG43546.1	AF211528	Nicotiana tabacum
CAA08797.1	AJ009719	Solanum tuberosum
AAB47618.1	U73916	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
AAK28804.1	AF310959	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum
AAK28809.1	AF310962	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum
AAG01052.1	AF175395	Glycine max
AAG09951.1	AF175388	Glycine max
AAG01051.1	AF175394	Glycine max
CAC35329.1	AJ310154	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum
AAD25966.1	AF093639	Linum usitatissimum
AAD25965.1	AF093638	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAD25973.1	AF093646	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91022.1	U27081	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
CAC35332.1	AJ310157	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
CAC35336.1	AJ310161	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
CAC35321.1	AJ310150	Linum usitatissimum
AAG09954.1	AF175399	Glycine max
CAC35330.1	AJ310155	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35326.1	AJ310151	Linum usitatissimum
AAK28810.1	AF310964	Linum usitatissimum
AAK28812.1	AF310968	Linum usitatissimum
AAK28811.1	AF310966	Linum usitatissimum

SEQ ID NO. 1920

CAA39280.1	X55751	Solanum tuberosum
AAC31886.1	AF059484	Gossypium hirsutum
CAA45149.1	X63603	Nicotiana tabacum
CAA39278.1	X55749	Solanum tuberosum
AAC49651.1	U68461	Striga asiatica
AAC49652.1	U68462	Striga asiatica
AAF40438.1	AF234528	Avena nuda
AAF03692.1	AF172094	Picea rubens
AAF31643.1	AF143208	Vigna radiata
CAA33874.1	X15865	Oryza sativa
AAG10041.1	AF288226	Setaria italica
BAA89214.1	AB032361	Mimosa pudica
CAA39281.1	X55752	Solanum tuberosum
AAF71264.1	AF246714	Phalaenopsis sp. 'True Lady'
AAD41039.1	AF112538	Malva pusilla
AAF71265.1	AF246715	Phalaenopsis sp. 'True Lady'

AAD03741.1	AF111812	Brassica napus
CAA55923.1	X79378	Sorghum bicolor
AAB38512.1	U81047	Pisum sativum
AAB38511.1	U81046	Pisum sativum
AAB18642.1	U76191	Pisum sativum
AAB18641.1	U76190	Pisum sativum
CAA62028.1	X90378	Pisum sativum
CAA34356.1	X16280	Oryza sativa
CAA47899.1	X67666	Pisum sativum
AAF82805.1	AF282624	Helianthus annuus
CAA48609.1	X68649	Pisum sativum
AAC16054.1	AF061019	Coleochaete scutata
AAB38514.1	U81049	Pisum sativum
AAB18644.1	U76193	Pisum sativum
AAC64127.1	AF091809	Anemia phyllitidis
CAA39279.1	X55750	Solanum tuberosum
AAD02328.1	AF044573	Brassica oleracea
CAA23728.1	V00450	Glycine max
AAC16055.1	AF061020	Mesostigma viride
AAC64128.1	AF091810	Anemia phyllitidis
AAC05272.1	AF049106	Glycine max
AAF87302.1	AF281323	Magnolia denudata
BAA09450.1	D50839	Chlamydomonas reinhardtii
BAA09449.1	D50838	Chlamydomonas reinhardtii
AAA34243.1	M33963	Volvox carteri
AAA33433.1	J01238	Zea mays
AAC16053.1	AF061018	Scherffelia dubia
CAA33873.1	X15864	Oryza sativa
CAA33871.1	X15862	Oryza sativa
AAA33940.1	J01297	Glycine max
AAC64126.1	AF091808	Anemia phyllitidis
AAD48335.1	AF090969	Selaginella apoda
AAD48336.1	AF090970	Cosmarium botrytis
CAA39276.1	X55746	Solanum tuberosum

SEQ ID NO. 1925

CAA72341.1	Y11607	Medicago sativa
AAD17804.1	AF092431	Lotus japonicus
AAD17805.1	AF092432	Lotus japonicus
CAB90633.1	AJ277743	Fagus sylvatica
AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAC10358.1	AJ277086	Nicotiana tabacum
AAC36698.1	AF075580	Mesembryanthemum crystallir
CAC10359.1	AJ277087	Nicotiana tabacum
AAG43835.1	AF213455	Zea mays
CAC09575.1	AJ298987	Fagus sylvatica
CAB90634.1	AJ277744	Fagus sylvatica
AAC35951.1	AF079355	Mesembryanthemum crystallir
AAD11430.1	AF097667	Mesembryanthemum crystallir
AAC36700.1	AF075582	Mesembryanthemum crystallir
CAC09576.1	AJ298988	Fagus sylvatica
AAC26828.1	AF075603	Oryza sativa
AAB93832.1	U81960	Zea mays
AAC36699.1	AF075581	Mesembryanthemum crystallir

SEQ ID NO. 1927

AAG02411.1	AF284038	Cucurbita maxima
CAA72274.1	Y11486	Triticum aestivum
CAB52709.1	AJ245878	Triticum aestivum
CAB52710.1	AJ245879	Triticum aestivum
CAA66232.1	X97636	Hordeum vulgare
CAA72273.1	Y11485	Triticum aestivum
CAA64599.1	X95277	Hordeum vulgare
CAA90071.1	Z49890	Triticum aestivum
BAA88536.1	AP000969	Oryza sativa

SEQ ID NO. 1928

AAC35846.1	AF083333	Medicago sativa
AAA74882.1	L36823	Stylosanthes humilis
AAK28509.1	AF320110	Fragaria x ananassa
AAD10327.1	U63534	Fragaria x ananassa
AAB38503.1	U79770	Mesembryanthemum crystallinum
AAC15467.1	U24561	Apium graveolens
AAC61854.1	AF067082	Apium graveolens
AAA74883.1	L36456	Stylosanthes humilis
CAA86072.1	Z37991	Pinus taeda
CAA51226.1	X72675	Picea abies
CAA05097.1	AJ001926	Picea abies
CAA05096.1	AJ001925	Picea abies
AAB38774.1	U62394	Pinus radiata
CAA05095.1	AJ001924	Picea abies
CAA86073.1	Z37992	Pinus taeda

AAC31166.1	AF060491	Pinus radiata
CAC07423.1	AJ295837	Populus balsamifera subsp. trichocarpa
AAF43140.1	AF217957	Populus tremuloides
CAA79622.1	Z19568	Populus deltoides
CAA44216.1	X62343	Nicotiana tabacum
BAA03099.1	D13991	Aralia cordata
AAG15553.1	AF294793	Eucalyptus saligna
AAC07987.1	AF038561	Eucalyptus globulus
CAA44217.1	X62344	Nicotiana tabacum
CAA46585.1	X65631	Eucalyptus gunnii
AAF72100.1	AF146691	Lycopersicon esculentum
CAA53211.1	X75480	Eucalyptus gunnii
CAA74070.1	Y13733	Zea mays
CAA79625.1	Z19573	Medicago sativa
CAA06687.1	AJ005702	Zea mays
AAC35845.1	AF083332	Medicago sativa
CAA13177.1	AJ231135	Saccharum officinarum
AAB70908.1	AF010290	Lolium perenne
BAA19487.1	D86590	Zinnia elegans
BAA04046.1	D16624	Eucalyptus botryoides
AAF23416.1	AF207559	Brassica rapa
AAF23415.1	AF207558	Brassica oleracea
AAF23414.1	AF207557	Brassica napus
AAF23413.1	AF207556	Brassica napus
AAD18000.1	AF109157	Eucalyptus globulus
AAF23409.1	AF207552	Brassica napus
AAF23411.1	AF207554	Brassica oleracea

SEQ ID NO. 1929

CAA63223.1	X92491	Solanum tuberosum

SEQ ID NO. 1935

AAC27894.1	AF023164	Zea mays
AAC27895.1	AF023165	Zea mays
AAG16628.1	AY007545	Brassica napus
AAK21965.1	AY028699	Brassica napus
AAF91336.1	AF249317	Glycine max
BAA94509.1	AB041503	Populus nigra
AAC61805.1	U28007	Lycopersicon esculentum
AAF91337.1	AF249318	Glycine max
BAA82394.1	AP000367	Oryza sativa
BAA94510.1	AB041504	Populus nigra
BAA78764.1	AB023482	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAG03090.1	AC073405	Oryza sativa
AAB09771.1	U67422	Zea mays
AAF91323.1	AF244889	Glycine max
AAF91324.1	AF244890	Glycine max
AAF91322.1	AF244888	Glycine max
AAG25966.1	AF302082	Nicotiana tabacum
AAB61708.1	U93048	Daucus carota
CAC20842.1	AJ250467	Pinus sylvestris
AAF66615.1	AF142596	Nicotiana tabacum
AAF59906.1	AF197947	Glycine max
CAB51834.1	00069	Oryza sativa
CAA97692.1	Z73295	Catharanthus roseus
AAC36318.1	AF053127	Malus x domestica
BAA94529.2	AP001800	Oryza sativa
BAA94516.1	AP001800	Oryza sativa

SEQ ID NO. 1936

BAA78764.1	AB023482	Oryza sativa
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAG16628.1	AY007545	Brassica napus
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra
AAK21965.1	AY028699	Brassica napus
AAF91337.1	AF249318	Glycine max
AAG03090.1	AC073405	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum
AAF91336.1	AF249317	Glycine max
CAB51834.1	00069	Oryza sativa
AAC27894.1	AF023164	Zea mays
AAG25966.1	AF302082	Nicotiana tabacum
AAG33377.1	AF290411	Oryza meyeriana
AAC27895.1	AF023165	Zea mays
AAB47421.1	U59316	Lycopersicon esculentum
AAK11566.1	AF318490	Lycopersicon hirsutum
AAF76313.1	AF220603	Lycopersicon esculentum

AAF66615.1	AF142596	Nicotiana tabacum
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAB09771.1	U67422	Zea mays
CAA97692.1	Z73295	Catharanthus roseus
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAB61708.1	U93048	Daucus carota
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
AAG00510.1	AF285172	Phaseolus vulgaris
AAK11567.1	AF318491	Lycopersicon hirsutum

SEQ ID NO. 1937

BAB32443.1	AB055630	Phragmites australis
BAB32444.1	AB055631	Phragmites australis
BAB32442.1	AB055629	Phragmites australis
BAB32445.1	AB055632	Phragmites australis
AAF36491.1	AF129479	Hordeum vulgare
AAF36497.1	AF129485	Oryza sativa
AAF36492.1	AF129480	Hordeum vulgare
AAF36496.1	AF129484	Hordeum vulgare
CAC15061.1	AJ300161	Hordeum vulgare

SEQ ID NO. 1938

CAA71611.1	Y10602	Lycopersicon esculentum
CAA70100.1	Y08887	Lycopersicon esculentum
CAA70101.1	Y08888	Lycopersicon esculentum
AAC21564.1	AF067859	Solanum tuberosum
AAA62697.1	M55684	Hordeum vulgare
AAA62696.1	M55685	Hordeum vulgare
BAA02971.1	D13817	Oryza sativa
CAA77808.1	Z11754	Zea mays
BAA90618.1	AP001129	Oryza sativa
CAA71612.1	Y10603	Lycopersicon esculentum
AAC21565.1	AF067860	Solanum tuberosum
BAA04088.1	D16685	Oryza sativa
AAB38970.1	U80676	Botryococcus braunii
AAB39506.1	U40465	Chlamydomonas reinhardtii
AAD10324.1	U42979	Chlamydomonas reinhardtii
AAA33041.1	M33148	Citrullus lanatus
AAB99757.1	AF020273	Medicago sativa
CAB43994.1	AJ242712	Brassica napus
CAA55383.1	X78800	Eucalyptus gunnii
AAC41647.1	L31900	Cucumis sativus
CAB43995.1	AJ242713	Brassica napus
BAA12870.1	D85763	Oryza sativa
AAC24855.1	AF068686	Glycine max
AAC28106.1	AF079850	Pisum sativum
AAB99754.1	AF020270	Medicago sativa
CAB45387.1	AJ006974	Plastid Nicotiana tabacum
CAA63268.1	X92512	Brassica napus
AAA84971.1	U40212	Chlamydomonas reinhardtii
AAF69802.1	AF195869	Vitis vinifera
CAC15546.1	AJ250842	Dunaliella bioculata
CAA61621.1	X89451	Brassica napus
AAB99755.1	AF020271	Medicago sativa
AAD56659.1	AF180335	Glycine max
AAC19244.1	AF068687	Glycine max

SEQ ID NO. 1941

AAB95118.1	U71244	Brassica rapa
AAF06346.1	AF195653	Vitis vinifera
CAC10270.1	AJ243427	Malus x domestica
AAC36740.1	AF090143	Malus x domestica
BAA74546.2	AB000834	Nicotiana tabacum
AAB38064.1	U32440	Prunus avium
BAA28872.1	AB006009	Pyrus pyrifolia
AAF06347.1	AF195654	Vitis vinifera
CAB62167.1	AJ242828	Castanea sativa
CAC09477.1	AL442113	Oryza sativa
BAA95017.1	AB031870	Cestrum elegans
CAA10492.1	AJ131731	Pseudotsuga menziesii
BAA95165.1	AB029918	Nicotiana tabacum
AAB02259.1	U57787	Avena sativa
AAB53368.1	U77657	Oryza sativa
AAF82264.1	AF227324	Vitis vinifera
CAA09228.1	AJ010501	Cicer arietinum
AAB61590.1	AF003007	Vitis vinifera
CAA33293.1	X15224	Nicotiana tabacum
AAD55090.1	AF178653	Vitis riparia
CAA33292.1	X15223	Nicotiana tabacum
AAA93095.1	J01209	Thaumatococcus daniellii

SEQ ID NO. 1942		
AAC61839.1	AF025430	Papaver somniferum
AAC39358.1	AF005655	Eschscholzia californica
AAB20352.1	S65550	Eschscholzia californica
AAD17487.1	AF049347	Berberis stolonifera
SEQ ID NO. 1943		
CAA72093.1	Y11210	Nicotiana tabacum
SEQ ID NO. 1947		
CAC28528.1	X73111	Nicotiana tabacum
SEQ ID NO. 1950		
AAC34855.1	AF082030	Hemerocallis hybrid cultivar
SEQ ID NO. 1951		
AAC05149.1	AF049068	Pinus radiata
AAA63279.1	M57474	Lolium perenne
CAB63699.1	X57678	Lolium perenne
AAA63278.1	M57476	Lolium perenne
CAA93121.1	Z68893	Holcus lanatus
CAA81610.1	Z27084	Holcus lanatus
CAA10140.1	AJ012714	Holcus lanatus
CAA81613.1	Z27090	Phleum pratense
CAA10520.1	AJ131850	Poa pratensis
AAA86533.1	U31771	Oryza sativa
AAA50175.1	U03860	Glycine max
CAA55390.1	X78813	Phleum pratense
AAB35984.1	S80654	Phalaris aquatica
AAF80379.2	AF159703	Cynodon dactylon
AAG52887.1	AF333386	Nicotiana tabacum
AAB50734.2	S83343	Cynodon dactylon
AAD10496.1	U91981	Triticum aestivum
AAB37749.1	U30460	Cucumis sativus
SEQ ID NO. 1957		
BAA90510.2	AP001111	Oryza sativa
AAF73985.1	AF096871	Zea mays
CAA63790.1	X93592	Dunaliella bioculata
AAD11618.1	AF050496	Lycopersicon esculentum
AAA34138.1	M96324	Lycopersicon esculentum
AAB58910.1	U82966	Oryza sativa
AAD11617.1	AF050495	Lycopersicon esculentum
AAG28435.1	AF195028	Glycine max
AAG28436.1	AF195029	Glycine max
CAA68234.1	X99972	Brassica oleracea
AAD31896.1	AF145478	Mesembryanthemum crystalli
AAB60276.1	U09989	Zea mays
CAB69824.1	AJ271439	Prunus persica
AAD46187.1	AF156683	Nicotiana plumbaginifolia
BAA01058.1	D10207	Oryza sativa
AAB49042.1	U54690	Dunaliella acidophila
AAA34173.1	M60166	Lycopersicon esculentum
CAA52107.1	X73901	Dunaliella bioculata
AAB35314.2	S79323	Vicia faba
BAA06629.1	D31843	Oryza sativa
AAA34094.1	M80489	Nicotiana plumbaginifolia
BAA08134.1	D45189	Zostera marina
CAB85494.1	AJ132891	Medicago truncatula
CAB85495.1	AJ132892	Medicago truncatula
AAB84202.2	AF029256	Kosteletzkya virginica
CAA47275.1	X66737	Nicotiana plumbaginifolia
CAA54045.1	X76535	Solanum tuberosum
AAD46186.1	AF156679	Nicotiana plumbaginifolia
AAB17186.1	U72148	Lycopersicon esculentum
CAB69823.1	AJ271438	Prunus persica
AAB41898.1	U84891	Mesembryanthemum crystallinum
CAC29436.1	AJ310524	Vicia faba
BAA37150.1	AB022442	Vicia faba
CAA59800.1	X85805	Zea mays
CAA59799.1	X85804	Phaseolus vulgaris
CAC29435.1	AJ310523	Vicia faba
AAD46188.1	AF156691	Nicotiana plumbaginifolia
AAA34099.1	M80491	Nicotiana plumbaginifolia
AAA34052.1	M27888	Nicotiana plumbaginifolia
CAA54046.1	X76536	Solanum tuberosum
AAA34098.1	M80490	Nicotiana plumbaginifolia
AAD55399.1	AF179442	Lycopersicon esculentum
AAF98344.1	AF275745	Lycopersicon esculentum
AAG01028.1	AF289025	Cucumis sativus
AAK31799.1	AY029190	Lilium longiflorum

AAA81348.1	U38965	Vicia faba
AAK32119.1	AF308817	Hordeum vulgare
AAK32118.1	AF308816	Hordeum vulgare
AAA20600.1	U08984	Zea mays

SEQ ID NO. 1959

CAB43505.1	AJ239051	Cicer arietinum
BAA74465.1	AB022732	Glycyrrhiza echinata
BAA93634.1	AB025016	Lotus japonicus
BAA22422.1	AB001379	Glycyrrhiza echinata
CAA04117.1	AJ000478	Helianthus tuberosus
CAB41490.1	AJ238439	Cicer arietinum
CAA04116.1	AJ000477	Helianthus tuberosus
CAA10067.1	AJ012581	Cicer arietinum
AAD56282.1	AF155332	Petunia x hybrida
AAG09208.1	AF175278	Pisum sativum
BAA12159.1	D83968	Glycine max
CAA65580.1	X96784	Nicotiana tabacum
AAC49188.2	U29333	Pisum sativum
AAG44132.1	AF218296	Pisum sativum
CAA64635.1	X95342	Nicotiana tabacum
AAC39454.1	AF014802	Eschscholzia californica
AAB94590.1	AF022461	Glycine max
AAA32913.1	M32885	Persea americana
BAA84072.1	AB028152	Torenia hybrida
BAA13076.1	D86351	Glycine max
BAA84071.1	AB028151	Antirrhinum majus
AAC32274.1	AF081575	Petunia x hybrida
CAA50155.1	X70824	Solanum melongena
CAA70575.1	Y09423	Nepeta racemosa
BAA92894.1	AB006790	Petunia x hybrida
AAB94587.1	AF022458	Glycine max

SEQ ID NO. 1960

BAA01887.1	D11111	Nicotiana sylvestris
BAA01886.1	D11110	Nicotiana tabacum
CAA11894.1	AJ224325	Hordeum vulgare
BAA22411.1	D38485	Triticum aestivum
CAA06469.1	AJ005286	Hordeum vulgare
CAA66479.1	X97905	Vicia faba
CAA46233.1	X65117	Nicotiana plumbaginifolia
CAA46234.1	X65118	Nicotiana plumbaginifolia
AAA33486.1	M74566	Zea mays
AAA79045.1	U34742	Spinacia oleracea
CAA57551.1	X82030	Phaseolus vulgaris
CAA11893.1	AJ224324	Hordeum vulgare
CAA41023.1	X57955	Spinacia oleracea
AAA33039.1	L15080	Mesembryanthemum crystalli
CAC01238.1	AJ292768	Nicotiana plumbaginifolia
AAC49850.1	U90212	Nicotiana tabacum
CAC01237.1	AJ292767	Nicotiana plumbaginifolia
CAA81127.1	Z26042	Anemia phyllitidis
AAF66823.1	AF190655	Nicotiana tabacum
AAB38974.1	U81318	Triticum aestivum
CAA05729.1	AJ002894	Oryza sativa
BAA05170.1	D26182	Nicotiana sylvestris
AAF66825.1	AF190657	Nicotiana tabacum
AAK30205.1	AF349964	Daucus carota
AAF63202.1	AF240679	Cucumis sativus
AAB71417.1	U81287	Pisum sativum
BAA22083.1	D28862	Nicotiana sylvestris
CAB75429.1	AJ272011	Nicotiana plumbaginifolia
BAA12064.1	D83696	Nicotiana sylvestris
AAA75104.1	U32310	Triticum aestivum
BAA03742.1	D16205	Nicotiana sylvestris
CAA88558.1	Z48624	Hordeum vulgare
AAG23220.1	AF310215	Sorghum bicolor

SEQ ID NO. 1961

AAG27547.1	AF269128	Brassica nigra
AAC27695.1	AF016010	Brassica napus
AAC27694.1	AF016009	Brassica napus
AAC27696.1	AF016011	Brassica napus
AAG27546.1	AF269126	Brassica nigra
AAG24863.1	AF300700	Ipomoea nil
AAC99310.1	AF052585	Malus x domestica
AAC99309.1	AF052584	Malus x domestica
AAC35496.1	AF052690	Raphanus sativus
AAD22518.1	AF001136	Pinus radiata
AAK14948.1	AF230669	Brassica napus
AAK14950.1	AF230671	Brassica oleracea
AAK14947.1	AF230668	Brassica napus

AAK14949.1	AF230670	Brassica rapa

SEQ ID NO. 1962

AAA33975.1	M11395	Glycine max
CAA41547.1	X58711	Medicago sativa
AAB03893.1	M11318	Glycine max
AAA33672.1	M33899	Pisum sativum
CAA25578.1	X01104	Glycine max
CAB55634.2	AJ237596	Helianthus annuus
BAA33062.1	AB017273	Cuscuta japonica
AAA33974.1	M11317	Glycine max
AAD30454.1	AF123257	Lycopersicon esculentum
AAD30452.1	AF123255	Lycopersicon esculentum
CAA39603.1	X56138	Lycopersicon esculentum
AAD30453.1	AF123256	Lycopersicon esculentum
CAA37847.1	X53851	Daucus carota
AAA33671.1	M33900	Pisum sativum
AAF34133.1	AF161179	Malus x domestica
CAA41546.1	X58710	Medicago sativa
AAB63310.1	U46544	Helianthus annuus
AAB63311.1	U46545	Helianthus annuus
CAB08441.1	Z95153	Helianthus annuus
CAA42222.1	X59701	Helianthus annuus
AAC39360.1	U63631	Fragaria x ananassa
AAA33910.1	M80939	Oryza sativa
CAA37848.1	X53852	Daucus carota
AAA33909.1	M80938	Oryza sativa
CAA43210.1	X60820	Oryza sativa
CAA37864.1	X53870	Chenopodium rubrum
AAD49336.1	AF166277	Nicotiana tabacum
AAA61632.1	U08601	Papaver somniferum
AAB72109.1	AF022217	Brassica rapa
CAA63902.1	X94192	Pennisetum glaucum
AAB39856.1	U81385	Oryza sativa
CAA46641.1	X65725	Zea mays
CAA08908.1	AJ009880	Castanea sativa
CAA63903.1	X94193	Pennisetum glaucum
CAB36910.1	AJ000691	Quercus suber
CAA63901.1	X94191	Pennisetum glaucum
AAC78392.1	U83669	Oryza sativa
BAA02160.1	D12635	Oryza sativa
AAC78393.1	U83670	Oryza sativa
CAA31785.1	X13431	Triticum aestivum
CAA63570.1	X92983	Pseudotsuga menziesii
AAC78394.1	U83671	Oryza sativa
CAA63571.1	X92984	Pseudotsuga menziesii

SEQ ID NO. 1965

AAD03415.1	AF069494	Sinapis alba
AAA85440.1	U32624	Sorghum bicolor
AAF27289.1	AF140613	Manihot esculenta
AAF27290.1	AF140614	Manihot esculenta
AAF66543.1	AF140609	Triglochin maritimum
AAF66544.1	AF140610	Triglochin maritimum
BAA92894.1	AB006790	Petunia x hybrida
AAD56282.1	AF155332	Petunia x hybrida
CAA50155.1	X70824	Solanum melongena
AAC32274.1	AF081575	Petunia x hybrida
AAA32913.1	M32885	Persea americana
CAA64635.1	X95342	Nicotiana tabacum
CAA65580.1	X96784	Nicotiana tabacum
AAB94587.1	AF022458	Glycine max
AAB17562.1	U72654	Eustoma grandiflorum
AAG09208.1	AF175278	Pisum sativum
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
CAB43505.1	AJ239051	Cicer arietinum
AAC49188.2	U29333	Pisum sativum
AAG14963.1	AF214009	Brassica napus
AAD38930.1	AF135485	Glycine max
AAG14962.1	AF214008	Brassica napus
AAG44132.1	AF218296	Pisum sativum
AAB94588.1	AF022459	Glycine max
AAG14961.1	AF214007	Brassica napus
AAB94590.1	AF022461	Glycine max
BAA84071.1	AB028151	Antirrhinum majus
CAA50442.1	X71130	Petunia x hybrida

SEQ ID NO. 1966

AAG38521.1	AF283536	Citrus x paradisi

AAA97905.1	U51853	Glycine max
CAA79954.1	Z21954	Vigna unguiculata
AAB66355.1	U54702	Oryza sativa
AAB24010.1	S49967	Oryza
CAA60610.1	X87126	Zea mays
BAA09666.1	D63342	Zea mays
AAA32672.1	L16624	Ambrosia artemisiifolia
BAA07327.1	D38130	Zea mays
AAA97907.1	U51855	Glycine max
BAB18766.1	AB038392	Triticum aestivum
BAB18767.1	AB038393	Triticum aestivum
CAA11899.1	AJ224331	Castanea sativa
AAB71505.1	U82220	Pyrus communis
CAA60634.1	X87168	Sorghum bicolor
BAB18765.1	AB038391	Triticum aestivum
BAB18768.1	AB038394	Triticum aestivum
AAC37479.1	L41355	Brassica rapa
BAA28867.1	AB014760	Cucumis sativus
AAD33907.1	AF143677	Artemisia vulgaris
BAA89582.1	AP001073	Oryza sativa
CAA72790.1	Y12068	Hordeum vulgare
AAA96316.1	U51119	Brassica rapa
AAK15090.1	AF240007	Sesamum indicum
AAF23127.1	AF198389	Lycopersicon esculentum
BAA19610.1	D64115	Glycine max
BAA19608.1	D31700	Glycine max
CAA89697.1	Z49697	Ricinus communis
AAF72202.1	AF265551	Manihot esculenta
AAA97906.1	U51854	Glycine max
CAA50437.1	X71124	Carica papaya
AAF23126.1	AF198388	Lycopersicon esculentum
AAD13812.1	AF117334	Ipomoea batatas
AAF64480.1	AF241536	Ipomoea batatas
AAK30004.1	AY028994	Dianthus caryophyllus
BAB18769.1	AB038395	Triticum aestivum
AAC32853.1	AF083253	Lycopersicon esculentum

SEQ ID NO. 1967

CAB42052.1	AJ242045	Lycopersicon esculentum
AAD32651.1	AF136942	Hordeum vulgare
BAB17824.1	AB023819	Oryza sativa
AAD32650.1	AF136941	Hordeum vulgare
BAA74583.1	AB011266	Hordeum vulgare
BAB17826.1	AB046401	Oryza sativa
BAB17823.1	AB023818	Oryza sativa
BAA74586.1	AB011269	Hordeum vulgare
BAA74588.2	AB021746	Oryza sativa
BAB17825.1	AB046401	Oryza sativa
BAA74587.1	AB019525	Hordeum vulgare
BAA74585.1	AB011268	Hordeum vulgare
BAA74580.1	AB010086	Hordeum vulgare
BAA74584.1	AB011267	Hordeum vulgare

SEQ ID NO. 1968

AAD49420.1	AF172681	Canavalia lineata
CAA08855.1	AJ009825	Cicer arietinum
AAA62490.1	L39931	Pisum sativum
BAA77206.1	AB026253	Pisum sativum
AAB34918.2	S78994	Lens culinaris
CAA06833.1	AJ006052	Cicer arietinum
CAA45526.1	X64201	Lens culinaris
AAD40979.1	AF089851	Glycine max
AAD51007.1	AF171698	Euphorbia characias

SEQ ID NO. 1969

AAC98091.1	AF067401	Oryza sativa
AAG13663.1	AF263457	Zea mays
BAB39155.1	AB048713	Pisum sativum
AAC98090.1	AF067400	Zea mays
BAA90816.1	AP001168	Oryza sativa

SEQ ID NO. 1977

BAA78764.1	AB023482	Oryza sativa
BAA94510.1	AB041504	Populus nigra
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
BAA94509.1	AB041503	Populus nigra
AAG16628.1	AY007545	Brassica napus
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
CAB51834.1	00069	Oryza sativa
AAC61805.1	U28007	Lycopersicon esculentum

AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max
AAF66615.1	AF142596	Nicotiana tabacum
CAA97692.1	Z73295	Catharanthus roseus
AAK11567.1	AF318491	Lycopersicon hirsutum
AAB47421.1	U59316	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
AAC27894.1	AF023164	Zea mays
AAK11566.1	AF318490	Lycopersicon hirsutum
AAC27895.1	AF023165	Zea mays
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAB47424.1	U59317	Lycopersicon pimpinellifolium
AAF76307.1	AF220602	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAG25966.1	AF302082	Nicotiana tabacum
AAF34428.1	AF172282	Oryza sativa
CAA73134.1	Y12531	Brassica oleracea
AAG33377.1	AF290411	Oryza meyeriana
BAA92954.1	AP001551	Oryza sativa

SEQ ID NO. 1978

BAA34675.1	AB011670	Triticum aestivum
BAA83688.1	AB011967	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA83689.1	AB011968	Oryza sativa
CAA73068.1	Y12465	Sorghum bicolor
CAA73067.1	Y12464	Sorghum bicolor
AAB62693.1	AF004947	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
CAA71142.1	Y10036	Cucumis sativus
AAD23582.1	AF128443	Glycine max
CAA57898.1	X82548	Hordeum vulgare
BAA05649.1	D26602	Nicotiana tabacum
AAC99329.1	AF062479	Oryza sativa
CAA65244.1	X95997	Solanum tuberosum
AAB05457.1	U55768	Oryza sativa
CAA46554.1	X65604	Hordeum vulgare
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
AAD00239.1	U73938	Nicotiana tabacum
BAA13608.1	D88399	Oryza sativa
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
AAB58348.1	U29095	Triticum aestivum
AAD00240.1	U73939	Nicotiana tabacum
AAA96325.1	M94726	Triticum aestivum
CAA81443.1	Z26846	Mesembryanthemum crystalli:
AAB68962.1	L38855	Glycine max
AAF27340.1	AF186020	Vicia faba
CAA89202.1	Z49233	Chlamydomonas eugametos
CAA06503.1	AJ005373	Craterostigma plantagineum

SEQ ID NO. 1979

AAF13739.1	AF108435	Papaver somniferum
AAF13736.1	AF108432	Papaver somniferum
AAF13738.1	AF108434	Papaver somniferum
AAF13737.1	AF108433	Papaver somniferum
CAA39261.1	X55730	Glycine max
CAA57783.1	X82367	Medicago sativa
AAB41556.1	U13925	Medicago sativa subsp. sativa
CAA57784.1	X82368	Medicago sativa
CAA57782.1	X82366	Medicago sativa
AAB41555.1	U13924	Medicago sativa subsp. sativa
BAA12084.1	D83718	Glycyrrhiza echinata
BAA13114.1	D86559	Glycyrrhiza glabra
BAA13113.1	D86558	Glycyrrhiza glabra
AAD22264.1	AF133841	Xerophyta viscosa
AAA21751.1	L12042	Bromus inermis
CAA40747.1	X57526	Hordeum vulgare
CAA88322.1	Z48360	Hordeum vulgare
AAC49138.1	U21747	Avena fatua
AAG15839.2	AF055910	Orobanche ramosa
AAB97617.1	U83687	Apium graveolens
CAA88591.1	Z48672	Sesbania rostrata
AAF13741.1	AF108437	Papaver somniferum
AAG31150.1	AF308853	Lotus corniculatus
BAA76417.1	AB024989	Cicer arietinum
AAG31151.1	AF308854	Lotus corniculatus
AAF13740.1	AF108436	Papaver somniferum

SEQ ID NO. 1980

CAB94692.1	AJ242742	Ipomoea batatas
AAD37430.1	AF149280	Phaseolus vulgaris
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA06335.1	D30653	Populus kitakamiensis
AAA34108.1	J02979	Nicotiana tabacum
BAA01992.1	D11396	Nicotiana tabacum
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
AAB47602.1	L07554	Linum usitatissimum
BAA11853.1	D83225	Populus nigra
CAA50597.1	X71593	Lycopersicon esculentum
CAB67121.1	Y19023	Lycopersicon esculentum
BAA11852.1	D83224	Populus nigra
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
AAD37427.1	AF149277	Phaseolus vulgaris
BAA01877.1	D11102	Populus kitakamiensis
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
CAA62225.1	X90692	Medicago sativa
AAB97734.1	AF014502	Glycine max
CAA62226.1	X90693	Medicago sativa
CAA62227.1	X90694	Medicago sativa
BAA06334.1	D30652	Populus kitakamiensis
BAA07241.1	D38051	Populus kitakamiensis
AAB41810.1	L36156	Medicago sativa
AAB41811.1	L36157	Medicago sativa
BAA14144.1	D90116	Armoracia rusticana
AAC98519.1	AF007211	Glycine max
BAA02840.1	D13683	Populus kitakamiensis
BAA14143.1	D90115	Armoracia rusticana
AAA33129.1	M91372	Cucumis sativus
BAA08499.1	D49551	Oryza sativa
AAA34101.1	L02124	Nicotiana tabacum
CAA76680.1	Y17192	Cucurbita pepo
CAA40796.1	X57564	Armoracia rusticana
AAA33121.1	M32742	Cucumis sativus
BAA82306.1	AB027752	Nicotiana tabacum
AAD43561.1	AF155124	Gossypium hirsutum
AAB06183.1	M37636	Arachis hypogaea
CAA71492.1	Y10466	Spinacia oleracea
AAF63027.1	AF244924	Spinacia oleracea
BAA77389.1	AB024439	Scutellaria baicalensis
BAA77388.1	AB024438	Scutellaria baicalensis
AAB02554.1	L37790	Stylosanthes humilis
AAF63026.1	AF244923	Spinacia oleracea

SEQ ID NO. 1981

AAD10204.1	AF030260	Vicia sativa
AAG17470.1	AF123609	Triticum aestivum
AAG33645.1	AF092917	Vicia sativa
AAK31592.1	AY029178	Brassica rapa subsp. pekin
CAB41474.1	AJ238402	Catharanthus roseus
AAB94588.1	AF022459	Glycine max
AAB94586.1	AF022457	Glycine max
AAA32913.1	M32885	Persea americana
CAA89260.1	Z49263	Pisum sativum
BAA12159.1	D83968	Glycine max
BAB40323.1	AB037244	Asparagus officinalis
CAA70576.1	Y09424	Nepeta racemosa
BAB40324.1	AB037245	Asparagus officinalis
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
CAB56503.1	AJ238612	Catharanthus roseus
CAA70575.1	Y09423	Nepeta racemosa
AAB94589.1	AF022460	Glycine max
AAD56282.1	AF155332	Petunia x hybrida
AAG14963.1	AF214009	Brassica napus
AAG14961.1	AF214007	Brassica napus
AAG14962.1	AF214008	Brassica napus
CAA50648.1	X71657	Solanum melongena
AAC48987.1	U09610	Berberis stolonifera
CAA57423.1	X81829	Zea mays
CAA72208.1	Y11404	Zea mays
BAA13076.1	D86351	Glycine max
CAB41490.1	AJ238439	Cicer arietinum
BAB40322.1	AB036772	Triticum aestivum
CAA10067.1	AJ012581	Cicer arietinum
BAA84916.1	AB032833	Cicer arietinum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus

SEQ ID NO. 1983

BAA33200.1	AB001882	Oryza sativa
BAA33206.1	AB001888	Oryza sativa
AAC35496.1	AF052690	Raphanus sativus
AAD22518.1	AF001136	Pinus radiata
BAA33203.1	AB001885	Oryza sativa
BAA33204.1	AB001886	Oryza sativa
BAA33202.1	AB001884	Oryza sativa
BAA33201.1	AB001883	Oryza sativa
BAA33205.1	AB001887	Oryza sativa

SEQ ID NO. 1986

CAB89831.1	AJ242853	Solanum tuberosum
AAB70119.1	U82230	Zea mays
CAA04440.1	AJ000991	Hordeum vulgare
CAA09976.1	AJ012284	Triticum aestivum
CAA46875.1	X66076	Zea mays
BAA08094.1	D45066	Cucurbita maxima
BAA88190.1	AP000836	Oryza sativa

SEQ ID NO. 1987

AAC34858.1	AF082033	Hemerocallis hybrid cultivar
AAC49186.1	U37088	Simmondsia chinensis
AAG28600.1	AF247134	Limnanthes douglasii
AAB72178.1	AF009563	Brassica napus
AAA96054.1	U50771	Brassica napus
CAA71898.1	Y11007	Brassica juncea
CAC17746.1	AJ291728	Zea mays
AAK11266.1	AF333040	Dunaliella salina
AAC25110.1	AF054498	Brassica napus
AAC25109.1	AF054497	Brassica napus
AAC25112.1	AF054500	Brassica oleracea
AAC25111.1	AF054499	Brassica rapa

SEQ ID NO. 1988

AAK25822.1	AF350505	Phaseolus vulgaris
AAK01953.1	AY026054	Phaseolus acutifolius
CAC00658.1	AJ292745	Petroselinum crispum
CAA71687.1	Y10685	Glycine max
CAC00657.1	AJ292744	Petroselinum crispum
AAD55394.1	AF176641	Lycopersicon esculentum
CAC00656.1	AJ292743	Petroselinum crispum
CAA74023.1	Y13676	Antirrhinum majus
CAA74022.1	Y13675	Antirrhinum majus
BAA22204.1	D63951	Nicotiana tabacum
AAK14790.1	AY027510	Catharanthus roseus
BAA11431.1	D78609	Oryza sativa
BAA36492.1	AB021736	Oryza sativa
CAA41453.1	X58577	Petroselinum crispum
AAC37418.1	L34551	Oryza sativa
AAB36514.1	U57389	Phaseolus vulgaris
CAA70216.1	Y09013	Triticum aestivum
CAA66477.1	X97903	Vicia faba
CAA71795.1	Y10834	Hordeum vulgare
CAA71768.1	Y10809	Petroselinum crispum
AAC49398.1	U46217	Petroselinum crispum

SEQ ID NO. 1989

AAF62896.1	AF223643	Pisum sativum

SEQ ID NO. 1993

CAA78386.1	Z13996	Petunia x hybrida
AAK19616.1	AF336283	Gossypium hirsutum
CAA72218.1	Y11415	Oryza sativa
CAB43399.1	AJ006292	Antirrhinum majus
BAA23337.1	D88617	Oryza sativa
BAA88224.1	AB028652	Nicotiana tabacum
CAA64614.1	X95296	Lycopersicon esculentum
CAA50221.1	X70876	Hordeum vulgare
AAK19619.1	AF336286	Gossypium hirsutum
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
AAK19611.1	AF336278	Gossypium hirsutum
CAA67600.1	X99210	Lycopersicon esculentum
BAA88221.1	AB028649	Nicotiana tabacum
BAA23338.1	D88618	Oryza sativa
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
CAA72186.1	Y11351	Oryza sativa
BAA81733.2	AB029162	Glycine max

AAF22256.1	AF161711	Pimpinella brachycarpa
BAA88222.1	AB028650	Nicotiana tabacum
CAA67575.1	X99134	Lycopersicon esculentum
CAA78387.1	Z13997	Petunia x hybrida
BAA81736.1	AB029165	Glycine max
CAA72217.1	Y11414	Oryza sativa
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
AAK19618.1	AF336285	Gossypium hirsutum
BAA23340.1	D88620	Oryza sativa
CAA65525.1	X96749	Oryza sativa
CAA64615.1	X95297	Lycopersicon esculentum
AAK19615.1	AF336282	Gossypium hirsutum
CAA66952.1	X98308	Lycopersicon esculentum
AAK19617.1	AF336284	Gossypium hirsutum
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays

SEQ ID NO. 1995

BAA77603.1	AB027002	Nicotiana paniculata
BAA77604.1	AB027001	Nicotiana paniculata
CAA71408.1	Y10380	Solanum tuberosum
BAA02730.1	D13513	Oryza sativa
AAA33642.1	M97476	Pisum sativum
AAA33643.1	M97477	Pisum sativum
AAF74220.1	AF216582	Avena sativa
CAA47293.1	X66814	Spinacia oleracea
AAK19325.1	AF329674	Dunaliella salina
AAK19324.1	AF329673	Dunaliella salina
CAA49590.1	X69969	Chlamydomonas reinhardtii
AAC60574.1	S72951	Chloroplast Chlamydomonas reinhardtii
CAA09669.1	AJ011516	Scherffelia dubia
AAB70542.1	AF017362	Oryza sativa
AAG21429.1	AF308587	Fragaria x ananassa
AAB61592.1	AF003124	Mesembryanthemum crystallinum
CAB77243.2	AJ133146	Persea americana
CAA31366.1	X12872	Zea mays
AAA33435.1	M16220	Zea mays

CAA61946.1	X89828	Pisum sativum
CAA46649.1	X65742	Spinacia oleracea
BAA02729.1	D13512	Oryza sativa
BAA08830.1	D50301	Oryza sativa
BAA08845.1	D50307	Oryza sativa
CAA37290.1	X53130	Oryza sativa
CAA06308.1	AJ005041	Cicer arietinum
CAA61947.1	X89829	Pisum sativum
CAC34412.1	Y18576	Flaveria trinervia
BAA78593.1	AU066535	Chlamydomonas sp. HS-5
BAA76430.1	AB025002	Cicer arietinum

SEQ ID NO. 1996

CAA71238.1	Y10156	Brassica napus
CAA71237.1	Y10155	Brassica napus
CAB62165.1	AJ223307	Brassica napus
AAC49181.1	U39289	Brassica napus
AAC49182.1	U39319	Brassica napus

SEQ ID NO. 1997

BAA12159.1	D83968	Glycine max
AAC32274.1	AF081575	Petunia x hybrida
AAA32913.1	M32885	Persea americana
BAA13076.1	D86351	Glycine max
CAA64635.1	X95342	Nicotiana tabacum
CAA65580.1	X96784	Nicotiana tabacum
AAD56282.1	AF155332	Petunia x hybrida
BAB12433.1	AB025030	Coptis japonica
AAG44132.1	AF218296	Pisum sativum
CAA50155.1	X70824	Solanum melongena
AAB17562.1	U72654	Eustoma grandiflorum
AAF05621.1	AF191772	Papaver somniferum
CAB56503.1	AJ238612	Catharanthus roseus
CAA70575.1	Y09423	Nepeta racemosa
BAA74466.1	AB022733	Glycyrrhiza echinata
CAA50648.1	X71657	Solanum melongena
BAA22423.1	AB001380	Glycyrrhiza echinata
BAB40324.1	AB037245	Asparagus officinalis
AAB94588.1	AF022459	Glycine max
AAG14961.1	AF214007	Brassica napus
BAB40323.1	AB037244	Asparagus officinalis

AAC39452.1	AF014800	Eschscholzia californica
AAG14962.1	AF214008	Brassica napus
BAA84072.1	AB028152	Torenia hybrida
AAC39453.1	AF014801	Eschscholzia californica
AAD47832.1	AF166332	Nicotiana tabacum

SEQ ID NO. 1999

AAB01567.1	L47672	Picea glauca

SEQ ID NO. 2000

BAA22976.1	D63457	Arabis gemmifera
BAA22973.1	D63454	Arabis gemmifera
AAF23537.1	AF110439	Arabis glabra
BAA22978.1	D63459	Arabis gemmifera
BAA22974.1	D63455	Arabis gemmifera
AAF23540.1	AF110442	Arabidopsis halleri
AAF23551.1	AF110453	Arabidopsis lyrata subsp. petraea
AAF23539.1	AF110441	Halimolobos perplexa var. lemhiensis
BAA22975.1	D63456	Arabis gemmifera
AAF23546.1	AF110448	Arabis lyallii
AAF23548.1	AF110450	Arabis parishii
AAF23550.1	AF110452	Arabidopsis lyrata subsp. petraea
BAA22972.1	D63453	Arabis gemmifera
BAA22971.1	D63452	Arabis gemmifera
BAA22977.1	D63458	Arabis gemmifera
AAF23549.1	AF110451	Arabis pauciflora
AAF23545.1	AF110447	Arabis lignifera
AAF23536.1	AF110438	Arabis fendleri
AAF23541.1	AF110443	Arabis hirsuta
AAF23531.1	AF110433	Arabis blepharophylla
AAF23530.1	AF110432	Arabis blepharophylla
AAF23523.1	AF110425	Aubrieta deltoidea
AAF23529.1	AF110431	Arabis blepharophylla
AAF23547.1	AF110449	Arabidopsis lyrata subsp. lyrata
AAF23533.1	AF110435	Capsella rubella
AAF23534.1	AF110436	Arabis drummondii
AAF23532.1	AF110434	Brassica oleracea
AAF23556.1	AF110458	Barbarea vulgaris
AAF23555.1	AF110457	Arabis turrita
AAF23538.1	AF110440	Arabidopsis griffithiana
AAF23524.1	AF110426	Arabis alpina
AAF23543.1	AF110445	Arabis hirsuta
AAF23525.1	AF110427	Arabis alpina
AAF23527.1	AF110429	Arabis alpina
AAF23535.1	AF110437	Arabis drummondii
AAF23553.1	AF110455	Arabis procurrens
AAF23544.1	AF110446	Arabis jacquinii
AAF23526.1	AF110428	Arabis alpina
AAF23528.1	AF110430	Cardamine amara
AAF23552.1	AF110454	Arabis procurrens
AAF23542.1	AF110444	Arabis hirsuta
AAC79418.1	AF037560	Leavenworthia stylosa
BAA34682.1	AB015504	Arabidopsis griffithiana
BAA34685.1	AB015507	Arabidopsis suecica
BAA34683.1	AB015505	Arabidopsis korshinskyi
CAB72921.1	AJ251281	Arabidopsis lyrata subsp. petraea
CAB72920.1	AJ251280	Arabidopsis lyrata subsp. petraea
CAB72919.1	AJ251279	Arabidopsis lyrata subsp. petraea
CAB72918.1	AJ251278	Arabidopsis lyrata subsp. petraea
CAB72917.1	AJ251277	Arabidopsis lyrata subsp. petraea

SEQ ID NO. 2001

AAG43286.1	AF140228	Oryza sativa
AAA33944.1	J03920	Glycine max
CAA48299.1	X68217	Pisum sativum
CAA48300.1	X68218	Pisum sativum
CAA48297.1	X68215	Pisum sativum

SEQ ID NO. 2005

BAA21923.1	AB006601	Petunia x hybrida
BAA21922.1	AB006600	Petunia x hybrida
BAA21921.1	AB006599	Petunia x hybrida
BAA19110.1	AB000451	Petunia x hybrida

BAA21926.1	AB006604	Petunia x hybrida
BAA21925.1	AB006603	Petunia x hybrida
BAA21924.1	AB006602	Petunia x hybrida
BAA21920.1	AB006598	Petunia x hybrida
BAA19111.1	AB000452	Petunia x hybrida
BAA96071.1	AB035133	Petunia x hybrida
BAA21927.1	AB006605	Petunia x hybrida
BAA96070.1	AB035132	Petunia x hybrida
BAA21919.1	AB006597	Petunia x hybrida
AAK01713.1	AF332876	Oryza sativa
AAC06243.1	AF053077	Nicotiana tabacum
BAA05079.1	D26086	Petunia x hybrida
BAA05078.1	D26085	Petunia x hybrida
BAA05076.1	D26083	Petunia x hybrida
BAA05077.1	D26084	Petunia x hybrida
BAA21928.1	AB006606	Petunia x hybrida
BAA19114.1	AB000455	Petunia x hybrida
AAD26942.1	AF119050	Datisca glomerata
BAA19112.1	AB000453	Petunia x hybrida
AAB53260.1	U76554	Brassica rapa
AAB53261.1	U76555	Brassica rapa
BAA19926.1	AB000456	Petunia x hybrida

SEQ ID NO. 2008

CAB61221.1	AJ250396	Antirrhinum majus
CAA71244.1	Y10162	Chenopodium rubrum
CAA09852.1	AJ011892	Nicotiana tabacum
CAA09853.1	AJ011893	Nicotiana tabacum
CAB60837.1	AJ002589	Lycopersicon esculentum
CAB61222.1	AJ250397	Antirrhinum majus
CAB60838.1	AJ002590	Lycopersicon esculentum
BAA33153.1	AB008188	Pisum sativum
CAB60836.1	AJ002588	Lycopersicon esculentum
CAB51788.1	AJ245415	Lycopersicon esculentum
CAA61334.1	X88864	Medicago sativa
CAB40540.1	AJ132929	Medicago sativa
CAA09854.1	AJ011894	Nicotiana tabacum
CAB61223.1	AJ250398	Antirrhinum majus
CAB40541.1	AJ132930	Medicago sativa
CAA09769.1	AJ011776	Chenopodium rubrum
CAA53729.1	X76123	Antirrhinum majus
CAA63543.1	X92967	Nicotiana tabacum
CAA63542.1	X92966	Nicotiana tabacum
CAA44632.1	X62820	Glycine max
CAA44188.1	X62303	Glycine max
CAB46641.1	AJ243451	Lycopersicon esculentum
AAC50013.1	U50064	Zea mays
CAA81232.1	Z26331	Glycine max
CAB46642.1	AJ243452	Lycopersicon esculentum
CAA71243.1	Y10161	Chenopodium rubrum
AAA20237.1	U10077	Zea mays
CAA99990.1	Z75660	Sesbania rostrata
BAA96590.1	AP002481	Oryza sativa
BAA86628.1	AB024986	Oryza sativa
AAC61888.1	U24193	Lupinus luteus
AAD31789.1	AF126106	Lupinus luteus
AAC61889.1	U24194	Lupinus luteus
AAD31790.1	AF126107	Lupinus luteus
AAC24245.1	U44857	Lupinus luteus
AAD31791.1	AF126108	Lupinus luteus
BAA09467.1	D50871	Glycine max
BAA09465.1	D50869	Glycine max
CAA53728.1	X76122	Antirrhinum majus
BAA20411.1	D86386	Catharanthus roseus
BAA09466.1	D50870	Glycine max
AAC41681.1	L34207	Petroselinum crispum
CAB81558.1	Z37978	Nicotiana tabacum
BAA11560.1	D82349	Adiantum capillus-veneris
CAB58998.1	AJ250315	Petunia x hybrida

SEQ ID NO. 2009

CAA75386.1	Y15113	Morinda citrifolia
CAA79855.1	Z21792	Lycopersicon esculentum
CAA79856.1	Z21793	Lycopersicon esculentum

SEQ ID NO. 2010

CAA71878.1	Y10984	Brassica juncea
AAB71231.1	AF017984	Lycopersicon esculentum
AAF98157.1	AF258320	Phaseolus vulgaris

SEQ ID NO. 2011

AAB72109.1	AF022217	Brassica rapa

CAA37847.1	X53851	Daucus carota
AAD49336.1	AF166277	Nicotiana tabacum
BAA33062.1	AB017273	Cuscuta japonica
CAB36910.1	AJ000691	Quercus suber
CAA08908.1	AJ009880	Castanea sativa
AAA33975.1	M11395	Glycine max
CAA25578.1	X01104	Glycine max
AAB03893.1	M11318	Glycine max
CAA41547.1	X58711	Medicago sativa
AAB63310.1	U46544	Helianthus annuus
CAB08441.1	Z95153	Helianthus annuus
CAA42222.1	X59701	Helianthus annuus
CAA37848.1	X53852	Daucus carota
AAC39360.1	U63631	Fragaria x ananassa
AAA33672.1	M33899	Pisum sativum
AAB63311.1	U46545	Helianthus annuus
AAA33974.1	M11317	Glycine max
CAA63903.1	X94193	Pennisetum glaucum
AAA61632.1	U08601	Papaver somniferum
CAB55634.2	AJ237596	Helianthus annuus
AAC78392.1	U83669	Oryza sativa
AAA33910.1	M80939	Oryza sativa
BAA02160.1	D12635	Oryza sativa
CAA43210.1	X60820	Oryza sativa
CAA37864.1	X53870	Chenopodium rubrum
AAA33909.1	M80938	Oryza sativa
AAC78393.1	U83670	Oryza sativa
AAB39856.1	U81385	Oryza sativa
AAD30454.1	AF123257	Lycopersicon esculentum
AAA33671.1	M33900	Pisum sativum
AAC78394.1	U83671	Oryza sativa
CAA63901.1	X94191	Pennisetum glaucum
CAA63902.1	X94192	Pennisetum glaucum
AAD30452.1	AF123255	Lycopersicon esculentum
CAA46641.1	X65725	Zea mays
CAA39603.1	X56138	Lycopersicon esculentum
CAA63570.1	X92983	Pseudotsuga menziesii
AAD30453.1	AF123256	Lycopersicon esculentum
CAA63571.1	X92984	Pseudotsuga menziesii
CAA31785.1	X13431	Triticum aestivum
CAA53286.1	X75616	Oryza sativa

SEQ ID NO. 2016

BAA77204.1	AB026262	Cicer arietinum
AAG43550.1	AF211532	Nicotiana tabacum
BAA78746.1	AB023482	Oryza sativa

SEQ ID NO. 2017

AAA33811.1	L02830	Solanum tuberosum
AAG43547.1	AF211529	Nicotiana tabacum
CAB63264.1	AJ251808	Lotus japonicus
AAA92677.1	U13736	Pisum sativum
AAF31152.1	AF078680	Olea europaea
AAD10245.1	AF030033	Phaseolus vulgaris
AAF31151.1	AF078679	Olea europaea
AAA19571.1	U10150	Brassica napus
AAC49587.1	U49105	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49585.1	U49103	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum
AAC49580.1	U48689	Triticum aestivum
AAC49579.1	U48688	Triticum aestivum
AAC49578.1	U48242	Triticum aestivum
AAA85157.1	U20297	Solanum tuberosum
AAA85156.1	U20296	Solanum tuberosum
AAA62351.1	U20295	Solanum tuberosum
AAA85155.1	U20294	Solanum tuberosum
AAA33900.1	L18914	Oryza sativa
AAA92681.1	U13882	Pisum sativum
CAA78288.1	Z12828	Oryza sativa

SEQ ID NO. 2019

CAA71003.1	Y09876	Nicotiana tabacum
AAG43988.1	AF215823	Zea mays
AAF73828.1	AF162665	Oryza sativa
BAB19052.1	AB044537	Oryza sativa
BAA96793.1	AB030939	Oryza sativa
BAA96794.1	AB037421	Oryza sativa
AAB41696.1	U69142	Spinacia oleracea
AAA34025.1	M31480	Spinacia oleracea
CAA41377.1	X58463	Beta vulgaris
CAA41376.1	X58462	Beta vulgaris

CAA49425.1	X69770	Atriplex hortensis
BAB18544.1	AB043540	Avicennia marina
AAB58165.1	AF000132	Amaranthus hypochondriacus
AAB70010.1	AF017150	Amaranthus hypochondriacus
BAA21098.1	AB001348	Oryza sativa
BAB18543.1	AB043539	Avicennia marina
BAA05466.1	D26448	Hordeum vulgare
AAC49268.1	U12196	Sorghum bicolor
AAC49267.1	U12195	Sorghum bicolor
AAB33843.1	S77096	Brassica napus
CAA53076.1	X75327	Pisum sativum
AAF08296.1	AF196292	Apium graveolens
AAB47571.1	U87848	Nicotiana plumbaginifolia
AAG43027.1	AF323586	Oryza sativa
CAA53075.1	X75326	Zea mays
AAC03055.1	AF045770	Oryza sativa
AAB47996.1	U87982	Sorghum bicolor

SEQ ID NO. 2020

AAD32141.1	AF123503	Nicotiana tabacum
CAA42636.1	X60033	Glycine max
BAA96221.1	AP002094	Oryza sativa

SEQ ID NO. 2022

CAA79702.2	Z21493	Solanum tuberosum
BAA77337.1	AB019533	Oryza sativa
BAA36181.1	D88272	Hordeum vulgare

SEQ ID NO. 2025

CAA33330.1	X15258	Lycopersicon esculentum
CAA41407.1	X58517	Pinus sylvestris
AAF44703.1	AF241525	Alonsoa meridionalis
CAA57492.1	X81962	Pisum sativum
CAA41406.1	X58516	Pinus sylvestris
AAA34159.1	M20241	Lycopersicon esculentum
CAA32197.1	X14036	Lycopersicon esculentum
AAA33711.1	M21317	Petunia x hybrida
AAF13731.1	AF002248	Pisum sativum
AAC67557.1	AF094775	Oryza sativa
AAF90200.1	AF287276	Hordeum vulgare
CAA57877.1	X82497	Nicotiana tabacum
AAA33392.1	M12152	Lemna gibba
CAA32109.1	X13909	Oryza sativa
AAF20948.1	AF207690	Daucus carota
AAA33636.1	M23532	Physcomitrella patens
AAC25775.1	AF072931	Medicago sativa
CAA50763.1	X71965	Pyrobotrys stellata
CAA44881.1	X63197	Hordeum vulgare
CAA42818.1	X60275	Lycopersicon esculentum
AAD27877.1	AF139465	Vigna radiata
CAA49149.1	X69215	Pisum sativum
CAA38025.1	X54090	Gossypium hirsutum
AAF89205.1	AF279248	Vigna radiata
CAA57408.1	X81809	Picea abies
CAA49209.1	X69434	Pyrobotrys stellata
BAA77273.1	AB026686	Physcomitrella patens
AAB61237.1	AF003128	Mesembryanthemum crystallinum
BAA00536.1	D00641	Oryza sativa
CAA39883.1	X56538	Pisum sativum
CAA43804.1	X61610	Brassica napus
CAA57409.1	X81810	Picea abies
AAA34142.1	M17559	Lycopersicon esculentum
AAB19040.1	U51632	Pinus palustris
CAA28639.1	X04966	Petunia x hybrida
AAB18209.1	U73218	Triticum aestivum
CAA84525.1	Z35160	Solanum tuberosum

SEQ ID NO. 2028

AAC39481.1	AF047694	Vernicia fordii
CAA89699.1	Z49699	Ricinus communis
AAB92658.1	AF037988	Fritillaria agrestis
AAB92657.1	AF037987	Fritillaria agrestis
AAB92656.1	AF037986	Fritillaria agrestis
AAB92655.1	AF037985	Fritillaria agrestis
AAB92654.1	AF037984	Fritillaria agrestis
AAB92419.1	AF037455	Fritillaria agrestis
BAA20071.1	D86744	Oryza sativa
CAA54397.1	X77150	Oryza sativa

SEQ ID NO. 2032

CAA72271.1	Y11483	Brassica napus
CAA72270.1	Y11482	Brassica napus

AAB72097.1	AF021257	Hordeum vulgare
AAB72096.1	AF021256	Hordeum vulgare

SEQ ID NO. 2033

AAA34181.1	M98466	Lycopersicon esculentum
AAB39547.1	U63374	Lycopersicon esculentum
AAB38497.1	U79772	Mercurialis annua

SEQ ID NO. 2034

AAD15628.1	AF021807	Corylus avellana
AAF34133.1	AF161179	Malus x domestica
CAA41546.1	X58710	Medicago sativa
CAA41547.1	X58711	Medicago sativa
AAA33672.1	M33899	Pisum sativum
AAB03893.1	M11318	Glycine max
AAB63310.1	U46544	Helianthus annuus
AAD30454.1	AF123257	Lycopersicon esculentum
AAD30452.1	AF123255	Lycopersicon esculentum
AAB63311.1	U46545	Helianthus annuus
AAD30453.1	AF123256	Lycopersicon esculentum
CAA63570.1	X92983	Pseudotsuga menziesii
CAA63903.1	X94193	Pennisetum glaucum
CAA25578.1	X01104	Glycine max
CAA39603.1	X56138	Lycopersicon esculentum
CAA63571.1	X92984	Pseudotsuga menziesii
AAA61632.1	U08601	Papaver somniferum
CAB36910.1	AJ000691	Quercus suber
CAB55634.2	AJ237596	Helianthus annuus
AAA33910.1	M80939	Oryza sativa
CAA37848.1	X53852	Daucus carota
CAA37864.1	X53870	Chenopodium rubrum
AAA33975.1	M11395	Glycine max
AAB39856.1	U81385	Oryza sativa
AAA33909.1	M80938	Oryza sativa
CAA43210.1	X60820	Oryza sativa
CAA37847.1	X53851	Daucus carota
CAA63902.1	X94192	Pennisetum glaucum
AAA33974.1	M11317	Glycine max
AAC78392.1	U83669	Oryza sativa
AAC39360.1	U63631	Fragaria x ananassa
AAB72109.1	AF022217	Brassica rapa
BAA33062.1	AB017273	Cuscuta japonica
AAA33671.1	M33900	Pisum sativum
BAA02160.1	D12635	Oryza sativa
CAB08441.1	Z95153	Helianthus annuus
CAA42222.1	X59701	Helianthus annuus
CAA08908.1	AJ009880	Castanea sativa
CAA63901.1	X94191	Pennisetum glaucum
AAC78394.1	U83671	Oryza sativa
CAA46641.1	X65725	Zea mays
AAD09181.1	AF089842	Funaria hygrometrica
AAC01560.1	AF007762	Agrostis stolonifera var. palustris

SEQ ID NO. 2036

CAA05276.1	AJ002236	Lycopersicon pimpinellifolium
AAC78591.1	AF053993	Lycopersicon esculentum
AAC78596.1	AF053998	Lycopersicon esculentum
CAA05279.1	AJ002237	Lycopersicon esculentum
AAC78593.1	AF053995	Lycopersicon esculentum
AAA65235.1	U15936	Lycopersicon pimpinellifolium
CAA05274.1	AJ002236	Lycopersicon pimpinellifolium
AAC78592.1	AF053994	Lycopersicon esculentum
AAC78595.1	AF053997	Lycopersicon esculentum
AAC78594.1	AF053996	Lycopersicon pimpinellifolium
BAA96776.1	AP002521	Oryza sativa
BAB08215.1	AP002539	Oryza sativa
CAA05268.1	AJ002235	Lycopersicon hirsutum
AAD50430.1	AF166121	Hordeum vulgare
CAB55409.1	AL117265	Oryza sativa
AAC49123.1	U37133	Oryza sativa
AAC80225.1	U72723	Oryza longistaminata

SEQ ID NO. 2038

AAD00708.1	U91857	Stylosanthes hamata
BAA97123.1	AB016265	Nicotiana sylvestris
BAB03248.1	AB037183	Oryza sativa
BAA76734.1	AB024575	Nicotiana tabacum
BAA97122.1	AB016264	Nicotiana sylvestris
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
AAC49740.1	U89256	Lycopersicon esculentum

AAC49741.1	U89257	Lycopersicon esculentum
BAA07321.1	D38123	Nicotiana tabacum
AAC50047.1	U89255	Lycopersicon esculentum
AAF05606.1	AF190770	Oryza sativa
AAC29516.1	U77655	Solanum tuberosum
BAA97124.1	AB016266	Nicotiana sylvestris
AAC62619.1	AF057373	Nicotiana tabacum
BAA87068.1	AB035270	Matricaria chamomilla
AAB38748.1	U81157	Nicotiana tabacum
AAD45623.1	AF084185	Brassica napus

SEQ ID NO. 2040

BAA90610.1	AP001129	Oryza sativa
CAA43454.1	X61146	Nicotiana tabacum

SEQ ID NO. 2043

CAA04670.1	AJ001310	Solanum tuberosum

SEQ ID NO. 2045

BAA89544.1	AP001072	Oryza sativa
BAA88191.1	AP000836	Oryza sativa
BAA90510.2	AP001111	Oryza sativa
AAD11618.1	AF050496	Lycopersicon esculentum
AAA34138.1	M96324	Lycopersicon esculentum
AAD11617.1	AF050495	Lycopersicon esculentum
AAF73985.1	AF096871	Zea mays
AAD31896.1	AF145478	Mesembryanthemum crystallinum
AAG28436.1	AF195029	Glycine max
CAA63790.1	X93592	Dunaliella bioculata
AAG28435.1	AF195028	Glycine max
CAA68234.1	X99972	Brassica oleracea
AAB58910.1	U82966	Oryza sativa
CAB69824.1	AJ271439	Prunus persica
AAB60276.1	U09989	Zea mays
BAA01058.1	D10207	Oryza sativa
CAC29435.1	AJ310523	Vicia faba
AAD20330.1	AF110268	Oryza sativa
AAA34098.1	M80490	Nicotiana plumbaginifolia
AAB84203.1	AF029257	Kosteletzkya virginica
CAC28224.1	AJ286749	Sesbania rostrata
AAD46188.1	AF156691	Nicotiana plumbaginifolia
AAA34173.1	M60166	Lycopersicon esculentum
AAA34094.1	M80489	Nicotiana plumbaginifolia
AAA34052.1	M27888	Nicotiana plumbaginifolia
CAC28221.1	AJ286746	Sesbania rostrata
CAA54045.1	X76535	Solanum tuberosum
BAA06629.1	D31843	Oryza sativa
CAA64406.1	X94936	Phaseolus vulgaris
AAF98344.1	AF275745	Lycopersicon esculentum
AAD55399.1	AF179442	Lycopersicon esculentum
CAA54046.1	X76536	Solanum tuberosum

SEQ ID NO. 2046

AAA69541.1	U18557	Raphanus sativus
CAA65983.1	X97318	Raphanus sativus
AAA69540.1	U18556	Raphanus sativus
AAB03224.1	U59459	Brassica napus
CAA65984.1	X97319	Raphanus sativus

SEQ ID NO. 2048

BAA85400.1	AP000615	Oryza sativa
CAB06083.1	Z83834	Hordeum vulgare
CAA74909.1	Y14573	Hordeum vulgare
CAA06487.1	AJ005341	Linum usitatissimum

SEQ ID NO. 2049

AAC63113.1	AF000307	Brassica napus
AAC63112.1	AF000306	Brassica napus
AAC63111.1	AF000305	Brassica napus
AAA61638.1	U10275	Flaveria bidentis
AAA33342.2	M84135	Flaveria chloraefolia
AAA87399.1	U10277	Flaveria bidentis
AAA33343.1	M84136	Flaveria chloraefolia

SEQ ID NO. 2050

AAD22970.1	AF124148	Glycine max
CAB50901.1	AJ238651	Medicago truncatula

SEQ ID NO. 2051

AAC04671.1	AF018174	Brassica napus
AAC49357.1	U35830	Pisum sativum
CAA45098.1	X63537	Pisum sativum

AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA33082.1	X14959	Spinacia oleracea
AAC32111.1	AF051206	Picea mariana
BAB20886.1	AB053294	Oryza sativa
CAA77847.1	Z11803	Nicotiana tabacum
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
AAB53695.1	U59380	Brassica napus
BAA13524.1	D87984	Fagopyrum esculentum
CAA94534.1	Z70677	Ricinus communis
CAA56850.1	X80887	Chlamydomonas reinhardtii
CAA55399.1	X78822	Chlamydomonas reinhardtii
AAB51522.1	U92541	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAF88067.1	AF286593	Triticum aestivum
CAA41415.1	X58527	Nicotiana tabacum
BAA04864.1	D21836	Oryza sativa
BAA25681.1	AB010434	Brassica rapa
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAB53694.1	U59379	Brassica napus
AAD49232.1	AF159387	Lolium perenne
AAD49230.1	AF159385	Hordeum bulbosum
AAD49231.1	AF159386	Secale cereale
AAD49233.1	AF159388	Phalaris coerulescens
AAD49234.1	AF159389	Phalaris coerulescens
AAD56954.1	AF186240	Secale cereale
BAB39913.1	AP002912	Oryza sativa
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii
CAA06735.1	AJ005840	Triticum aestivum
AAD45358.1	AF160870	Brassica napus
AAB52409.1	U76831	Brassica napus
CAA35826.1	X51462	Spinacia oleracea
CAA53900.1	X76269	Pisum sativum
AAC49358.1	U35831	Pisum sativum
CAA35827.1	X51463	Spinacia oleracea
CAA06736.1	AJ005841	Oryza sativa

SEQ ID NO. 2054

AAF74567.1	AF215853	Solanum tuberosum
AAF74565.1	AF215851	Spinacia oleracea
AAF74566.1	AF215852	Nicotiana tabacum
AAF74568.1	AF215854	Zea mays

SEQ ID NO. 2066

CAA59049.1	X84308	Hordeum vulgare

SEQ ID NO. 2067

AAF75824.1	AF101788	Pinus taeda
AAC32448.1	U76296	Spinacia oleracea
AAF66243.1	AF243181	Lycopersicon esculentum
BAA90481.1	AB035146	Ipomoea nil

SEQ ID NO. 2068

AAC34983.1	AF039598	Prunus persica
CAA38025.1	X54090	Gossypium hirsutum
AAD48017.1	AF165529	Rumex palustris
CAA41188.1	X58230	Nicotiana tabacum
CAA74179.1	Y13865	Beta vulgaris
CAA28639.1	X04966	Petunia x hybrida
CAA52750.1	X74732	Amaranthus hypochondriacus
CAA84525.1	Z35160	Solanum tuberosum
CAA43907.1	X61915	Pinus thunbergii
AAA34141.1	M17558	Lycopersicon esculentum
AAA33392.1	M12152	Lemna gibba
AAF89205.1	AF279248	Vigna radiata
CAA40365.1	X57082	Pisum sativum
AAC15992.1	AF061577	Oryza sativa
BAA00537.1	D00642	Oryza sativa
AAB19040.1	U51632	Pinus palustris
CAA31773.1	X13407	Pinus thunbergii
AAA34142.1	M17559	Lycopersicon esculentum
CAA89823.1	Z49749	Pseudotsuga menziesii
AAB82142.1	AF022739	Oryza sativa
AAA60965.1	L23107	Ginkgo biloba
CAA48641.1	X68682	Zea mays
AAA80591.1	U21111	Solanum tuberosum
AAA34147.1	M14443	Lycopersicon esculentum
AAA80593.1	U21113	Solanum tuberosum
AAA80589.1	U20983	Solanum tuberosum
BAA25391.1	AB012637	Nicotiana sylvestris

BAA25396.1	AB012641	Nicotiana sylvestris
BAA25394.1	AB012639	Nicotiana sylvestris
AAA80594.1	U21114	Solanum tuberosum
BAA25389.1	AB012637	Nicotiana sylvestris
BAA25392.1	AB012638	Nicotiana sylvestris
AAA68425.1	M34396	Polystichum munitum
CAA57409.1	X81810	Picea abies
AAA50172.1	U01964	Glycine max
AAA80592.1	U21112	Solanum tuberosum
BAA25395.1	AB012640	Nicotiana sylvestris
BAA25388.1	AB012636	Nicotiana sylvestris
CAA41187.1	X58229	Nicotiana tabacum
BAA25390.1	AB012637	Nicotiana sylvestris
CAA32900.1	X14794	Zea mays
AAA34148.1	M14444	Lycopersicon esculentum
CAA57408.1	X81809	Picea abies
BAA25393.1	AB012638	Nicotiana sylvestris
BAA77273.1	AB026686	Physcomitrella patens
CAA47950.1	X67714	Pinus contorta

SEQ ID NO. 2069

AAD27877.1	AF139465	Vigna radiata
CAA49149.1	X69215	Pisum sativum
AAF20948.1	AF207690	Daucus carota
CAA43803.1	X61609	Brassica napus
CAA43804.1	X61610	Brassica napus
CAA43802.1	X61608	Brassica napus
AAA33392.1	M12152	Lemna gibba
CAA52750.1	X74732	Amaranthus hypochondriacus
CAA41188.1	X58230	Nicotiana tabacum
CAA28639.1	X04966	Petunia x hybrida
AAC34983.1	AF039598	Prunus persica
CAA74179.1	Y13865	Beta vulgaris
AAA34141.1	M17558	Lycopersicon esculentum
CAA89823.1	Z49749	Pseudotsuga menziesii
CAA38025.1	X54090	Gossypium hirsutum
AAB19040.1	U51632	Pinus palustris
CAA84525.1	Z35160	Solanum tuberosum
CAA32900.1	X14794	Zea mays
CAA40365.1	X57082	Pisum sativum
BAA00537.1	D00642	Oryza sativa

CAA43907.1	X61915	Pinus thunbergii
AAD48017.1	AF165529	Rumex palustris
AAC15992.1	AF061577	Oryza sativa
CAA39883.1	X56538	Pisum sativum
AAA50172.1	U01964	Glycine max
CAA32526.1	X14341	Plastid Spinacia oleracea
AAA34142.1	M17559	Lycopersicon esculentum
CAA10284.1	AJ131044	Cicer arietinum
AAC25775.1	AF072931	Medicago sativa
AAF26741.1	AF220527	Euphorbia esula
AAA33396.1	M29334	Lemna gibba
BAA25393.1	AB012638	Nicotiana sylvestris
AAB61238.1	AF003129	Mesembryanthemum crystalli
BAA25395.1	AB012640	Nicotiana sylvestris
AAA80589.1	U20983	Solanum tuberosum
AAA33124.1	M16057	Cucumis sativus
CAA31419.1	X12981	Glycine max
AAA80591.1	U21111	Solanum tuberosum
AAA80593.1	U21113	Solanum tuberosum
AAB61237.1	AF003128	Mesembryanthemum crystallinum
CAA41187.1	X58229	Nicotiana tabacum
BAA24493.1	AB006081	Fagus crenata
AAA34148.1	M14444	Lycopersicon esculentum
AAA60965.1	L23107	Ginkgo biloba
AAA34147.1	M14443	Lycopersicon esculentum

SEQ ID NO. 2070

AAB86942.1	AF031241	Glycine max
AAK21920.1	AF338252	Glycine max
CAA42660.1	X60058	Nicotiana tabacum
CAA42659.1	X60057	Nicotiana tabacum
AAC49900.1	U58209	Zea mays
AAC49899.1	U58208	Zea mays
AAB63469.1	AF006825	Oryza sativa
CAA89834.2	Z49764	Pseudotsuga menziesii
AAA92743.1	M59449	Zea mays

SEQ ID NO. 2071

CAA32764.1	X14609	Cucumis sativus
CAA41434.1	X58542	Cucumis sativus
BAA08410.1	D49432	Cucurbita sp.

BAA08411.1	D49433	Cucurbita sp.
AAB00105.1	U01067	Cucurbita pepo

SEQ ID NO. 2072

BAA09852.1	D63781	Glycine max
CAA55293.1	X78547	Glycine max
CAA55294.1	X78548	Glycine max
AAA81890.1	U02495	Solanum tuberosum
AAA81892.1	U02497	Solanum tuberosum
AAA81889.1	U02494	Solanum tuberosum
AAA81891.1	U02496	Solanum tuberosum
AAA81893.1	U02498	Solanum tuberosum
BAA85201.1	AP000570	Oryza sativa
BAA84626.1	AP000492	Oryza sativa
BAA85202.1	AP000570	Oryza sativa
BAA84627.1	AP000492	Oryza sativa
AAB02006.1	U57350	Nicotiana tabacum

SEQ ID NO. 2076

AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
CAA59450.1	X85138	Lycopersicon esculentum
BAA83484.1	AB031274	Scutellaria baicalensis
AAB48444.1	U82367	Solanum tuberosum
BAA36410.1	AB012114	Vigna mungo
CAA54610.1	X77460	Manihot esculenta
AAD04166.1	AF101972	Phaseolus lunatus
BAA89009.1	AB027455	Petunia x hybrida
AAD51778.1	AF116858	Phaseolus vulgaris
AAF61647.1	AF190634	Nicotiana tabacum
BAA93039.1	AB033758	Citrus unshiu
BAA36412.1	AB012116	Vigna mungo
BAA36423.1	AB013598	Verbena x hybrida
AAF17077.1	AF199453	Sorghum bicolor
CAA54611.1	X77461	Manihot esculenta
CAA54612.1	X77462	Manihot esculenta
AAF98390.1	AF287143	Brassica napus
BAA19155.1	AB000623	Nicotiana tabacum
BAA89008.1	AB027454	Petunia x hybrida
CAA54609.1	X77459	Manihot esculenta
BAA36421.1	AB013596	Perilla frutescens
AAD55985.1	AF165148	Petunia x hybrida
CAA54613.1	X77463	Manihot esculenta
BAA12737.1	D85186	Gentiana triflora
CAA54558.1	X77369	Solanum melongena
BAA36411.1	AB012115	Vigna mungo
CAA81057.1	Z25802	Petunia x hybrida
AAD21086.1	AF127218	Forsythia x intermedia
CAA50376.1	X71059	Petunia x hybrida
CAA50377.1	X71060	Petunia x hybrida

SEQ ID NO. 2077

AAK28303.1	AF346431	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
BAA83484.1	AB031274	Scutellaria baicalensis
AAB48444.1	U82367	Solanum tuberosum
BAA36410.1	AB012114	Vigna mungo
CAA54610.1	X77460	Manihot esculenta
AAD51778.1	AF116858	Phaseolus vulgaris
AAD04166.1	AF101972	Phaseolus lunatus
BAA89009.1	AB027455	Petunia x hybrida
AAB62270.1	AF006081	Solanum berthaultii
AAF61647.1	AF190634	Nicotiana tabacum
CAA54612.1	X77462	Manihot esculenta
BAA36412.1	AB012116	Vigna mungo
AAF98390.1	AF287143	Brassica napus
BAA36423.1	AB013598	Verbena x hybrida
AAF17077.1	AF199453	Sorghum bicolor
BAA93039.1	AB033758	Citrus unshiu
BAA89008.1	AB027454	Petunia x hybrida
CAA54558.1	X77369	Solanum melongena
CAA54611.1	X77461	Manihot esculenta
CAA54609.1	X77459	Manihot esculenta
BAA12737.1	D85186	Gentiana triflora
AAD21086.1	AF127218	Forsythia x intermedia

BAA36411.1	AB012115	Vigna mungo
BAA19155.1	AB000623	Nicotiana tabacum
AAD55985.1	AF165148	Petunia x hybrida
CAA54613.1	X77463	Manihot esculenta
BAA36421.1	AB013596	Perilla frutescens
BAA19659.1	AB002818	Perilla frutescens
AAB81683.1	AF000372	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera

SEQ ID NO. 2078

AAA53140.1	U08469	Glycine max
AAA19157.1	U07745	Lycopersicon esculentum
AAF80468.1	AF163149	Glycine max
AAC02267.1	AF007100	Glycine max
AAC23573.1	AF068249	Glycine max
AAF80469.1	AF163150	Glycine max
AAC41659.1	L38260	Nicotiana tabacum
AAA85742.1	U34393	Glycine max
AAC39330.1	AF029895	Triticum aestivum
AAA80214.1	U19183	Zea mays
CAC19876.1	AJ131866	Brassica napus
AAB42144.1	L25042	Medicago sativa
CAC19875.1	AJ131865	Brassica napus
AAC49275.1	U39321	Triticum aestivum
CAA54683.1	X77576	Brassica napus
AAA19970.1	U10187	Triticum aestivum
AAC39332.1	AF029897	Triticum aestivum
AAC39331.1	AF029896	Triticum aestivum
AAA81578.1	L48995	Glycine max
CAA71346.1	Y10301	Brassica napus
AAA53141.1	U08846	Glycine max
CAC16140.1	X77374	Brassica napus
CAA71347.1	Y10302	Brassica napus
AAC41658.1	L39267	Ricinus communis

SEQ ID NO. 2079

AAB67737.1	L77080	Stylosanthes humilis
AAA32676.1	M37637	Arachis hypogaea
CAA64413.1	X94943	Lycopersicon esculentum
CAA59487.1	X85230	Triticum aestivum

CAA71489.1	Y10463	Spinacia oleracea
BAA01950.1	D11337	Vigna angularis
BAA11853.1	D83225	Populus nigra
CAA71491.1	Y10465	Spinacia oleracea
AAF63024.1	AF244921	Spinacia oleracea
AAD37429.2	AF149279	Phaseolus vulgaris
BAA92500.1	AP001383	Oryza sativa
BAA92967.1	AP001551	Oryza sativa
AAF63027.1	AF244924	Spinacia oleracea
CAC21391.1	AJ401274	Zea mays
AAB06183.1	M37636	Arachis hypogaea
CAB92952.1	AJ251254	Pinus pinaster
AAA34050.1	M74103	Nicotiana sylvestris
BAA96643.1	AP002482	Oryza sativa
CAC21393.1	AJ401276	Zea mays
CAA71494.1	Y10468	Spinacia oleracea
AAD43561.1	AF155124	Gossypium hirsutum
CAA76374.2	Y16776	Spinacia oleracea
AAB02926.1	U59284	Linum usitatissimum
AAA98491.1	L36981	Petroselinum crispum
AAB48184.1	L24120	Linum usitatissimum
BAA94962.1	AB042103	Asparagus officinalis
AAF63025.1	AF244922	Spinacia oleracea
AAD11482.1	U51192	Glycine max
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
BAA14144.1	D90116	Armoracia rusticana
AAC05277.1	AF049881	Linum usitatissimum
AAD11481.1	U51191	Glycine max
BAA07663.1	D42064	Nicotiana tabacum
CAA71490.1	Y10464	Spinacia oleracea
BAA77387.1	AB024437	Scutellaria baicalensis
CAA80502.1	Z22920	Spirodela polyrrhiza
BAA82306.1	AB027752	Nicotiana tabacum
AAF63026.1	AF244923	Spinacia oleracea
AAD37376.1	AF145350	Glycine max
AAA65636.1	L13653	Lycopersicon esculentum
CAA40796.1	X57564	Armoracia rusticana
BAA07664.1	D42065	Nicotiana tabacum
AAB02554.1	L37790	Stylosanthes humilis

SEQ ID NO. 2080

AAC15870.1	AF002016	Cucurbita sp.
AAF14635.1	AF202987	Petroselinum crispum
AAB67883.1	U66299	Phalaenopsis sp. 'True Lady'
AAC32108.1	AF051203	Picea mariana
CAB55555.1	AJ010946	Pisum sativum
CAB55554.1	AJ010945	Pisum sativum
CAC08233.1	AJ278987	Solanum tuberosum
CAC08234.1	AJ278988	Solanum tuberosum
AAF02449.1	AF127432	Picea abies
AAF02451.1	AF127434	Picea abies
AAF02450.1	AF127433	Picea abies
AAC32152.1	AF051733	Picea mariana
AAC32153.1	AF051734	Picea mariana

SEQ ID NO. 2081

CAB64356.1	AJ251511	Populus tremula x Populus tremuloides
AAC60576.1	S71335	Mitochondrion Nicotiana tabacum
CAA56163.1	X79768	Nicotiana tabacum
AAC35354.1	AF083880	Glycine max
BAB21500.1	AB055060	Catharanthus roseus
BAA23803.1	AB009395	Catharanthus roseus
BAA86963.1	AB007452	Oryza sativa
BAA28773.1	AB004864	Oryza sativa
BAA28772.1	AB004813	Oryza sativa
CAA78823.1	Z15117	Sauromatum guttatum
AAA34048.1	M60330	Sauromatum guttatum
AAD51707.1	AF174004	Triticum aestivum
CAA55892.1	X79329	Mangifera indica
CAB72441.1	AJ271889	Populus tremula x Populus tremuloides
AAB97285.1	U87906	Glycine max
BAA28771.1	AB004813	Oryza sativa
BAA28774.1	AB004865	Oryza sativa
AAB97286.1	U87907	Glycine max
AAB97839.1	AF040566	Zea mays
AAG33634.1	AF314255	Chlamydomonas reinhardtii
AAG02081.1	AF285187	Chlamydomonas reinhardtii
AAG33633.1	AF314254	Chlamydomonas reinhardtii
AAC05743.2	AF047832	Chlamydomonas reinhardtii
BAA23725.1	AB009087	Chlamydomonas sp. W80
AAC34192.1	S81466	Glycine max
AAG18450.1	AF302932	Lycopersicon esculentum
AAG18449.1	AF302931	Lycopersicon esculentum
AAG02287.1	AF177980	Lycopersicon esculentum
AAG02286.1	AF177979	Lycopersicon esculentum
AAG02288.1	AF177981	Capsicum annuum
AAB36072.1	S81470	Glycine max
AAC35554.2	AF085174	Oryza sativa
AAG00450.1	AF274001	Triticum aestivum

SEQ ID NO. 2082

CAA64614.1	X95296	Lycopersicon esculentum
CAA78386.1	Z13996	Petunia x hybrida
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA78387.1	Z13997	Petunia x hybrida
CAB43399.1	AJ006292	Antirrhinum majus
CAA66952.1	X98308	Lycopersicon esculentum
CAA67600.1	X99210	Lycopersicon esculentum
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
BAA88222.1	AB028650	Nicotiana tabacum
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays
AAB41101.1	U72762	Nicotiana tabacum
CAA75509.1	Y15219	Oryza sativa subsp. indica

SEQ ID NO. 2083

BAA13635.1	D88530	Spinacia oleracea
BAA13634.1	D88529	Spinacia oleracea
BAA93050.1	AB040502	Allium tuberosum
BAA08479.1	D49535	Citrullus lanatus
BAA12843.1	D85624	Citrullus lanatus
BAA21827.1	AB006530	Citrullus lanatus
AAF19000.1	AF212156	Allium cepa

SEQ ID NO. 2084

CAA11417.1	AJ223499	Brassica juncea
CAA11416.1	AJ223498	Brassica juncea
AAB67995.1	U69694	Brassica oleracea
AAF13064.1	AF195511	Brassica oleracea var. botrytis

AAB53100.1	U68218	Brassica napus
AAB94542.1	AF016305	Zea mays
BAA36274.1	AB015204	Oryza sativa
AAF18998.1	AF212154	Allium cepa
AAB01234.1	U57088	Chlamydomonas reinhardtii

SEQ ID NO. 2085

AAG01147.1	AF283816	Pinus taeda
CAA95999.1	Z71395	Nicotiana plumbaginifolia
AAB71420.1	U74631	Ricinus communis
AAB71419.1	U74630	Ricinus communis
AAD32207.1	AF134733	Prunus armeniaca
CAA05161.1	AJ002057	Beta vulgaris
AAA32948.1	L27348	Hordeum vulgare
AAA32949.1	L27349	Hordeum vulgare
AAF01470.1	AF190454	Zea mays
CAA86728.1	Z46772	Zea mays
CAA61939.1	X89813	Zea mays
AAD17490.1	AF052040	Berberis stolonifera
AAB70919.1	AF019376	Brassica napus
CAA54975.1	X78057	Zea mays
CAB54526.1	AJ000765	Chlamydomonas reinhardtii
BAA85118.1	AB018243	Solanum melongena
AAK15502.1	AF325720	Pennisetum ciliare
CAA57914.1	X82578	Parthenium argentatum
BAA77025.1	AB026251	Lithospermum erythrorhizon

SEQ ID NO. 2086

AAK07610.1	AF319771	Brassica napus
AAF68384.1	AF236368	Zea mays
AAF68387.1	AF236371	Zea mays
AAC49690.1	U69154	Nicotiana tabacum
AAF68385.1	AF236369	Zea mays
AAF68386.1	AF236370	Zea mays

SEQ ID NO. 2087

AAD28178.1	AF109695	Brassica juncea
BAA05408.1	D26392	Cucumis sativus
AAC41654.1	L41345	Lycopersicon esculentum
AAA60979.1	U06461	Pisum sativum
BAA77214.1	D85764	Oryza sativa
BAA77282.1	AB026731	Oryza sativa
AAC26053.1	AF074940	Glycine max
AAB70837.1	AF019907	Vitis vinifera
BAA07108.1	D37870	Spinacia oleracea
AAB30526.1	S70187	Glycine max
AAD53185.1	AF181096	Vigna unguiculata
AAD28177.1	AF109694	Brassica juncea
BAA36283.1	D85751	Oryza sativa
BAA37092.1	AB009592	Oryza sativa
AAK27157.1	AF349449	Brassica juncea
CAA53925.1	X76293	Nicotiana tabacum
CAA54043.1	X76533	Nicotiana tabacum
CAA53993.1	X76455	Nicotiana tabacum
AAF26175.1	AF105199	Glycine max
CAB66332.1	AJ279690	Betula pendula
CAC13956.1	AJ400816	Mesembryanthemum crystallinum
CAA06835.1	AJ006055	Zea mays
CAA42921.1	X60373	Pisum sativum
CAA62482.1	X90996	Pisum sativum
AAA33962.1	L11632	Glycine max
CAA66924.1	X98274	Pisum sativum

SEQ ID NO. 2088

AAC72193.1	AF069909	Zea mays
AAC72192.1	AF069908	Zea mays
AAC72194.1	AF069910	Zea mays
AAB01223.1	U56697	Pisum sativum
AAC32149.1	AF051249	Picea mariana
AAF43837.1	AF166114	Chloroplast Mesostigma viride
AAD22077.1	AF124755	Pinus banksiana
CAA75778.1	Y15782	Capsicum annuum
AAB88295.1	AF024512	Oryza sativa

SEQ ID NO. 2089

CAC17753.1	AJ294543	Dendrobium 'Sonia'
CAC17752.1	AJ294542	Dendrobium 'Sonia'
CAA77151.1	Y18377	Zea mays
AAC27500.1	AF044603	Zea mays
BAB03420.1	AP002816	Oryza sativa

SEQ ID NO. 2090

CAA82993.1	Z30332	Spinacia oleracea
CAA82994.1	Z30333	Mesembryanthemum crystallinum

SEQ ID NO. 2094

AAC49181.1	U39289	Brassica napus
AAC49182.1	U39319	Brassica napus

SEQ ID NO. 2095

CAA55039.1	X78203	Hyoscyamus muticus
AAB65163.1	AF002692	Solanum commersonii
BAA01394.1	D10524	Nicotiana tabacum
CAA96431.1	Z71749	Nicotiana plumbaginifolia
AAA33931.1	M84969	Silene vulgaris
AAA33930.1	M84968	Silene vulgaris
AAF61392.1	AF133894	Persea americana
CAB38119.1	AJ010296	Zea mays
CAB38118.1	AJ010295	Zea mays
AAG34811.1	AF243376	Glycine max
AAG34812.1	AF243377	Glycine max
AAG34814.1	AF243379	Glycine max
CAA09190.1	AJ010451	Alopecurus myosuroides
CAA09193.1	AJ010454	Alopecurus myosuroides
CAA09191.1	AJ010452	Alopecurus myosuroides
CAA09192.1	AJ010453	Alopecurus myosuroides
AAD56395.1	AF184059	Triticum aestivum
CAA39487.1	X56012	Triticum aestivum
CAA68993.1	Y07721	Petunia x hybrida
AAA33470.1	M16901	Zea mays
AAA33469.1	M16902	Zea mays
AAA20585.1	U12679	Zea mays
CAA56047.1	X79515	Zea mays
CAB66333.1	AJ279691	Betula pendula
AAC64007.1	AF062403	Oryza sativa
CAA39480.1	X56004	Triticum aestivum
AAG34823.1	AF244680	Zea mays
AAG34818.1	AF244675	Zea mays
AAG34820.1	AF244677	Zea mays
AAG34817.1	AF244674	Zea mays
AAG34821.1	AF244678	Zea mays
CAA05354.1	AJ002380	Oryza sativa
AAG34816.1	AF244673	Zea mays
AAG34822.1	AF244679	Zea mays
CAA05355.1	AJ002381	Oryza sativa

SEQ ID NO. 2098

BAA84780.1	AB018444	Oryza sativa
BAA84779.1	AB018443	Oryza sativa

SEQ ID NO. 2099

CAA47926.1	X67696	Cucumis sativus
BAA11117.1	D70895	Cucurbita sp.
CAA63598.1	X93015	Brassica napus
CAA53078.1	X75329	Mangifera indica
CAA55006.1	X78116	Raphanus sativus
AAD44539.1	AF113522	Zea mays

SEQ ID NO. 2101

AAF67753.1	AF255651	Brassica rapa subsp. pekinensis
AAC49980.2	AF008441	Brassica rapa
CAA66924.1	X98274	Pisum sativum
BAA36283.1	D85751	Oryza sativa
BAA37092.1	AB009592	Oryza sativa
BAA07108.1	D37870	Spinacia oleracea
CAC13956.1	AJ400816	Mesembryanthemum crystallinum
CAB66332.1	AJ279690	Betula pendula
CAA53925.1	X76293	Nicotiana tabacum
CAA42921.1	X60373	Pisum sativum
AAK27157.1	AF349449	Brassica juncea
AAD28177.1	AF109694	Brassica juncea
CAA62482.1	X90996	Pisum sativum
AAF26175.1	AF105199	Glycine max
AAB70837.1	AF019907	Vitis vinifera
AAA33962.1	L11632	Glycine max
CAA54043.1	X76533	Nicotiana tabacum
CAA06835.1	AJ006055	Zea mays
CAA53993.1	X76455	Nicotiana tabacum
AAB30526.1	S70187	Glycine max
AAC26053.1	AF074940	Glycine max
AAD53185.1	AF181096	Vigna unguiculata
AAA60979.1	U06461	Pisum sativum
BAA05408.1	D26392	Cucumis sativus
AAC41654.1	L41345	Lycopersicon esculentum

AAD28178.1	AF109695	Brassica juncea
BAA77214.1	D85764	Oryza sativa

SEQ ID NO. 2104

AAG22606.1	AF258809	Lycopersicon esculentum
AAB41742.1	U82559	Lycopersicon esculentum
AAG22605.1	AF258808	Lycopersicon esculentum
AAG22607.1	AF258810	Lycopersicon esculentum
BAA23226.1	D88451	Zea mays
AAG22608.1	AF259793	Lycopersicon esculentum
AAB41741.1	U82558	Lycopersicon esculentum

SEQ ID NO. 2106

AAA74957.1	L31936	Brassica rapa
CAA99757.1	Z75521	Lycopersicon esculentum
AAB46718.1	U86018	Oryza sativa
AAF78511.1	AF195209	Pyrus pyrifolia

SEQ ID NO. 2107

CAA59409.1	X85038	Spinacia oleracea
AAD50464.1	AF170026	Chlamydomonas reinhardtii

SEQ ID NO. 2108

CAA45701.1	X64349	Nicotiana tabacum
BAA96365.2	AB043960	Bruguiera gymnorhiza
CAA35601.1	X17578	Solanum tuberosum
CAA78043.1	Z11999	Lycopersicon esculentum
BAA02554.1	D13297	Pisum sativum
AAC04808.1	AF037457	Fritillaria agrestis
CAA29062.1	X05548	Spinacia oleracea
CAA40670.1	X57408	Triticum aestivum
AAD38521.1	AF139818	Brassica napus
AAD55562.1	AF110780	Volvox carteri f. nagariensis
CAA36674.1	X52427	Lycopersicon esculentum

SEQ ID NO. 2109

CAA55090.1	X78284	Medicago sativa
CAC12883.1	AJ295006	Nicotiana tabacum
BAA92964.1	AP001551	Oryza sativa
AAB82139.1	AF022736	Oryza sativa
CAA64625.1	X95313	Chlamydomonas reinhardtii

AAF78516.1	AF195217	Pyrus pyrifolia

SEQ ID NO. 2111

BAA78575.1	AB028132	Oryza sativa
BAA78572.1	AB028129	Oryza sativa
BAA78573.1	AB028130	Oryza sativa
CAA66601.1	X97942	Nicotiana tabacum
CAB89831.1	AJ242853	Solanum tuberosum
CAA08755.1	AJ009594	Nicotiana tabacum
CAA66606.1	X97947	Nicotiana tabacum
CAA66604.1	X97945	Nicotiana tabacum
CAA66605.1	X97946	Nicotiana tabacum
BAA78574.1	AB028131	Oryza sativa
BAA78576.1	AB028133	Oryza sativa

SEQ ID NO. 2113

CAA98179.1	Z73951	Lotus japonicus
BAA02904.1	D13758	Oryza sativa

SEQ ID NO. 2114

BAA89009.1	AB027455	Petunia x hybrida
BAA36423.1	AB013598	Verbena x hybrida
BAA36421.1	AB013596	Perilla frutescens
BAA36422.1	AB013597	Perilla frutescens
BAA93039.1	AB033758	Citrus unshiu
AAF61647.1	AF190634	Nicotiana tabacum
AAF98390.1	AF287143	Brassica napus
AAF17077.1	AF199453	Sorghum bicolor
BAA83484.1	AB031274	Scutellaria baicalensis
AAD21086.1	AF127218	Forsythia x intermedia
BAA12737.1	D85186	Gentiana triflora
AAK28303.1	AF346431	Nicotiana tabacum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
CAA54612.1	X77462	Manihot esculenta
BAB41019.1	AB047092	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
AAB36653.1	U32644	Nicotiana tabacum
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera

BAA19659.1	AB002818	Perilla frutescens
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
AAK28304.1	AF346432	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAA89008.1	AB027454	Petunia x hybrida
CAA59450.1	X85138	Lycopersicon esculentum
CAA54614.1	X77464	Manihot esculenta
CAA54611.1	X77461	Manihot esculenta
CAA54613.1	X77463	Manihot esculenta

SEQ ID NO. 2116

AAD44809.1	AF148648	Nicotiana tabacum
AAD44808.1	AF147203	Spinacia oleracea

SEQ ID NO. 2118

AAD55090.1	AF178653	Vitis riparia
CAA51432.1	X72928	Solanum commersonii
CAA47601.1	X67121	Solanum commersonii
CAC34055.1	AJ297410	Capsicum annuum
CAA47047.1	X66416	Lycopersicon esculentum
AAB23375.1	S44889	Nicotiana tabacum
AAB22459.2	S40046	Nicotiana tabacum
AAG16625.1	AY007309	Solanum dulcamara
CAA46623.1	X65701	Nicotiana tabacum
CAA46622.1	X65700	Nicotiana tabacum
CAA51431.1	X72927	Solanum commersonii
CAA64620.1	X95308	Nicotiana tabacum
CAA51430.1	X72926	Solanum commersonii
AAC64171.1	AF093743	Lycopersicon esculentum
AAB61590.1	AF003007	Vitis vinifera
BAA11180.1	D76437	Nicotiana sylvestris
AAA34087.1	M64081	Nicotiana tabacum
CAA47669.1	X67244	Solanum commersonii
CAA71883.1	Y10992	Vitis vinifera
AAF13707.1	AF199508	Fragaria x ananassa
AAA34089.1	M29279	Nicotiana tabacum
CAA43854.1	X61679	Nicotiana tabacum
CAA04642.1	AJ001268	Hordeum vulgare
CAC22330.1	AJ298304	Fagus sylvatica
CAC22329.1	AJ298303	Fagus sylvatica
AAB67852.1	L76377	Oryza sativa
CAB36911.1	AJ000692	Quercus suber

SEQ ID NO. 2120

AAB61593.1	AF003125	Mesembryanthemum crystalli
AAA33665.1	M31713	Pisum sativum
AAD02175.1	AF039662	Capsicum annuum
AAA34028.1	M35660	Spinacia oleracea
CAA26281.1	X02432	Silene latifolia subsp. all
CAA99756.1	Z75520	Lycopersicon esculentum
AAA33459.1	M73829	Zea mays
AAA33460.1	M73830	Zea mays
CAA52980.1	X75089	Triticum aestivum
BAA06436.1	D30763	Oryza sativa
AAA33462.1	M73828	Zea mays
BAA32348.1	AB016810	Zea mays
AAK15005.1	AF233452	Impatiens balsamina
AAC49171.1	U29516	Chlamydomonas reinhardtii
AAA33085.1	L10349	Chlamydomonas reinhardtii
CAA87068.1	Z46944	Citrus sinensis
AAB65699.1	AF010320	Oryza sativa
CAA73265.1	Y12734	Physcomitrella patens
AAA33461.1	M73831	Zea mays
BAA06456.1	D30794	Oryza sativa
BAA90760.1	AB038037	Ipomoea nil
BAA19865.1	D83660	Oryza sativa

SEQ ID NO. 2121

AAD32141.1	AF123503	Nicotiana tabacum
CAA42636.1	X60033	Glycine max
BAA96221.1	AP002094	Oryza sativa

SEQ ID NO. 2122

AAC63372.1	AF093751	Brassica oleracea
AAB37228.1	U22105	Brassica napus
AAA73945.1	L33904	Brassica oleracea
AAA73946.1	L33905	Brassica oleracea
AAA64310.1	U22174	Brassica napus
AAA73947.1	L33906	Brassica oleracea
AAA73948.1	L33907	Brassica oleracea

AAA32995.1	L29767	Brassica oleracea
AAG29777.1	AF228333	Gossypium hirsutum
AAF35186.1	AF195865	Gossypium hirsutum
AAF35184.1	AF195863	Gossypium hirsutum
AAC00499.1	AF044204	Gossypium hirsutum
AAD09107.1	AF101038	Brassica napus
AAA75599.1	U15153	Gossypium hirsutum
AAB34774.1	S78173	Gossypium hirsutum
AAK28533.1	AF329829	Corylus avellana
AAF28385.1	AF151214	Nicotiana glauca
AAA34032.1	M58635	Spinacia oleracea
AAC49860.1	U72765	Phaseolus vulgaris
AAF26449.1	AF221501	Prunus avium
AAF35185.1	AF195864	Gossypium hirsutum
AAF26450.1	AF221502	Malus x domestica
CAA50660.1	X71667	Sorghum bicolor
CAA05771.1	AJ002958	Cicer arietinum
CAA65475.1	X96714	Prunus dulcis
AAF26451.1	AF221503	Pyrus communis
CAA65477.1	X96716	Prunus dulcis
AAD46683.1	AF171094	Lilium longiflorum
CAA50661.1	X71668	Sorghum bicolor
CAA44267.1	X62395	Nicotiana tabacum
AAA91050.1	L31938	Brassica rapa
AAA33493.1	J04176	Zea mays
CAB96874.1	AJ277164	Malus x domestica
CAA85484.1	Z37115	Hordeum vulgare
AAG27707.1	AF302788	Triticum aestivum
CAA83459.1	Z31588	Gerbera hybrida
AAF71695.1	AF198168	Aerides japonica
AAA74624.1	U31766	Oryza sativa
AAB70539.1	AF017359	Oryza sativa
AAB06443.1	U66105	Zea mays
CAA85483.1	Z37114	Hordeum vulgare
CAA50662.1	X71669	Sorghum bicolor

SEQ ID NO. 2123

CAA06728.1	AJ005833	Craterostigma plantagineum
CAA64491.1	X95193	Pimpinella brachycarpa
CAA63222.1	X92489	Glycine max
CAA64152.1	X94375	Pimpinella brachycarpa
CAA64221.1	X94449	Pimpinella brachycarpa
BAA93463.1	AB028075	Physcomitrella patens
AAF19980.1	AF211193	Oryza sativa
CAA65456.2	X96681	Oryza sativa
AAK31270.1	AC079890	Oryza sativa
AAD37700.1	AF145731	Oryza sativa
AAD37695.1	AF145726	Oryza sativa
AAD37696.1	AF145727	Oryza sativa
CAA06717.1	AJ005820	Craterostigma plantagineum
BAA93462.1	AB028074	Physcomitrella patens
BAA05622.1	D26573	Daucus carota
AAD37698.1	AF145729	Oryza sativa
BAA05625.1	D26576	Daucus carota
BAA21017.1	D26578	Daucus carota
AAF01765.1	AF184278	Glycine max
AAF01764.2	AF184277	Glycine max
BAA93464.1	AB028076	Physcomitrella patens
BAA05624.1	D26575	Daucus carota
BAA93466.1	AB028078	Physcomitrella patens
CAB67118.1	Y17306	Lycopersicon esculentum
BAA93468.1	AB028080	Physcomitrella patens
AAD37697.1	AF145728	Oryza sativa
AAF73482.1	AF268422	Brassica rapa subsp. pekinensis
BAA05623.1	D26574	Daucus carota
BAA93465.1	AB028077	Physcomitrella patens

SEQ ID NO. 2124

AAA32913.1	M32885	Persea americana
AAA19701.1	L24438	Thlaspi arvense
AAC39318.1	AF029858	Sorghum bicolor
BAB40323.1	AB037244	Asparagus officinalis
AAB94589.1	AF022460	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
BAB40324.1	AB037245	Asparagus officinalis
BAA03635.1	D14990	Solanum melongena
AAF27282.1	AF122821	Capsicum annuum
CAA50645.1	X71654	Solanum melongena
AAB94584.1	AF022157	Glycine max
CAA50312.1	X70981	Solanum melongena
AAB94588.1	AF022459	Glycine max
CAA70576.1	Y09424	Nepeta racemosa

AAD47832.1	AF166332	Nicotiana tabacum
CAB56503.1	AJ238612	Catharanthus roseus
BAB40322.1	AB036772	Triticum aestivum
CAA83941.1	Z33875	Mentha x piperita
AAD44150.1	AF124815	Mentha spicata
AAG44132.1	AF218296	Pisum sativum
CAA64635.1	X95342	Nicotiana tabacum
AAD44151.1	AF124816	Mentha x piperita
CAA65580.1	X96784	Nicotiana tabacum
BAA12159.1	D83968	Glycine max
BAA13076.1	D86351	Glycine max
AAD38930.1	AF135485	Glycine max
CAA72196.1	Y11368	Zea mays
CAA57425.1	X81831	Zea mays
AAD56282.1	AF155332	Petunia x hybrida
AAD44152.1	AF124817	Mentha x piperita
CAA57423.1	X81829	Zea mays

SEQ ID NO. 2125

CAA08995.1	AJ010091	Brassica napus
BAA05648.1	D26601	Nicotiana tabacum
CAA08997.1	AJ010093	Brassica napus
AAF34436.1	AF172282	Oryza sativa
CAA04261.2	AJ000728	Lycopersicon esculentum
CAC24705.1	AJ302651	Nicotiana tabacum
AAF67262.1	AF165186	Nicotiana tabacum
AAG40578.1	AF216314	Oryza sativa
AAA34002.1	M67449	Glycine max
AAC83393.1	U83625	Zea mays
AAF23900.1	AF194413	Oryza sativa
CAC09580.1	AJ298992	Fagus sylvatica
AAF23901.2	AF194414	Oryza sativa
BAA06731.1	D31964	Nicotiana tabacum
CAA78961.1	Z17313	Malus x domestica
CAA86286.1	Z38126	Malus x domestica
AAD08721.1	AF038570	Dunaliella tertiolecta
CAA73067.1	Y12464	Sorghum bicolor
AAG53979.1	AF325168	Nicotiana tabacum
CAA73068.1	Y12465	Sorghum bicolor
CAA71142.1	Y10036	Cucumis sativus
CAA57898.1	X82548	Hordeum vulgare

BAA05649.1	D26602	Nicotiana tabacum
AAD23582.1	AF128443	Glycine max
CAA89202.1	Z49233	Chlamydomonas eugametos
BAA83689.1	AB011968	Oryza sativa
BAA90814.1	AP001168	Oryza sativa
AAC99329.1	AF062479	Oryza sativa
AAA33443.1	L15390	Zea mays
AAC05270.1	AF048691	Oryza sativa
BAA85396.1	AP000615	Oryza sativa
AAF19401.1	AF203479	Glycine max
CAA65244.1	X95997	Solanum tuberosum
AAG46110.1	AC073166	Oryza sativa

SEQ ID NO. 2127

AAA84543.1	M55147	Chloroplast Pisum sativum
BAA85402.1	AP000615	Oryza sativa
AAA34076.1	M14418	Nicotiana tabacum
AAA33780.1	L26923	Pinus sylvestris
AAA86855.1	L27668	Chloroplast Chlamydomonas reinhardtii
AAA33464.1	M18976	Zea mays
CAA33455.1	X15408	Zea mays
CAA36396.1	X52148	Pisum sativum
AAA34075.1	M14417	Nicotiana tabacum
BAA94304.1	AB035312	Chlamydomonas sp. W80
AAB82133.1	AF022730	Oryza sativa
AAB66887.1	AF010582	Oryza sativa
CAA06030.1	AJ003783	Marsilea quadrifolia
AAG23800.1	AF260734	Cucurbita pepo
AAA33779.1	L07501	Pinus sylvestris
AAD10215.1	L32560	Chloroplast Pinus sylvestris
AAA33352.1	L26924	Ginkgo biloba
CAA04942.1	AJ001706	Pinus sylvestris
AAD10214.1	L32561	Chloroplast Pinus sylvestris
CAB39974.1	AJ133422	Nicotiana tabacum
AAA87880.1	U45858	Zea mays
AAA87578.1	U45855	Zea mays
CAA51676.1	X73151	Zea mays
AAB59010.1	U96623	Selaginella lepidophylla
CAA42901.1	X60343	Hordeum vulgare
AAA89207.1	L26922	Taxus baccata

AAA87579.1	U45856	Zea mays
AAA03442.1	U02886	Atriplex nummularia
CAA53269.1	X75597	Atriplex nummularia
AAA33033.1	J05223	Mesembryanthemum crystallinum
AAA33031.1	M29956	Mesembryanthemum crystallinum
CAA55116.1	X78307	Craterostigma plantagineum
AAA87580.1	U45857	Zea mays
CAA42103.1	X59517	Antirrhinum majus
AAA82047.1	U31676	Oryza sativa
AAG23799.1	AF260733	Cucurbita pepo
CAA42904.1	X60346	Petunia x hybrida
CAA51071.1	X72381	Physcomitrella patens
CAA42905.1	X60347	Magnolia liliiflora

SEQ ID NO. 2128

CAA72092.1	Y11209	Nicotiana tabacum
AAD02069.1	AF036939	Chlamydomonas reinhardtii
AAC49896.1	AF027727	Chlamydomonas reinhardtii
AAD55566.1	AF110784	Volvox carteri f. nagariensis
CAC21230.1	AJ277379	Triticum turgidum subsp. durum
AAA19660.1	U11496	Triticum aestivum
CAC21231.1	AJ277380	Triticum turgidum subsp. durum
CAC21229.1	AJ277378	Triticum turgidum subsp. durum
CAC21228.1	AJ277377	Triticum turgidum subsp. durum
AAB05641.1	U41385	Ricinus communis
CAA77575.1	Z11499	Medicago sativa
AAD28260.1	AF131223	Datisca glomerata
BAA92322.1	AB039278	Oryza sativa
BAA77026.1	AB026252	Lithospermum erythrorhizon

SEQ ID NO. 2130

AAA87456.1	U22147	Hevea brasiliensis
CAB38443.1	AJ133470	Hevea brasiliensis
AAG24921.1	AF311749	Hevea brasiliensis
AAF44667.1	AF239617	Vitis vinifera
AAB41551.1	U27179	Medicago sativa subsp. sativa
AAB24398.1	S51479	Pisum sativum
CAA37289.1	X53129	Phaseolus vulgaris
AAA34078.1	M63634	Nicotiana plumbaginifolia
AAA51643.1	M23120	Nicotiana plumbaginifolia
CAA30261.1	X07280	Nicotiana plumbaginifolia
AAA03618.1	M80608	Lycopersicon esculentum
AAC19114.1	AF067863	Solanum tuberosum
AAA18928.1	U01901	Solanum tuberosum
AAA63539.1	M60402	Nicotiana tabacum
AAA63540.1	M60403	Nicotiana tabacum
AAA88794.1	U01900	Solanum tuberosum
AAA63541.1	M59442	Nicotiana tabacum
AAB82772.2	AF001523	Musa acuminata
AAF08679.1	AF004838	Musa acuminata
AAA19111.1	U01902	Solanum tuberosum
AAC04710.1	AF034106	Glycine max
AAC04714.1	AF034113	Glycine max
CAB91554.1	AJ277900	Vitis vinifera
AAA34082.1	M20620	Nicotiana tabacum
CAA03908.1	AJ000081	Citrus sinensis
AAB03501.1	U41323	Glycine max
AAA92013.1	U49454	Prunus persica
AAA33946.1	M37753	Glycine max
AAA63542.1	M59443	Nicotiana tabacum
AAF34761.1	AF227953	Capsicum annuum
AAD33881.1	AF141654	Nicotiana tabacum
AAG34080.1	AF294849	Capsicum annuum
AAF33405.1	AF230109	Populus x canescens
AAD33880.1	AF141653	Nicotiana tabacum
CAA57255.1	X81560	Nicotiana tabacum
AAA34053.1	M60464	Nicotiana tabacum

SEQ ID NO. 2131

AAD37698.1	AF145729	Oryza sativa
BAA05624.1	D26575	Daucus carota
AAF01765.1	AF184278	Glycine max
CAA64417.1	X94947	Lycopersicon esculentum
BAA93465.1	AB028077	Physcomitrella patens
BAB18171.1	AB042769	Zinnia elegans
BAA93460.1	AB028072	Physcomitrella patens
BAA93466.1	AB028078	Physcomitrella patens
BAA93461.1	AB028073	Physcomitrella patens
BAA05625.1	D26576	Daucus carota
BAA05622.1	D26573	Daucus carota
BAA93467.1	AB028079	Physcomitrella patens
BAA93464.1	AB028076	Physcomitrella patens

AAD37697.1	AF145728	Oryza sativa
AAF01764.2	AF184277	Glycine max
BAA21017.1	D26578	Daucus carota
BAB18168.1	AB042766	Zinnia elegans
BAA93468.1	AB028080	Physcomitrella patens
BAA05623.1	D26574	Daucus carota
AAD37699.1	AF145730	Oryza sativa
AAD38144.1	AF139497	Prunus armeniaca
AAA63768.2	AF339748	Helianthus annuus
BAA93463.1	AB028075	Physcomitrella patens
CAA64491.1	X95193	Pimpinella brachycarpa
CAA64221.1	X94449	Pimpinella brachycarpa
CAA64152.1	X94375	Pimpinella brachycarpa
AAD37700.1	AF145731	Oryza sativa
AAD37695.1	AF145726	Oryza sativa
CAA06728.1	AJ005833	Craterostigma plantagineum
CAA62608.1	X91212	Lycopersicon esculentum
CAA63222.1	X92489	Glycine max
CAA65456.2	X96681	Oryza sativa
AAF19980.1	AF211193	Oryza sativa

SEQ ID NO. 2132

AAF33669.1	AF079871	Nicotiana tabacum
AAF33670.1	AF079872	Nicotiana tabacum
AAB53255.1	U65390	Nicotiana tabacum
CAB62555.1	AJ249962	Daucus carota
CAA65254.1	X96390	Lycopersicon esculentum
BAA96150.1	AP002092	Oryza sativa
CAB54856.1	AJ132686	Zea mays
BAA96192.1	AP002093	Oryza sativa
AAD39492.1	AF145272	Samanea saman
CAA56175.1	X79779	Solanum tuberosum
CAA68912.1	Y07632	Zea mays
CAA71598.1	Y10579	Vicia faba
CAC05489.1	AJ271447	Populus tremula x Populus tremuloides
AAD16278.1	AF099095	Samanea saman
AAF81251.1	AF267755	Mesembryanthemum crystallinum
BAA84085.1	AB032074	Nicotiana paniculata
AAF36832.1	AF207745	Triticum aestivum
CAA12645.1	AJ225805	Egeria densa
CAC10514.1	AJ299019	Samanea saman
CAC05488.1	AJ271446	Populus tremula x Populus tremuloides

SEQ ID NO. 2134

CAA55693.1	X79086	Zea mays
CAA55691.1	X79085	Zea mays
AAF97508.1	AF242298	Oryza sativa

SEQ ID NO. 2135

AAG43509.1	AF210049	Petunia x hybrida
CAA44807.1	X63093	Lycopersicon esculentum

SEQ ID NO. 2136

AAG41776.1	AF212990	Cucurbita maxima
BAB12433.1	AB025030	Coptis japonica
AAB17562.1	U72654	Eustoma grandiflorum
CAA50647.1	X71656	Solanum melongena
AAD56282.1	AF155332	Petunia x hybrida
AAB94587.1	AF022458	Glycine max
AAC39453.1	AF014801	Eschscholzia californica
AAC39452.1	AF014800	Eschscholzia californica
AAA32913.1	M32885	Persea americana
CAA50155.1	X70824	Solanum melongena
CAA50648.1	X71657	Solanum melongena
AAB94593.1	AF022464	Glycine max
AAB94588.1	AF022459	Glycine max
BAA84071.1	AB028151	Antirrhinum majus
AAF05621.1	AF191772	Papaver somniferum
CAA70575.1	Y09423	Nepeta racemosa
AAC32274.1	AF081575	Petunia x hybrida
AAD37433.1	AF150881	Lycopersicon esculentum x Lycopersicon peruvianum
BAA92894.1	AB006790	Petunia x hybrida
BAB40324.1	AB037245	Asparagus officinalis
CAA70576.1	Y09424	Nepeta racemosa
AAB94589.1	AF022460	Glycine max
BAB40323.1	AB037244	Asparagus officinalis
AAD47832.1	AF166332	Nicotiana tabacum

SEQ ID NO. 2138

CAA72218.1	Y11415	Oryza sativa
CAA78386.1	Z13996	Petunia x hybrida
AAK19616.1	AF336283	Gossypium hirsutum
CAB43399.1	AJ006292	Antirrhinum majus
AAK19619.1	AF336286	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
CAA64614.1	X95296	Lycopersicon esculentum
BAA23337.1	D88617	Oryza sativa
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
CAA50221.1	X70876	Hordeum vulgare
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA72186.1	Y11351	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
BAA88221.1	AB028649	Nicotiana tabacum
BAA23338.1	D88618	Oryza sativa
BAA88222.1	AB028650	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
CAA72217.1	Y11414	Oryza sativa
BAA88224.1	AB028652	Nicotiana tabacum
CAA67575.1	X99134	Lycopersicon esculentum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
CAA50226.1	X70881	Hordeum vulgare
CAA50223.1	X70878	Hordeum vulgare
BAA81733.2	AB029162	Glycine max
BAA81736.1	AB029165	Glycine max
CAA66952.1	X98308	Lycopersicon esculentum
BAA23340.1	D88620	Oryza sativa
CAA72187.1	Y11352	Oryza sativa
CAA65525.1	X96749	Oryza sativa
AAK19618.1	AF336285	Gossypium hirsutum
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
CAA64615.1	X95297	Lycopersicon esculentum

SEQ ID NO. 2139

BAA96751.1	AP002521	Oryza sativa
AAA33118.1	L32701	Cucurbita argyrosperma
AAA33117.1	L31550	Cucurbita maxima
AAA83538.1	L31552	Cucurbita maxima
AAA33116.1	L31551	Cucurbita maxima
CAA78979.1	Z17331	Cucurbita maxima
AAF74345.1	AF150627	Cucurbita moschata
AAA92465.1	L32700	Cucurbita argyrosperma
CAA80364.1	Z22647	Cucurbita maxima

SEQ ID NO. 2140

AAF27340.1	AF186020	Vicia faba
AAD00239.1	U73938	Nicotiana tabacum
CAA81443.1	Z26846	Mesembryanthemum crystalli
AAB58348.1	U29095	Triticum aestivum
AAB68962.1	L38855	Glycine max
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
AAD00240.1	U73939	Nicotiana tabacum
AAA96325.1	M94726	Triticum aestivum
BAA13608.1	D88399	Oryza sativa
CAA06503.1	AJ005373	Craterostigma plantagineum
AAC98509.1	AF100162	Chlamydomonas reinhardtii
CAA73067.1	Y12464	Sorghum bicolor
AAD23582.1	AF128443	Glycine max
CAA71142.1	Y10036	Cucumis sativus
CAA73068.1	Y12465	Sorghum bicolor
BAA05649.1	D26602	Nicotiana tabacum
BAA96628.1	AP002482	Oryza sativa
CAA65244.1	X95997	Solanum tuberosum
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
CAA46554.1	X65604	Hordeum vulgare
BAA83689.1	AB011968	Oryza sativa
AAB62693.1	AF004947	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
AAF22219.1	AF141378	Zea mays

SEQ ID NO. 2142

BAB39155.1	AB048713	Pisum sativum
AAG13663.1	AF263457	Zea mays
AAC98090.1	AF067400	Zea mays
BAA90816.1	AP001168	Oryza sativa
AAC98091.1	AF067401	Oryza sativa
BAB39156.1	AB048714	Pisum sativum

SEQ ID NO. 2146

AAA80588.1	U20502	Glycine max
CAA54678.1	X77569	Zea mays
CAA76741.1	Y17329	Pisum sativum
CAA84491.1	Z35108	Helianthus tuberosus

SEQ ID NO. 2147

CAA83924.1	Z33643	Brassica napus
AAF37386.1	AF134835	Medicago truncatula

SEQ ID NO. 2149

AAA34238.1	L20507	Vigna radiata
CAA36644.1	X52398	Medicago sativa
AAD10245.1	AF030033	Phaseolus vulgaris
AAD10244.1	AF030032	Phaseolus vulgaris
CAA74307.1	Y13974	Zea mays
CAA46150.1	X65016	Oryza sativa
AAC36058.1	AF042839	Oryza sativa
AAD10246.1	AF030034	Phaseolus vulgaris
CAA54583.1	X77397	Zea mays
BAA87825.1	AP000815	Oryza sativa
AAA92681.1	U13882	Pisum sativum
AAA33706.1	M80836	Petunia x hybrida
AAA33705.1	M80831	Petunia x hybrida
CAA43143.1	X60738	Malus x domestica
CAA78301.1	Z12839	Lilium longiflorum
CAA42423.1	X59751	Daucus carota
CAA67054.1	X98404	Capsicum annuum
AAG27432.1	AF295637	Elaeis guineensis
AAG11418.1	AF292108	Prunus avium
AAA34237.1	L20691	Vigna radiata
AAC49587.1	U49105	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49585.1	U49103	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum
AAC49583.1	U48692	Triticum aestivum
AAC49582.1	U48691	Triticum aestivum
AAC49580.1	U48689	Triticum aestivum
AAC49579.1	U48688	Triticum aestivum
AAC49578.1	U48242	Triticum aestivum
AAB36130.1	S81594	Vigna radiata
CAA78287.1	Z12827	Oryza sativa
AAB46588.1	U83402	Capsicum annuum
CAA61980.1	X89890	Bidens pilosa
AAA32938.1	M27303	Hordeum vulgare
BAA88540.1	AP000969	Oryza sativa
AAF65511.1	AF108889	Capsicum annuum
AAC36059.1	AF042840	Oryza sativa
AAA33900.1	L18914	Oryza sativa
CAA78288.1	Z12828	Oryza sativa
AAA16320.1	L14071	Bryonia dioica
AAA19571.1	U10150	Brassica napus
AAA87347.1	M88307	Brassica juncea
CAA52602.1	X74490	Zea mays

SEQ ID NO. 2152

CAA42727.1	X60158	Hordeum vulgare
AAD46189.1	AF157017	Tortula ruralis

SEQ ID NO. 2153

AAF36491.1	AF129479	Hordeum vulgare
BAB32443.1	AB055630	Phragmites australis
BAB32442.1	AB055629	Phragmites australis
BAB32444.1	AB055631	Phragmites australis
BAB32445.1	AB055632	Phragmites australis
AAF36497.1	AF129485	Oryza sativa
AAF36496.1	AF129484	Hordeum vulgare
AAF36492.1	AF129480	Hordeum vulgare
CAC15061.1	AJ300161	Hordeum vulgare

SEQ ID NO. 2154

AAF43095.1	AF053769	Malus x domestica
AAB81079.1	AF022390	Hordeum vulgare
AAB41849.1	U65648	Solanum tuberosum

AAC32818.1	AF050181	Oryza sativa
BAB18583.1	AB043955	Ceratopteris richardii
AAD13611.1	AF100455	Zea mays
BAB18582.1	AB043954	Ceratopteris richardii
BAB18584.1	AB043956	Ceratopteris richardii
AAC33008.1	AF080104	Pisum sativum
AAC32817.1	AF050180	Oryza sativa
AAD09582.1	U76409	Lycopersicon esculentum
AAD00252.1	U76408	Lycopersicon esculentum
AAG27464.1	AF308454	Medicago truncatula
AAC49917.1	AF000141	Lycopersicon esculentum
AAD00251.1	U76407	Lycopersicon esculentum
AAF23753.2	AF193813	Brassica oleracea

SEQ ID NO. 2157

AAF31151.1	AF078679	Olea europaea
AAF31152.1	AF078680	Olea europaea
CAB63264.1	AJ251808	Lotus japonicus
AAA92677.1	U13736	Pisum sativum
AAA33083.1	M20729	Chlamydomonas reinhardtii
BAA94697.1	AB041712	Chara corallina
BAA94696.1	AB041711	Chara corallina
BAA96536.1	AB044286	Chara corallina
AAK11255.1	AF329729	Nicotiana tabacum
AAB67884.1	U62865	Dunaliella salina
CAA67054.1	X98404	Capsicum annuum
BAA87825.1	AP000815	Oryza sativa
CAA62150.1	X90560	Physcomitrella patens
AAB46588.1	U83402	Capsicum annuum
AAA85155.1	U20294	Solanum tuberosum
AAA62351.1	U20295	Solanum tuberosum
AAA85156.1	U20296	Solanum tuberosum
AAA85157.1	U20297	Solanum tuberosum
AAF65511.1	AF108889	Capsicum annuum
CAA61980.1	X89890	Bidens pilosa
AAA33900.1	L18914	Oryza sativa
CAA78288.1	Z12828	Oryza sativa
CAA54583.1	X77397	Zea mays
AAA87347.1	M88307	Brassica juncea
AAA19571.1	U10150	Brassica napus
AAD10245.1	AF030033	Phaseolus vulgaris
AAC49583.1	U48692	Triticum aestivum
AAC49582.1	U48691	Triticum aestivum
AAK25753.1	AF334833	Castanea sativa
AAA33706.1	M80836	Petunia x hybrida
CAA74307.1	Y13974	Zea mays
AAA33705.1	M80831	Petunia x hybrida
AAD10244.1	AF030032	Phaseolus vulgaris
CAA36644.1	X52398	Medicago sativa
CAA43143.1	X60738	Malus x domestica
CAA78301.1	Z12839	Lilium longiflorum
AAB68399.1	U79736	Helianthus annuus
CAA42423.1	X59751	Daucus carota
AAA34238.1	L20507	Vigna radiata
AAG27432.1	AF295637	Elaeis guineensis
AAG11418.1	AF292108	Prunus avium
CAA74111.1	Y13784	Mougeotia scalaris
AAA92681.1	U13882	Pisum sativum

SEQ ID NO. 2158

AAG43835.1	AF213455	Zea mays
AAC36698.1	AF075580	Mesembryanthemum crystallinum
CAC10359.1	AJ277087	Nicotiana tabacum
CAB90633.1	AJ277743	Fagus sylvatica
AAC36697.1	AF075579	Mesembryanthemum crystallinum
CAC10358.1	AJ277086	Nicotiana tabacum
CAA72341.1	Y11607	Medicago sativa
AAD17804.1	AF092431	Lotus japonicus
AAC36700.1	AF075582	Mesembryanthemum crystallinum
CAC09575.1	AJ298987	Fagus sylvatica
AAD17805.1	AF092432	Lotus japonicus
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAC26828.1	AF075603	Oryza sativa
CAB90634.1	AJ277744	Fagus sylvatica
AAB93832.1	U81960	Zea mays
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAC35951.1	AF079355	Mesembryanthemum crystallinum
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 2159

BAB19864.1	AB052885	Oryza sativa
CAA04511.1	AJ001061	Vitis vinifera

AAB06594.1	U38651	Medicago truncatula
CAB07812.1	Z93775	Vicia faba
CAA47324.1	X66856	Nicotiana tabacum
CAA70777.1	Y09590	Vitis vinifera
AAA79761.1	L08196	Ricinus communis
AAA79857.1	L08188	Ricinus communis
BAB19863.1	AB052884	Oryza sativa
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA09419.1	AJ010942	Lycopersicon esculentum
CAB06079.1	Z83829	Picea abies
BAB19862.1	AB052883	Oryza sativa
CAA68813.1	Y07520	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri
CAA53192.1	X75440	Chlorella kessleri
CAB52688.1	AJ132223	Lycopersicon esculentum
AAD55054.1	AF173655	Beta vulgaris
CAB52690.1	AJ132225	Lycopersicon esculentum
AAG43998.1	AF215837	Apium graveolens var. dulce
AAF74567.1	AF215853	Solanum tuberosum
AAF74565.1	AF215851	Spinacia oleracea
AAF74566.1	AF215852	Nicotiana tabacum
AAF74568.1	AF215854	Zea mays

SEQ ID NO. 2163

AAB68962.1	L38855	Glycine max
CAA06503.1	AJ005373	Craterostigma plantagineum
AAG60195.1	AC084763	Oryza sativa
BAA13608.1	D88399	Oryza sativa
AAD00239.1	U73938	Nicotiana tabacum
BAA19573.1	AB002109	Oryza sativa
AAB58348.1	U29095	Triticum aestivum
AAD00240.1	U73939	Nicotiana tabacum
CAA81443.1	Z26846	Mesembryanthemum crystallinum
AAA96325.1	M94726	Triticum aestivum
AAF27340.1	AF186020	Vicia faba
AAC98509.1	AF100162	Chlamydomonas reinhardtii
AAD23582.1	AF128443	Glycine max
BAA05649.1	D26602	Nicotiana tabacum
CAA71142.1	Y10036	Cucumis sativus
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
CAA73068.1	Y12465	Sorghum bicolor
CAA73067.1	Y12464	Sorghum bicolor
CAA65244.1	X95997	Solanum tuberosum
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
CAA46554.1	X65604	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
AAB62693.1	AF004947	Oryza sativa
BAA83689.1	AB011968	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA34675.1	AB011670	Triticum aestivum

SEQ ID NO. 2164

AAB58348.1	U29095	Triticum aestivum
AAD00239.1	U73938	Nicotiana tabacum
AAA96325.1	M94726	Triticum aestivum
CAA81443.1	Z26846	Mesembryanthemum crystallinum
AAG60195.1	AC084763	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
BAA13608.1	D88399	Oryza sativa
AAD00240.1	U73939	Nicotiana tabacum
AAB68962.1	L38855	Glycine max
CAA06503.1	AJ005373	Craterostigma plantagineum
AAF27340.1	AF186020	Vicia faba
AAC98509.1	AF100162	Chlamydomonas reinhardtii
BAA96628.1	AP002482	Oryza sativa
CAA73067.1	Y12464	Sorghum bicolor
CAA71142.1	Y10036	Cucumis sativus
AAD23582.1	AF128443	Glycine max
CAA73068.1	Y12465	Sorghum bicolor
BAA05649.1	D26602	Nicotiana tabacum
CAA65244.1	X95997	Solanum tuberosum
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
AAB05457.1	U55768	Oryza sativa
CAA46554.1	X65604	Hordeum vulgare
AAF22219.1	AF141378	Zea mays

BAA83688.1	AB011967	Oryza sativa
BAA83689.1	AB011968	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
AAB62693.1	AF004947	Oryza sativa

SEQ ID NO. 2165

CAA72271.1	Y11483	Brassica napus
CAA72270.1	Y11482	Brassica napus
AAB72097.1	AF021257	Hordeum vulgare
AAB72096.1	AF021256	Hordeum vulgare

SEQ ID NO. 2166

AAA86424.1	U44386	Lycopersicon esculentum
AAF05766.1	AF192758	Glycine max

SEQ ID NO. 2168

AAK19619.1	AF336286	Gossypium hirsutum
CAA64614.1	X95296	Lycopersicon esculentum
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
CAA50221.1	X70876	Hordeum vulgare
BAA23337.1	D88617	Oryza sativa
BAA23338.1	D88618	Oryza sativa
CAA72218.1	Y11415	Oryza sativa
CAA78386.1	Z13996	Petunia x hybrida
AAK19616.1	AF336283	Gossypium hirsutum
CAB43399.1	AJ006292	Antirrhinum majus
CAA50225.1	X70880	Hordeum vulgare
AAF22256.1	AF161711	Pimpinella brachycarpa
AAK19611.1	AF336278	Gossypium hirsutum
AAK19617.1	AF336284	Gossypium hirsutum
CAA72186.1	Y11351	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum
AAK19615.1	AF336282	Gossypium hirsutum
AAK19618.1	AF336285	Gossypium hirsutum
BAA81732.1	AB029161	Glycine max
CAA72185.1	Y11350	Oryza sativa
AAG13574.1	AC037425	Oryza sativa
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
CAA78387.1	Z13997	Petunia x hybrida
BAA88222.1	AB028650	Nicotiana tabacum
BAA81736.1	AB029165	Glycine max
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays
BAA23339.1	D88619	Oryza sativa
CAA72217.1	Y11414	Oryza sativa
BAA81733.2	AB029162	Glycine max
BAA88224.1	AB028652	Nicotiana tabacum
CAA66952.1	X98308	Lycopersicon esculentum

SEQ ID NO. 2169

BAA95893.1	AP002071	Oryza sativa
CAB51834.1	00069	Oryza sativa
AAB09771.1	U67422	Zea mays
AAK11566.1	AF318490	Lycopersicon hirsutum
CAA97692.1	Z73295	Catharanthus roseus
AAK11674.1	AF339747	Lophopyrum elongatum
AAF43496.1	AF131222	Lophopyrum elongatum
AAF76313.1	AF220603	Lycopersicon esculentum
AAB47421.1	U59316	Lycopersicon esculentum
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAK11567.1	AF318491	Lycopersicon hirsutum
AAK21965.1	AY028699	Brassica napus
AAG25966.1	AF302082	Nicotiana tabacum
AAK11569.1	AF318493	Lycopersicon hirsutum
AAF66615.1	AF142596	Nicotiana tabacum
AAG03090.1	AC073405	Oryza sativa
BAA83373.1	AP000391	Oryza sativa
BAA84787.1	AP000559	Oryza sativa
CAA74662.1	Y14286	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
AAK11568.1	AF318492	Lycopersicon hirsutum
BAA78764.1	AB023482	Oryza sativa
BAA94509.1	AB041503	Populus nigra
BAA94510.1	AB041504	Populus nigra

SEQ ID NO. 2172

BAA22422.1	AB001379	Glycyrrhiza echinata

BAA74465.1	AB022732	Glycyrrhiza echinata
CAB43505.1	AJ239051	Cicer arietinum
CAB41490.1	AJ238439	Cicer arietinum
CAA10067.1	AJ012581	Cicer arietinum
BAA93634.1	AB025016	Lotus japonicus
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAD56282.1	AF155332	Petunia x hybrida
BAA12159.1	D83968	Glycine max
AAB94590.1	AF022461	Glycine max
CAA65580.1	X96784	Nicotiana tabacum
AAA32913.1	M32885	Persea americana
AAG09208.1	AF175278	Pisum sativum
CAB56742.1	AJ249800	Cicer arietinum
AAC49188.2	U29333	Pisum sativum
AAG44132.1	AF218296	Pisum sativum
BAA13076.1	D86351	Glycine max
AAC39454.1	AF014802	Eschscholzia californica
CAA64635.1	X95342	Nicotiana tabacum
AAD38930.1	AF135485	Glycine max
AAB17562.1	U72654	Eustoma grandiflorum
BAA92894.1	AB006790	Petunia x hybrida
AAC32274.1	AF081575	Petunia x hybrida
BAA84072.1	AB028152	Torenia hybrida
CAA50155.1	X70824	Solanum melongena
BAB40324.1	AB037245	Asparagus officinalis
BAB40323.1	AB037244	Asparagus officinalis
BAA74466.1	AB022733	Glycyrrhiza echinata

SEQ ID NO. 2173

AAF64450.1	AF239928	Euphorbia esula
AAG34803.1	AF243368	Glycine max
AAG34796.1	AF243361	Glycine max
AAG34809.1	AF243374	Glycine max
AAG34797.1	AF243362	Glycine max
AAG34807.1	AF243372	Glycine max
AAG34798.1	AF243363	Glycine max
AAG34804.1	AF243369	Glycine max
AAG34801.1	AF243366	Glycine max
AAG34810.1	AF243375	Glycine max
AAC18566.1	AF048978	Glycine max
AAG34808.1	AF243373	Glycine max
AAG34800.1	AF243365	Glycine max
CAA71784.1	Y10820	Glycine max
AAG34844.1	AF244701	Zea mays
AAA68430.1	J03679	Solanum tuberosum
CAA04391.1	AJ000923	Carica papaya
AAG34831.1	AF244688	Zea mays
CAA09187.1	AJ010448	Alopecurus myosuroides
CAA09188.1	AJ010449	Alopecurus myosuroides
AAG34802.1	AF243367	Glycine max
AAG34805.1	AF243370	Glycine max
AAG34832.1	AF244689	Zea mays
AAG34837.1	AF244694	Zea mays
AAG34836.1	AF244693	Zea mays
AAG34849.1	AF244706	Zea mays
CAC24549.1	AJ296343	Cichorium intybus x Cichorium endivia
AAC32118.1	AF051214	Picea mariana
AAG34795.1	AF243360	Glycine max
AAG34841.1	AF244698	Zea mays
AAF29773.1	AF159229	Gossypium hirsutum

SEQ ID NO. 2174

AAB67714.1	AF013161	Prunus serotina
CAA51194.1	X72617	Prunus serotina
AAB38536.1	U78814	Prunus serotina
CAA69388.1	Y08211	Prunus dulcis
AAB96764.1	AF040079	Prunus serotina
AAB96763.1	AF040078	Prunus serotina
AAC61982.1	AF053886	Prunus serotina
AAC61981.1	AF053885	Prunus serotina
AAC61980.1	AF053884	Prunus serotina
AAD02266.1	AF043187	Prunus serotina
AAD02265.1	AF043186	Prunus serotina

SEQ ID NO. 2176

CAA58994.1	X84208	Sinapis alba
CAA76116.1	Y16190	Sinapis alba

SEQ ID NO. 2177

CAA68190.1	X99922	Brassica napus

SEQ ID NO. 2181

AAD37375.1	AF145349	Glycine max
AAA32676.1	M37637	Arachis hypogaea
AAD37429.2	AF149279	Phaseolus vulgaris
BAA82307.1	AB027753	Nicotiana tabacum
CAA71494.1	Y10468	Spinacia oleracea
CAA64413.1	X94943	Lycopersicon esculentum
AAB67737.1	L77080	Stylosanthes humilis
AAB47602.1	L07554	Linum usitatissimum
BAA14143.1	D90115	Armoracia rusticana
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
CAA62227.1	X90694	Medicago sativa
AAA65637.1	L13654	Lycopersicon esculentum
AAD11482.1	U51192	Glycine max
AAF63027.1	AF244924	Spinacia oleracea
CAA50597.1	X71593	Lycopersicon esculentum
AAD37427.1	AF149277	Phaseolus vulgaris
CAA62226.1	X90693	Medicago sativa
CAB67121.1	Y19023	Lycopersicon esculentum
BAA01877.1	D11102	Populus kitakamiensis
AAD11481.1	U51191	Glycine max
CAA80502.1	Z22920	Spirodela polyrrhiza
AAB41810.1	L36156	Medicago sativa
AAD37430.1	AF149280	Phaseolus vulgaris
BAA03644.1	D14997	Oryza sativa
CAA62225.1	X90692	Medicago sativa
CAB94692.1	AJ242742	Ipomoea batatas
BAA01992.1	D11396	Nicotiana tabacum
AAB41811.1	L36157	Medicago sativa
AAB97734.1	AF014502	Glycine max
CAA40796.1	X57564	Armoracia rusticana
AAC98519.1	AF007211	Glycine max
AAA34108.1	J02979	Nicotiana tabacum
BAA11853.1	D83225	Populus nigra
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
AAA65636.1	L13653	Lycopersicon esculentum
AAF63026.1	AF244923	Spinacia oleracea
BAA06335.1	D30653	Populus kitakamiensis
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
CAA76680.1	Y17192	Cucurbita pepo
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
BAA08499.1	D49551	Oryza sativa
BAA92500.1	AP001383	Oryza sativa
CAC21393.1	AJ401276	Zea mays

SEQ ID NO. 2183

AAD03415.1	AF069494	Sinapis alba
AAA85440.1	U32624	Sorghum bicolor
AAF27289.1	AF140613	Manihot esculenta
AAF27290.1	AF140614	Manihot esculenta
AAF66543.1	AF140609	Triglochin maritimum
AAF66544.1	AF140610	Triglochin maritimum
BAA92894.1	AB006790	Petunia x hybrida
AAD56282.1	AF155332	Petunia x hybrida
CAA50155.1	X70824	Solanum melongena
AAA32913.1	M32885	Persea americana
CAA64635.1	X95342	Nicotiana tabacum
CAA65580.1	X96784	Nicotiana tabacum
AAC32274.1	AF081575	Petunia x hybrida
CAB43505.1	AJ239051	Cicer arietinum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAB17562.1	U72654	Eustoma grandiflorum
AAG09208.1	AF175278	Pisum sativum
BAA93634.1	AB025016	Lotus japonicus
AAG44132.1	AF218296	Pisum sativum
AAC49188.2	U29333	Pisum sativum
AAB94587.1	AF022458	Glycine max
AAB94590.1	AF022461	Glycine max
BAA12159.1	D83968	Glycine max
BAA84071.1	AB028151	Antirrhinum majus
AAB94588.1	AF022459	Glycine max
BAA74465.1	AB022732	Glycyrrhiza echinata
BAA84072.1	AB028152	Torenia hybrida

SEQ ID NO. 2184

CAA62228.1	X90695	Medicago sativa

CAA09881.1	AJ011939	Trifolium repens
CAA71495.1	Y10469	Spinacia oleracea
AAB41812.1	L36158	Medicago sativa
AAD11483.1	U51193	Glycine max
AAF63024.1	AF244921	Spinacia oleracea
AAD11484.1	U51194	Glycine max
AAB67737.1	L77080	Stylosanthes humilis
CAA62226.1	X90693	Medicago sativa
CAA62227.1	X90694	Medicago sativa
AAC98519.1	AF007211	Glycine max
BAA77387.1	AB024437	Scutellaria baicalensis
CAB67121.1	Y19023	Lycopersicon esculentum
CAA50597.1	X71593	Lycopersicon esculentum
CAB94692.1	AJ242742	Ipomoea batatas
AAA98491.1	L36981	Petroselinum crispum
AAD11481.1	U51191	Glycine max
BAA01950.1	D11337	Vigna angularis
AAD11482.1	U51192	Glycine max
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAB41810.1	L36156	Medicago sativa
AAD37427.1	AF149277	Phaseolus vulgaris
BAA07664.1	D42065	Nicotiana tabacum
CAC21393.1	AJ401276	Zea mays
BAA82306.1	AB027752	Nicotiana tabacum
BAA07663.1	D42064	Nicotiana tabacum
BAA06335.1	D30653	Populus kitakamiensis
CAA62225.1	X90692	Medicago sativa
AAA34050.1	M74103	Nicotiana sylvestris
AAD37430.1	AF149280	Phaseolus vulgaris
AAB41811.1	L36157	Medicago sativa
BAA14144.1	D90116	Armoracia rusticana
BAA01877.1	D11102	Populus kitakamiensis
CAA59485.1	X85228	Triticum aestivum
BAA14143.1	D90115	Armoracia rusticana
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
CAA76376.1	Y16778	Spinacia oleracea
AAA34108.1	J02979	Nicotiana tabacum
BAA96643.1	AP002482	Oryza sativa
AAA32973.1	M73234	Hordeum vulgare
AAA65637.1	L13654	Lycopersicon esculentum
CAA71488.1	Y10462	Spinacia oleracea
AAA32676.1	M37637	Arachis hypogaea
BAA77389.1	AB024439	Scutellaria baicalensis
CAA40796.1	X57564	Armoracia rusticana

SEQ ID NO. 2186

AAG34803.1	AF243368	Glycine max
AAG34797.1	AF243362	Glycine max
AAG34798.1	AF243363	Glycine max
AAF64450.1	AF239928	Euphorbia esula
AAG34796.1	AF243361	Glycine max
AAG34801.1	AF243366	Glycine max
AAG34804.1	AF243369	Glycine max
AAG34807.1	AF243372	Glycine max
AAG34809.1	AF243374	Glycine max
AAG34810.1	AF243375	Glycine max
AAG34802.1	AF243367	Glycine max
AAG34808.1	AF243373	Glycine max
AAG34844.1	AF244701	Zea mays
CAA09188.1	AJ010449	Alopecurus myosuroides
CAA09187.1	AJ010448	Alopecurus myosuroides
AAA68430.1	J03679	Solanum tuberosum
AAG34837.1	AF244694	Zea mays
AAG34800.1	AF243365	Glycine max
AAG34831.1	AF244688	Zea mays
AAC32118.1	AF051214	Picea mariana
AAG34805.1	AF243370	Glycine max
AAC18566.1	AF048978	Glycine max
AAG34829.1	AF244686	Zea mays
CAA04391.1	AJ000923	Carica papaya
CAA71784.1	Y10820	Glycine max
AAG34795.1	AF243360	Glycine max
AAG34836.1	AF244693	Zea mays
AAG34832.1	AF244689	Zea mays
AAG34833.1	AF244690	Zea mays
AAG34849.1	AF244706	Zea mays
AAG34806.1	AF243371	Glycine max
CAA09189.1	AJ010450	Alopecurus myosuroides

SEQ ID NO. 2187

AAD02848.1	AF086839	Populus tremula x Populus tremuloides
BAA36555.1	AB011798	Citrus unshiu
CAB66329.1	AJ279687	Betula pendula
AAC77357.1	U79562	Pisum sativum
CAB61887.1	AJ250003	Lycopersicon esculentum
BAA36556.1	AB011799	Citrus unshiu
BAB40808.1	AB058921	Nicotiana suaveolens x Nicotiana tabacum
AAB16804.1	U68560	Malus x domestica
BAB40809.1	AB058922	Nicotiana suaveolens x Nicotiana tabacum
AAC32147.1	AF051247	Picea mariana
CAB56223.1	AJ133276	Hordeum vulgare
CAB56224.1	AJ133277	Hordeum vulgare
AAC24568.2	AF055909	Zea mays

SEQ ID NO. 2188

CAC12822.1	AJ299252	Nicotiana tabacum
AAC24587.1	AF071893	Prunus armeniaca
AAF23899.1	AF193803	Oryza sativa
BAB16083.1	AB036883	Oryza sativa
AAF63205.1	AF245119	Mesembryanthemum crystallinum
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
BAA78738.1	AB023482	Oryza sativa
AAF76898.1	AF274033	Atriplex hortensis
BAA99376.1	AP002526	Oryza sativa

SEQ ID NO. 2189

AAF60173.1	AF236068	Elaeis guineensis
AAD23407.1	AF112887	Populus x canescens
AAG16973.1	AF183903	Petunia x hybrida
AAG16974.1	AF183904	Petunia x hybrida
CAA78483.1	Z14110	Lilium longiflorum
CAA78482.1	Z14109	Brassica napus
CAA66310.1	X97725	Zea mays
CAA66311.1	X97726	Zea mays
CAA56786.1	X80820	Zea mays
AAC49404.1	U58278	Triticum aestivum
AAG28460.1	AF195612	Lophopyrum elongatum
AAG28490.1	AF196350	Lophopyrum elongatum

SEQ ID NO. 2190

AAF05112.1	AF158091	Mesembryanthemum crystallir
AAF19402.1	AF203480	Lycopersicon esculentum
AAF19403.1	AF203481	Lycopersicon esculentum
AAF06969.1	AF162661	Kalanchoe fedtschenkoi
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
AAF19401.1	AF203479	Glycine max
AAF19404.1	AF203482	Brassica napus
BAA13440.1	D87707	Ipomoea batatas
CAA39936.1	X56599	Daucus carota
AAD17800.1	AF090835	Mesembryanthemum crystallir
AAD28192.2	AF115406	Solanum tuberosum
AAB88537.1	AF035944	Fragaria x ananassa
AAC25423.1	AF072908	Nicotiana tabacum
AAB80693.1	U69174	Glycine max
BAA12715.1	D85039	Zea mays
CAA65500.1	X96723	Medicago sativa
CAA57157.1	X81394	Oryza sativa
BAA90814.1	AP001168	Oryza sativa
AAA69507.1	U28376	Zea mays
AAB49984.1	U90262	Cucurbita pepo
AAB70706.1	U82087	Tortula ruralis
CAA07481.1	AJ007366	Zea mays
AAC49405.1	U08140	Vigna radiata
BAA85396.1	AP000615	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
BAA12338.1	D84408	Zea mays
CAA57156.1	X81393	Oryza sativa
BAA81749.1	AB017515	Marchantia polymorpha
BAA81751.1	AB017517	Marchantia polymorpha
BAA81750.1	AB017516	Marchantia polymorpha
BAA81748.1	AB017515	Marchantia polymorpha
AAB80692.1	U69173	Glycine max
BAA13232.1	D87042	Zea mays
AAA61682.1	L27484	Zea mays
AAG46110.1	AC073166	Oryza sativa
CAA89202.1	Z49233	Chlamydomonas eugametos
BAA02698.1	D13436	Oryza sativa
AAF23900.1	AF194413	Oryza sativa

AAF21062.1	AF216527	Dunaliella tertiolecta
CAA58750.1	X83869	Daucus carota
AAA33443.1	L15390	Zea mays
AAK26164.1	AY027885	Cucumis sativus
BAA12692.1	D84508	Zea mays
AAB47181.1	S82324	Zea mays
BAA12691.1	D84507	Zea mays
AAG01179.1	AF289237	Zea mays
BAA22410.1	D38452	Zea mays

SEQ ID NO. 2191

BAA13032.1	D86180	Pisum sativum

SEQ ID NO. 2192

AAD01600.1	AF016713	Lycopersicon esculentum
CAC07206.1	AJ278966	Brassica napus
AAC32034.1	AF023472	Hordeum vulgare
AAF20002.1	AF213936	Prunus dulcis
AAF07875.1	AF140606	Oryza sativa
BAB19760.1	AB052788	Glycine max
CAA93316.1	Z69370	Cucumis sativus
BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
AAB69642.1	AF000392	Lotus japonicus
AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 2193

CAA61980.1	X89890	Bidens pilosa
AAF73157.1	AF150059	Brassica napus
BAA87825.1	AP000815	Oryza sativa
CAA67054.1	X98404	Capsicum annuum
AAA87347.1	M88307	Brassica juncea
AAG27432.1	AF295637	Elaeis guineensis
CAA42423.1	X59751	Daucus carota
AAG11418.1	AF292108	Prunus avium
AAA92681.1	U13882	Pisum sativum
AAB46588.1	U83402	Capsicum annuum
AAA33706.1	M80836	Petunia x hybrida
AAF65511.1	AF108889	Capsicum annuum
CAA43143.1	X60738	Malus x domestica
AAA19571.1	U10150	Brassica napus
CAA78301.1	Z12839	Lilium longiflorum
BAA88540.1	AP000969	Oryza sativa
AAB36130.1	S81594	Vigna radiata
AAC36059.1	AF042840	Oryza sativa
AAA33900.1	L18914	Oryza sativa
AAA34237.1	L20691	Vigna radiata
CAA78288.1	Z12828	Oryza sativa
AAA32938.1	M27303	Hordeum vulgare
CAA78287.1	Z12827	Oryza sativa
AAC49587.1	U49105	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49583.1	U48692	Triticum aestivum
AAC49585.1	U49103	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum
AAC49582.1	U48691	Triticum aestivum
AAC49580.1	U48689	Triticum aestivum
AAC49579.1	U48688	Triticum aestivum
AAC49578.1	U48242	Triticum aestivum
AAC36058.1	AF042839	Oryza sativa
AAA85156.1	U20296	Solanum tuberosum
AAD10244.1	AF030032	Phaseolus vulgaris
CAA36644.1	X52398	Medicago sativa
AAA85155.1	U20294	Solanum tuberosum
AAB68399.1	U79736	Helianthus annuus
AAA62351.1	U20295	Solanum tuberosum
AAA34238.1	L20507	Vigna radiata
AAA85157.1	U20297	Solanum tuberosum
AAA33705.1	M80831	Petunia x hybrida
CAA74307.1	Y13974	Zea mays
CAA54583.1	X77397	Zea mays

SEQ ID NO. 2194

BAB32588.1	AB055807	Momordica charantia
AAA34180.1	J05094	Lycopersicon peruvianum
AAA34198.1	M59427	Lycopersicon peruvianum
CAB61327.1	AJ132473	Amaranthus hypochondriacus
AAA60745.1	J04099	Lycopersicon esculentum
CAA47461.1	X67076	Nicotiana tabacum
CAA78265.1	Z12619	Nicotiana tabacum
CAA47460.1	X67075	Nicotiana tabacum

AAA34067.1	M74102	Nicotiana sylvestris
AAC49603.1	U30861	Solanum tuberosum
BAA02823.1	D13662	Nicotiana glauca X Nicotiana langsdorffii
AAA34199.1	K03290	Lycopersicon esculentum
AAA34200.1	M13938	Lycopersicon esculentum
AAA72133.1	L06985	Solanum tuberosum
CAA78259.1	Z12611	Solanum tuberosum
AAA69781.1	L06606	Solanum tuberosum
CAA48136.1	X67950	Solanum tuberosum
CAA47907.1	X67675	Solanum tuberosum
CAA57677.1	X82187	Zea mays
CAA55588.1	X78988	Zea mays
CAA49593.1	X69972	Zea mays
AAA33816.1	M17108	Solanum tuberosum
CAA57307.1	X81647	Cucurbita maxima
CAA57203.1	X81447	Cucurbita maxima

SEQ ID NO. 2195

AAC32599.1	AF080436	Oryza sativa
CAC09581.1	AJ298993	Fagus sylvatica
CAC09568.1	AJ298980	Fagus sylvatica
CAA08997.1	AJ010093	Brassica napus
CAC09569.1	AJ298981	Fagus sylvatica
AAF34436.1	AF172282	Oryza sativa
CAA08995.1	AJ010091	Brassica napus
CAA08758.1	AJ009609	Brassica napus
CAA08757.1	AJ009608	Brassica napus
BAA05648.1	D26601	Nicotiana tabacum
AAF67262.1	AF165186	Nicotiana tabacum
CAA04261.2	AJ000728	Lycopersicon esculentum
AAD46406.1	AF096250	Lycopersicon esculentum
AAD10056.1	AF110518	Lycopersicon esculentum
AAD10057.1	AF110519	Lycopersicon esculentum
AAA34002.1	M67449	Glycine max
BAA06731.1	D31964	Nicotiana tabacum
CAA06334.1	AJ005077	Lycopersicon esculentum
BAB32405.1	AB055514	Nicotiana tabacum
AAG40578.1	AF216314	Oryza sativa
CAC24705.1	AJ302651	Nicotiana tabacum
AAC83393.1	U83625	Zea mays
AAK30005.1	AY029067	Rosa hybrid cultivar
AAG53979.1	AF325168	Nicotiana tabacum
AAG31141.1	AF305911	Oryza sativa
BAB18104.1	AB042714	Chlamydomonas reinhardtii
BAB18105.1	AB042715	Chlamydomonas reinhardtii
CAA73067.1	Y12464	Sorghum bicolor
CAC09580.1	AJ298992	Fagus sylvatica
CAA49592.1	X69971	Nicotiana tabacum
AAF23902.1	AF194415	Oryza sativa
AAD52659.1	AF177392	Oryza sativa
AAK11734.1	AY027437	Arachis hypogaea
CAA58466.1	X83440	Petunia x hybrida
AAF19402.1	AF203480	Lycopersicon esculentum
CAA73068.1	Y12465	Sorghum bicolor
AAF19403.1	AF203481	Lycopersicon esculentum
CAB61889.1	AJ251330	Oryza sativa
AAG40580.1	AF216316	Oryza sativa
AAF61238.1	AF241166	Oryza sativa

SEQ ID NO. 2196

AAB32591.2	S74753	Solanum tuberosum

SEQ ID NO. 2209

CAA09881.1	AJ011939	Trifolium repens
CAA62228.1	X90695	Medicago sativa
CAA71495.1	Y10469	Spinacia oleracea
AAB41812.1	L36158	Medicago sativa
AAF63024.1	AF244921	Spinacia oleracea
AAD11483.1	U51193	Glycine max
CAA62226.1	X90693	Medicago sativa
CAA62227.1	X90694	Medicago sativa
BAA77387.1	AB024437	Scutellaria baicalensis
AAD11484.1	U51194	Glycine max
BAA07664.1	D42065	Nicotiana tabacum
BAA07663.1	D42064	Nicotiana tabacum
AAD11481.1	U51191	Glycine max
AAD11482.1	U51192	Glycine max
AAD37427.1	AF149277	Phaseolus vulgaris
AAB41810.1	L36156	Medicago sativa
AAC98519.1	AF007211	Glycine max
CAB94692.1	AJ242742	Ipomoea batatas

CAC21393.1	AJ401276	Zea mays
CAA59485.1	X85228	Triticum aestivum
AAB67737.1	L77080	Stylosanthes humilis
AAC49818.1	AF014467	Oryza sativa
CAA46916.1	X66125	Oryza sativa
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAA65637.1	L13654	Lycopersicon esculentum
AAB41811.1	L36157	Medicago sativa
AAF65464.2	AF247700	Oryza sativa
AAA98491.1	L36981	Petroselinum crispum
CAA62225.1	X90692	Medicago sativa
CAA39486.1	X56011	Triticum aestivum
CAB67121.1	Y19023	Lycopersicon esculentum
BAA03644.1	D14997	Oryza sativa
CAA50597.1	X71593	Lycopersicon esculentum
BAA82306.1	AB027752	Nicotiana tabacum
BAA06335.1	D30653	Populus kitakamiensis
CAB99487.1	AJ276227	Hordeum vulgare
BAA01950.1	D11337	Vigna angularis
BAA07241.1	D38051	Populus kitakamiensis
AAD37430.1	AF149280	Phaseolus vulgaris
AAG02215.1	AF291667	Pinus sylvestris
AAA32972.1	L36093	Hordeum vulgare
CAA37713.1	X53675	Triticum aestivum
AAB02554.1	L37790	Stylosanthes humilis
CAA71488.1	Y10462	Spinacia oleracea
CAA62597.1	X91172	Raphanus sativus

SEQ ID NO. 2210

CAA54609.1	X77459	Manihot esculenta
CAA54613.1	X77463	Manihot esculenta
CAA54611.1	X77461	Manihot esculenta
CAA54612.1	X77462	Manihot esculenta
AAB36653.1	U32644	Nicotiana tabacum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAK28303.1	AF346431	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAD04166.1	AF101972	Phaseolus lunatus
BAA83484.1	AB031274	Scutellaria baicalensis
BAA12737.1	D85186	Gentiana triflora
BAA89008.1	AB027454	Petunia x hybrida
AAF61647.1	AF190634	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
AAD55985.1	AF165148	Petunia x hybrida
AAD21086.1	AF127218	Forsythia x intermedia
AAB48444.1	U82367	Solanum tuberosum
BAA19659.1	AB002818	Perilla frutescens
BAA89009.1	AB027455	Petunia x hybrida
AAF17077.1	AF199453	Sorghum bicolor
CAA54614.1	X77464	Manihot esculenta
BAA93039.1	AB033758	Citrus unshiu
AAB62270.1	AF006081	Solanum berthaultii
AAF98390.1	AF287143	Brassica napus
CAA54610.1	X77460	Manihot esculenta
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
AAB86473.1	AF028237	Ipomoea purpurea
AAB81683.1	AF000372	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera

SEQ ID NO. 2211

CAA54609.1	X77459	Manihot esculenta
CAA54611.1	X77461	Manihot esculenta
CAA54613.1	X77463	Manihot esculenta
CAA54612.1	X77462	Manihot esculenta
AAK28303.1	AF346431	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
AAF61647.1	AF190634	Nicotiana tabacum
BAA89008.1	AB027454	Petunia x hybrida
BAA36423.1	AB013598	Verbena x hybrida
BAA89009.1	AB027455	Petunia x hybrida
AAD55985.1	AF165148	Petunia x hybrida

BAA93039.1	AB033758	Citrus unshiu
AAF17077.1	AF199453	Sorghum bicolor
AAB48444.1	U82367	Solanum tuberosum
AAD21086.1	AF127218	Forsythia x intermedia
BAA83484.1	AB031274	Scutellaria baicalensis
CAA54614.1	X77464	Manihot esculenta
AAD04166.1	AF101972	Phaseolus lunatus
AAB86473.1	AF028237	Ipomoea purpurea
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
BAA19659.1	AB002818	Perilla frutescens
BAA36422.1	AB013597	Perilla frutescens
AAB62270.1	AF006081	Solanum berthaultii
AAB81683.1	AF000372	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera

SEQ ID NO. 2213

AAA33122.1	M80571	Cucumis sativus
BAB17755.1	AB042401	Cucurbita moschata
AAF64066.1	AF251795	Elaeis guineensis
BAB39689.1	AB049135	Cucurbita moschata
BAB39688.1	AB049134	Cucurbita moschata
BAB17754.1	AB042400	Cucurbita moschata
CAA41769.1	X59041	Plastid Pisum sativum
CAA56159.1	X79722	Phaseolus vulgaris
CAA88913.1	Z49091	Spinacia oleracea
CAB75874.1	AJ272082	Elaeis guineensis
CAA54559.1	X77370	Spinacia oleracea
AAD38408.1	AF155815	Chloroplast Oryza sativa
CAB44495.1	AJ242939	Plastid Oryza sativa
CAB45298.2	AJ242940	Plastid Oryza sativa
AAK15854.1	AY016286	Paeonia californica
AAK15853.1	AY016285	Paeonia californica
AAK15852.1	AY016284	Paeonia californica
AAK15851.1	AY016283	Paeonia californica
AAK15849.1	AY016281	Paeonia rockii
AAK15848.1	AY016280	Paeonia rockii
AAK15847.1	AY016279	Paeonia rockii
AAK15844.1	AY016276	Paeonia szechuanica
AAK15843.1	AY016275	Paeonia suffruticosa subsp. spontanea
AAK15841.1	AY016273	Paeonia delavayi
AAK15840.1	AY016272	Paeonia delavayi
AAK15835.1	AY016267	Paeonia lutea
AAK15834.1	AY016266	Paeonia lutea
AAK15832.1	AY016264	Paeonia mairei
AAK15831.1	AY016263	Paeonia mairei
AAK15828.1	AY016260	Paeonia japonica
AAK15827.1	AY016259	Paeonia japonica
AAK15826.1	AY016258	Paeonia japonica
AAK15825.1	AY016257	Paeonia obovata
AAK15824.1	AY016256	Paeonia obovata
AAK15822.1	AY016254	Paeonia obovata
AAK15820.1	AY016250	Paeonia tenuifolia
AAK15818.1	AY016248	Paeonia anomala
AAK15837.1	AY016269	Paeonia lutea
AAK15817.1	AY016247	Paeonia anomala
AAK15830.1	AY016262	Paeonia mairei
AAK15845.1	AY016277	Paeonia szechuanica
AAK15839.1	AY016271	Paeonia delavayi
AAK15836.1	AY016268	Paeonia lutea
AAK15846.1	AY016278	Paeonia szechuanica
AAK15833.1	AY016265	Paeonia lutea
AAK15821.1	AY016251	Paeonia tenuifolia

SEQ ID NO. 2214

AAD10386.1	U72255	Oryza sativa
CAB85903.1	AJ251646	Pisum sativum
AAA90953.1	U30323	Triticum aestivum
BAA89481.1	AB029462	Salix gilgiana
AAB82772.2	AF001523	Musa acuminata
CAA49513.1	X69887	Brassica napus
AAF08679.1	AF004838	Musa acuminata
CAA82271.1	Z28697	Nicotiana tabacum
AAD10384.1	U72253	Oryza sativa
CAA30261.1	X07280	Nicotiana plumbaginifolia
AAA51643.1	M23120	Nicotiana plumbaginifolia
AAA87456.1	U22147	Hevea brasiliensis
AAA34078.1	M63634	Nicotiana plumbaginifolia

AAD10385.1	U72254	Oryza sativa
CAB38443.1	AJ133470	Hevea brasiliensis
AAB03501.1	U41323	Glycine max
AAA32939.1	M62907	Hordeum vulgare
AAD33881.1	AF141654	Nicotiana tabacum
AAA03617.1	M80604	Lycopersicon esculentum
BAA77786.1	AB027431	Oryza sativa
BAA77787.1	AB027432	Oryza sativa
CAB91554.1	AJ277900	Vitis vinifera
AAC14399.1	AF030771	Hordeum vulgare
CAA03908.1	AJ000081	Citrus sinensis
AAG24921.1	AF311749	Hevea brasiliensis
AAA33946.1	M37753	Glycine max
AAA63542.1	M59443	Nicotiana tabacum
AAD28732.1	AF112965	Triticum aestivum
AAD10381.1	U72250	Oryza sativa
CAA57255.1	X81560	Nicotiana tabacum
AAD33880.1	AF141653	Nicotiana tabacum
AAB86541.1	AF030166	Oryza sativa
AAA63539.1	M60402	Nicotiana tabacum
AAA34053.1	M60464	Nicotiana tabacum
AAD10380.1	U72249	Oryza sativa
AAA63540.1	M60403	Nicotiana tabacum

SEQ ID NO. 2215

BAA97122.1	AB016264	Nicotiana sylvestris
BAA07321.1	D38123	Nicotiana tabacum
AAC50047.1	U89255	Lycopersicon esculentum
BAA07324.1	D38126	Nicotiana tabacum
AAC62619.1	AF057373	Nicotiana tabacum
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
BAA87068.1	AB035270	Matricaria chamomilla
AAC49740.1	U89256	Lycopersicon esculentum
AAB38748.1	U81157	Nicotiana tabacum
BAA97124.1	AB016266	Nicotiana sylvestris
BAA07323.1	D38125	Nicotiana tabacum
AAG43545.1	AF211527	Nicotiana tabacum
AAD00708.1	U91857	Stylosanthes hamata
AAF05606.1	AF190770	Oryza sativa
AAD09248.1	U91982	Stylosanthes hamata
AAC49741.1	U89257	Lycopersicon esculentum
BAB03248.1	AB037183	Oryza sativa
AAF23899.1	AF193803	Oryza sativa
AAC29516.1	U77655	Solanum tuberosum
BAA97123.1	AB016265	Nicotiana sylvestris
BAA07322.1	D38124	Nicotiana tabacum
BAA76734.1	AB024575	Nicotiana tabacum
AAD45623.1	AF084185	Brassica napus
AAG43549.1	AF211531	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum
AAK01089.1	AF298231	Hordeum vulgare
AAG59618.1	AF239616	Hordeum vulgare

SEQ ID NO. 2216

BAA33203.1	AB001885	Oryza sativa
BAA33201.1	AB001883	Oryza sativa
BAA33204.1	AB001886	Oryza sativa
BAA33202.1	AB001884	Oryza sativa
AAC99310.1	AF052585	Malus x domestica
AAC35496.1	AF052690	Raphanus sativus
AAG27547.1	AF269128	Brassica nigra
AAG27546.1	AF269126	Brassica nigra
AAC99309.1	AF052584	Malus x domestica
AAC27695.1	AF016010	Brassica napus
AAC27696.1	AF016011	Brassica napus
AAC27694.1	AF016009	Brassica napus
BAA33206.1	AB001888	Oryza sativa
AAD22518.1	AF001136	Pinus radiata
AAG24863.1	AF300700	Ipomoea nil
BAA33200.1	AB001882	Oryza sativa

SEQ ID NO. 2227

AAA74447.1	U30896	Vigna unguiculata

SEQ ID NO. 2232

CAA09457.1	AJ011010	Cicer arietinum
CAA06309.1	AJ005042	Cicer arietinum
CAA59162.1	X84684	Brassica oleracea
CAA07236.1	AJ006771	Cicer arietinum
AAC25984.1	AF020390	Lycopersicon esculentum
AAB61470.1	AF004812	Mangifera indica

CAA10175.1	AJ012798	Lycopersicon esculentum
CAA54525.1	X77319	Asparagus officinalis
CAA10173.1	AJ012796	Lycopersicon esculentum
AAF70822.1	AF154421	Lycopersicon esculentum
AAF70821.1	AF154420	Lycopersicon esculentum
AAF67342.1	AF229795	Vigna radiata
CAA10174.1	AJ012797	Lycopersicon esculentum
AAF21626.1	AF023847	Lycopersicon esculentum
BAB21492.1	AB046543	Pyrus pyrifolia
CAA10128.1	AJ012687	Cicer arietinum
AAF67341.1	AF229794	Vigna radiata
AAC77377.1	AF064786	Carica papaya
CAA10064.1	AJ012578	Carica papaya
AAC28739.1	AF079874	Carica papaya
AAG12249.1	AF184080	Prunus armeniaca
CAA06310.1	AJ005043	Cicer arietinum
AAD45349.1	AF159124	Vitis vinifera

SEQ ID NO. 2233

AAC61805.1	U28007	Lycopersicon esculentum
AAF91337.1	AF249318	Glycine max
AAF91336.1	AF249317	Glycine max
AAG16628.1	AY007545	Brassica napus
AAC27894.1	AF023164	Zea mays
BAA94509.1	AB041503	Populus nigra
AAK21965.1	AY028699	Brassica napus
AAC27895.1	AF023165	Zea mays
BAA94510.1	AB041504	Populus nigra
AAG03090.1	AC073405	Oryza sativa
BAA78764.1	AB023482	Oryza sativa
AAG25966.1	AF302082	Nicotiana tabacum
AAF43496.1	AF131222	Lophopyrum elongatum
AAK11674.1	AF339747	Lophopyrum elongatum
AAB09771.1	U67422	Zea mays
CAA97692.1	Z73295	Catharanthus roseus
AAB47421.1	U59316	Lycopersicon esculentum
AAF76313.1	AF220603	Lycopersicon esculentum
CAB51834.1	00069	Oryza sativa
AAB47423.1	U59315	Lycopersicon pimpinellifolium
AAF76306.1	AF220602	Lycopersicon pimpinellifolium
AAC48914.1	U02271	Lycopersicon pimpinellifolium
AAF66615.1	AF142596	Nicotiana tabacum
AAK11566.1	AF318490	Lycopersicon hirsutum
AAK11567.1	AF318491	Lycopersicon hirsutum
CAB51836.1	AJ243961	Oryza sativa
BAA92836.1	AB032473	Brassica oleracea

SEQ ID NO. 2235

CAB90633.1	AJ277743	Fagus sylvatica
CAC10358.1	AJ277086	Nicotiana tabacum
CAC10359.1	AJ277087	Nicotiana tabacum
CAC09575.1	AJ298987	Fagus sylvatica
AAD17804.1	AF092431	Lotus japonicus
AAC36697.1	AF075579	Mesembryanthemum crystalli
CAA72341.1	Y11607	Medicago sativa
AAC36698.1	AF075580	Mesembryanthemum crystallinum
AAD17805.1	AF092432	Lotus japonicus
AAG43835.1	AF213455	Zea mays
AAC36700.1	AF075582	Mesembryanthemum crystallinum
AAC36699.1	AF075581	Mesembryanthemum crystallinum
AAC26828.1	AF075603	Oryza sativa
AAB93832.1	U81960	Zea mays
CAB90634.1	AJ277744	Fagus sylvatica
AAD11430.1	AF097667	Mesembryanthemum crystallinum
AAC35951.1	AF079355	Mesembryanthemum crystallinum
CAC09576.1	AJ298988	Fagus sylvatica

SEQ ID NO. 2237

BAA83352.1	AP000391	Oryza sativa
BAA90508.1	AP001111	Oryza sativa
BAA90507.1	AP001111	Oryza sativa
BAA94511.1	AB041505	Populus nigra
CAA94437.1	Z70524	Spirodela polyrrhiza

SEQ ID NO. 2240

CAA63101.1	X92204	Petunia x hybrida
CAA63102.2	X92205	Petunia x hybrida
BAA84803.1	AP000559	Oryza sativa
BAB03447.1	AP002817	Oryza sativa
BAA92400.1	AP001366	Oryza sativa

SEQ ID NO. 2241

CAA78386.1	Z13996	Petunia x hybrida
CAB43399.1	AJ006292	Antirrhinum majus
CAA67600.1	X99210	Lycopersicon esculentum
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA64614.1	X95296	Lycopersicon esculentum
CAA78387.1	Z13997	Petunia x hybrida
BAA88222.1	AB028650	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
CAA67575.1	X99134	Lycopersicon esculentum
BAA88223.1	AB028651	Nicotiana tabacum
CAA66952.1	X98308	Lycopersicon esculentum
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays

SEQ ID NO. 2242

CAC19439.1	AJ237661	Oryza sativa
BAB40790.1	AB058642	Lilium hybrid division I
CAA71992.1	Y11105	Pisum sativum
AAK08983.1	AY026332	Oryza sativa
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
BAA81732.1	AB029161	Glycine max
BAA88222.1	AB028650	Nicotiana tabacum
AAF22256.1	AF161711	Pimpinella brachycarpa
AAK19618.1	AF336285	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
BAA88224.1	AB028652	Nicotiana tabacum
CAA78387.1	Z13997	Petunia x hybrida
BAA96421.1	AB044084	Triticum aestivum
CAA67600.1	X99210	Lycopersicon esculentum
CAA67000.1	X98355	Oryza sativa
CAA61021.1	X87690	Hordeum vulgare
AAG22863.1	AY008692	Hordeum vulgare
AAD31395.1	AF114162	Lolium temulentum
BAA88221.1	AB028649	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
CAA66952.1	X98308	Lycopersicon esculentum
CAA64614.1	X95296	Lycopersicon esculentum
CAB40189.1	AJ133638	Avena sativa
BAA81736.1	AB029165	Glycine max
AAK19615.1	AF336282	Gossypium hirsutum
AAK19617.1	AF336284	Gossypium hirsutum
BAA81733.2	AB029162	Glycine max
CAA67575.1	X99134	Lycopersicon esculentum
CAA78388.1	Z13998	Petunia x hybrida
BAA23339.1	D88619	Oryza sativa
CAA72186.1	Y11351	Oryza sativa
CAA72187.1	Y11352	Oryza sativa
CAA72218.1	Y11415	Oryza sativa
AAK19619.1	AF336286	Gossypium hirsutum
CAA65525.1	X96749	Oryza sativa

SEQ ID NO. 2244

CAA33903.1	X15894	Sinapis alba
CAA34459.1	X16436	Sinapis alba
AAB87573.1	AF034631	Panax ginseng
BAA25391.1	AB012637	Nicotiana sylvestris
AAA34147.1	M14443	Lycopersicon esculentum
AAA80589.1	U20983	Solanum tuberosum
CAA32526.1	X14341	Plastid Spinacia oleracea
AAF26741.1	AF220527	Euphorbia esula
BAA25390.1	AB012637	Nicotiana sylvestris
AAA80591.1	U21111	Solanum tuberosum
AAA80593.1	U21113	Solanum tuberosum
BAA25389.1	AB012637	Nicotiana sylvestris
AAA33396.1	M29334	Lemna gibba
AAA80594.1	U21114	Solanum tuberosum
BAA25392.1	AB012638	Nicotiana sylvestris
AAA50310.1	L36064	Prunus persica
AAB61236.1	AF003127	Mesembryanthemum crystallinum
BAA25388.1	AB012636	Nicotiana sylvestris
AAA34148.1	M14444	Lycopersicon esculentum
BAA25394.1	AB012639	Nicotiana sylvestris
CAA99993.1	Z75663	Apium graveolens
AAB61237.1	AF003128	Mesembryanthemum crystallinum
BAA25396.1	AB012641	Nicotiana sylvestris
AAA80592.1	U21112	Solanum tuberosum
AAA18529.1	L07119	Chloroplast Gossypium hirsutum
AAB61238.1	AF003129	Mesembryanthemum crystallinum

BAA03104.1	D14002	Lactuca sativa
BAA25395.1	AB012640	Nicotiana sylvestris
AAA80688.1	U39475	Glycine max
AAA50172.1	U01964	Glycine max
CAA41187.1	X58229	Nicotiana tabacum
BAA25393.1	AB012638	Nicotiana sylvestris
CAA39376.1	X55892	Zea mays
AAC25775.1	AF072931	Medicago sativa
CAA32900.1	X14794	Zea mays
AAA34055.1	M21397	Nicotiana plumbaginifolia
CAA10284.1	AJ131044	Cicer arietinum
BAA24493.1	AB006081	Fagus crenata
CAA31419.1	X12981	Glycine max
CAA32109.1	X13909	Oryza sativa
AAB18209.1	U73218	Triticum aestivum
AAF89207.1	AF279250	Vigna radiata
AAA34056.1	M21398	Nicotiana plumbaginifolia
AAF89206.1	AF279249	Vigna radiata

SEQ ID NO. 2245

AAB03108.1	U55032	Brassica napus
BAB20972.1	AB045894	Nepenthes alata
BAB20969.1	AB045891	Nepenthes alata
CAA39602.1	X56136	Hordeum vulgare
BAA06875.1	D32144	Oryza sativa
BAA06876.1	D32165	Oryza sativa
BAA76870.1	AB025359	Helianthus annuus
BAB20970.1	AB045892	Nepenthes alata
AAB03843.1	U61396	Vigna unguiculata
BAA96578.1	AP002480	Oryza sativa
CAA70340.1	Y09123	Centaurea calcitrapa
BAB20971.1	AB045893	Nepenthes alata
BAA19607.1	AB002695	Cucurbita pepo
BAA02242.1	D12777	Oryza sativa
BAA96446.1	AB021787	Pyrus pyrifolia
BAB20973.1	AB045895	Nepenthes alata
BAA76427.1	AB024999	Cicer arietinum
BAA78908.1	AB028888	Oryza sativa
AAB03109.1	U55033	Brassica napus
BAA22813.1	D26015	Nicotiana tabacum

SEQ ID NO. 2250

CAB42052.1	AJ242045	Lycopersicon esculentum
AAD32651.1	AF136942	Hordeum vulgare
BAB17824.1	AB023819	Oryza sativa
AAD32650.1	AF136941	Hordeum vulgare
BAA74583.1	AB011266	Hordeum vulgare
BAA74586.1	AB011269	Hordeum vulgare
BAA74587.1	AB019525	Hordeum vulgare
BAB17826.1	AB046401	Oryza sativa
BAB17823.1	AB023818	Oryza sativa
BAB17825.1	AB046401	Oryza sativa
BAA74588.2	AB021746	Oryza sativa
BAA74580.1	AB010086	Hordeum vulgare
BAA74585.1	AB011268	Hordeum vulgare
BAA74584.1	AB011267	Hordeum vulgare

SEQ ID NO. 2251

AAB96830.1	U64823	Nicotiana sylvestris
AAB48944.1	U31932	Nicotiana sylvestris
AAD25160.1	AF014808	Lycopersicon esculentum
CAA70778.1	Y09591	Vicia faba
AAD25162.1	AF014810	Lycopersicon esculentum
AAD25161.1	AF014809	Lycopersicon esculentum
AAF76897.1	AF274032	Atriplex hortensis
CAA70969.1	Y09826	Solanum tuberosum
AAD16014.1	AF080543	Nepenthes alata
CAA70968.1	Y09825	Solanum tuberosum
AAD16015.1	AF080544	Nepenthes alata
AAF15946.1	AF061436	Vicia faba
AAF15944.1	AF061434	Vicia faba
AAD16013.1	AF080542	Nepenthes alata

SEQ ID NO. 2254

BAA85398.1	AP000615	Oryza sativa
AAG43998.1	AF215837	Apium graveolens var. dulce
AAF74566.1	AF215852	Nicotiana tabacum
AAF74567.1	AF215853	Solanum tuberosum
AAF74568.1	AF215854	Zea mays
AAF74565.1	AF215851	Spinacia oleracea
CAA53192.1	X75440	Chlorella kessleri
CAA39036.1	X55349	Chlorella kessleri

CAA68813.1	Y07520	Chlorella kessleri
CAB06079.1	Z83829	Picea abies
CAB52689.1	AJ132224	Lycopersicon esculentum
CAA09419.1	AJ010942	Lycopersicon esculentum
CAA47324.1	X66856	Nicotiana tabacum
BAB19863.1	AB052884	Oryza sativa
AAD55054.1	AF173655	Beta vulgaris
CAB07812.1	Z93775	Vicia faba
AAB06594.1	U38651	Medicago truncatula
BAB19864.1	AB052885	Oryza sativa
AAA79761.1	L08196	Ricinus communis
CAB52688.1	AJ132223	Lycopersicon esculentum
CAB52690.1	AJ132225	Lycopersicon esculentum
CAA04511.1	AJ001061	Vitis vinifera
CAA70777.1	Y09590	Vitis vinifera
BAB19862.1	AB052883	Oryza sativa
AAB82147.1	AF022874	Lycopersicon esculentum

SEQ ID NO. 2255

AAA32989.1	J05233	Brassica napus
AAK07609.1	AF319771	Brassica napus
CAA42478.1	X59808	Raphanus sativus
CAA41984.1	X59294	Brassica napus
AAA32988.1	M16860	Brassica napus
CAA32692.1	X14555	Brassica napus
CAA41985.1	X59295	Brassica napus
CAA40980.1	X57850	Brassica napus
CAA57633.1	X82121	Amaranthus hypochondriacus
CAA42472.1	X59802	Raphanus sativus
AAC61881.1	U64443	Coffea arabica
AAC61983.1	AF054895	Coffea arabica
CAA76573.1	Y16976	Coffea arabica
AAK15087.1	AF240004	Sesamum indicum
CAA42473.1	X59803	Raphanus sativus
AAD32713.1	AF152003	Fagopyrum esculentum
CAA35631.1	X17637	Avena sativa
CAA42475.1	X59805	Raphanus sativus
CAA54152.1	X76737	Avena sativa
AAA33374.1	M28832	Helianthus annuus
CAA42477.1	X59807	Raphanus sativus
AAF73008.1	AF262999	Ricinus communis

CAA64789.1	X95542	Cryptomeria japonica
CAA64793.1	X95546	Metasequoia glyptostroboide
CAA64792.1	X95545	Metasequoia glyptostroboide
CAA64790.1	X95543	Cryptomeria japonica

SEQ ID NO. 2256

AAA33945.1	J03919	Glycine max
CAA48297.1	X68215	Pisum sativum
CAA48298.1	X68216	Pisum sativum
AAD50278.1	AF169830	Glycine max
AAA33944.1	J03920	Glycine max
CAA48300.1	X68218	Pisum sativum
CAA48299.1	X68217	Pisum sativum
CAB61882.1	AJ249996	Lycopersicon esculentum

SEQ ID NO. 2257

CAA09852.1	AJ011892	Nicotiana tabacum
CAA71244.1	Y10162	Chenopodium rubrum
CAA09854.1	AJ011894	Nicotiana tabacum
CAA61334.1	X88864	Medicago sativa
CAB40540.1	AJ132929	Medicago sativa
CAB51788.1	AJ245415	Lycopersicon esculentum
CAB60836.1	AJ002588	Lycopersicon esculentum
BAA33153.1	AB008188	Pisum sativum
CAB60837.1	AJ002589	Lycopersicon esculentum
CAB61222.1	AJ250397	Antirrhinum majus
CAA09853.1	AJ011893	Nicotiana tabacum
CAB61221.1	AJ250396	Antirrhinum majus
CAB61223.1	AJ250398	Antirrhinum majus
CAB60838.1	AJ002590	Lycopersicon esculentum
CAB40541.1	AJ132930	Medicago sativa
CAA09769.1	AJ011776	Chenopodium rubrum
BAA86629.1	AB024987	Oryza sativa
CAB46642.1	AJ243452	Lycopersicon esculentum
CAA57555.1	X82035	Oryza sativa
CAA63541.1	X92965	Nicotiana tabacum
CAA63542.1	X92966	Nicotiana tabacum
CAA63543.1	X92967	Nicotiana tabacum
CAB46643.1	AJ243453	Lycopersicon esculentum
CAB46641.1	AJ243451	Lycopersicon esculentum
CAA57556.1	X82036	Oryza sativa

BAA09465.1	D50869	Glycine max
AAC50013.1	U50064	Zea mays
AAA20236.1	U10076	Zea mays
BAA96590.1	AP002481	Oryza sativa
BAA86628.1	AB024986	Oryza sativa
CAB77269.1	AJ133722	Pisum sativum
AAA20237.1	U10077	Zea mays
CAA48675.1	X68741	Medicago sativa
CAA55272.1	X78504	Medicago sativa
CAB46644.1	AJ243454	Lycopersicon esculentum
CAA44631.1	X62819	Daucus carota
BAA09467.1	D50871	Glycine max
BAA20426.1	D89636	Nicotiana tabacum
CAA63540.1	X92964	Nicotiana tabacum
BAA09466.1	D50870	Glycine max
BAA20410.1	D86385	Catharanthus roseus
CAB46645.1	AJ243455	Lycopersicon esculentum
CAA71243.1	Y10161	Chenopodium rubrum
BAA11560.1	D82349	Adiantum capillus-veneris

SEQ ID NO. 2258

AAA86687.1	U15777	Lupinus albus
AAA87729.1	U20771	Lupinus albus
CAA72793.1	Y12072	Gossypium arboreum
BAB40665.1	AB053486	Humulus lupulus
BAB40666.1	AB053487	Humulus lupulus
CAA57893.1	X82543	Parthenium argentatum
AAC78557.1	AF019892	Helianthus annuus
CAA57892.1	X82542	Parthenium argentatum
AAC49452.1	U36376	Artemisia annua
CAA59170.1	X84695	Capsicum annuum
AAC73051.1	AF048747	Lycopersicon esculentum
AAD17204.1	AF112881	Artemisia annua
BAA19856.1	D85317	Oryza sativa
BAA36276.1	AB021747	Oryza sativa
AAD32648.1	AF136602	Artemisia annua
BAA36347.1	AB021979	Oryza sativa
AAD37789.1	AF149257	Artemisia annua
AAD45122.1	AF164026	Xanthoceras sorbifolium
AAB93951.1	U97330	Nicotiana tabacum
AAB93984.1	AF005201	Parthenium argentatum

SEQ ID NO. 2260

BAA05648.1	D26601	Nicotiana tabacum
CAA08997.1	AJ010093	Brassica napus
CAA08995.1	AJ010091	Brassica napus
AAF34436.1	AF172282	Oryza sativa
CAA08758.1	AJ009609	Brassica napus
CAA08757.1	AJ009608	Brassica napus
AAC83393.1	U83625	Zea mays
AAG53979.1	AF325168	Nicotiana tabacum
AAG40578.1	AF216314	Oryza sativa
CAA04261.2	AJ000728	Lycopersicon esculentum
AAF67262.1	AF165186	Nicotiana tabacum
BAB32405.1	AB055514	Nicotiana tabacum
AAF19403.1	AF203481	Lycopersicon esculentum
AAF19402.1	AF203480	Lycopersicon esculentum
CAC24705.1	AJ302651	Nicotiana tabacum
BAA06731.1	D31964	Nicotiana tabacum
AAG31141.1	AF305911	Oryza sativa
AAF19401.1	AF203479	Glycine max
AAD46406.1	AF096250	Lycopersicon esculentum
BAA05649.1	D26602	Nicotiana tabacum
AAD23582.1	AF128443	Glycine max
CAA06334.1	AJ005077	Lycopersicon esculentum
AAD10057.1	AF110519	Lycopersicon esculentum
AAC78558.1	AF030879	Solanum tuberosum
AAD10056.1	AF110518	Lycopersicon esculentum
AAG31142.1	AF305912	Hordeum vulgare
AAC24961.1	AF009337	Tradescantia virginiana
AAA61682.1	L27484	Zea mays
AAC25423.1	AF072908	Nicotiana tabacum
CAA71142.1	Y10036	Cucumis sativus
BAA83689.1	AB011968	Oryza sativa
CAA46554.1	X65604	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
CAA65500.1	X96723	Medicago sativa
AAF05112.1	AF158091	Mesembryanthemum crystallinum
AAD17800.1	AF090835	Mesembryanthemum crystallinum
CAA07813.1	AJ007990	Hordeum vulgare

SEQ ID NO. 2262

BAA90508.1	AP001111	Oryza sativa
BAA90507.1	AP001111	Oryza sativa
CAA94437.1	Z70524	Spirodela polyrrhiza
BAA83352.1	AP000391	Oryza sativa
AAD10836.1	U52079	Solanum tuberosum

SEQ ID NO. 2266

AAD17487.1	AF049347	Berberis stolonifera
AAC39358.1	AF005655	Eschscholzia californica
AAB20352.1	S65550	Eschscholzia californica
AAC61839.1	AF025430	Papaver somniferum

SEQ ID NO. 2267

AAC12934.1	AF053354	Phaseolus vulgaris
AAB70884.1	U67861	Pelargonium x hortorum
BAA33378.1	AB006807	Cucumis sativus
AAC48977.1	U07953	Pelargonium x hortorum

SEQ ID NO. 2268

BAA85400.1	AP000615	Oryza sativa
CAB06083.1	Z83834	Hordeum vulgare
CAA74909.1	Y14573	Hordeum vulgare
CAA06487.1	AJ005341	Linum usitatissimum

SEQ ID NO. 2269

CAA64327.1	X94624	Brassica napus
CAA96523.1	Z72153	Brassica napus
CAC19877.1	AJ401089	Brassica napus
CAA06820.1	AJ006025	Cicer arietinum
AAC39365.1	AF008183	Populus x generosa
CAA31697.1	X13325	Petroselinum crispum
CAA31696.1	X13324	Petroselinum crispum
AAC39366.1	AF008184	Populus x generosa
AAF37734.1	AF052223	Lolium perenne
AAF91309.1	AF239686	Rubus idaeus
AAF37733.1	AF052222	Lolium perenne
CAA36850.1	X52623	Oryza sativa
BAA07828.1	D43773	Nicotiana tabacum
BAA08365.1	D49366	Lithospermum erythrorhizon
AAB18637.1	U50845	Nicotiana tabacum
AAD40664.1	AF150686	Solanum tuberosum
AAA33842.1	M62755	Solanum tuberosum
AAB18638.1	U50846	Nicotiana tabacum
AAF91310.1	AF239687	Rubus idaeus
AAC24503.1	AF041049	Populus tremuloides
AAF37732.1	AF052221	Lolium perenne
AAA92669.1	U12013	Pinus taeda
AAB42382.1	U39404	Pinus taeda
AAB42383.1	U39405	Pinus taeda
AAF91308.1	AF239685	Rubus idaeus
AAC24504.1	AF041050	Populus tremuloides
AAA92668.1	U12012	Pinus taeda
CAC36095.1	X69955	Glycine max
AAG43823.1	AF212317	Capsicum annuum
BAA08366.2	D49367	Lithospermum erythrorhizon
CAA49575.1	X69954	Glycine max
CAB97359.1	AJ278455	Juglans nigra
AAF73995.2	AF144502	Pinus armandii
AAF73994.2	AF144501	Pinus armandii
AAF74018.2	AF144525	Tsuga canadensis
AAF74010.2	AF144517	Abies holophylla
AAF74020.2	AF144527	Pseudolarix amabilis
AAF74016.2	AF144523	Nothotsuga longibracteata
AAF73997.2	AF144504	Picea smithiana
AAF74013.2	AF144520	Abies beshanzuensis
AAF74008.2	AF144515	Abies firma
AAF74022.2	AF144529	Cedrus atlantica
AAF74005.2	AF144512	Larix gmelini
AAF74021.2	AF144528	Pseudolarix amabilis
AAF74003.2	AF144510	Pseudotsuga sinensis
AAF74019.2	AF144526	Tsuga canadensis

SEQ ID NO. 2275

BAA77358.1	AB020023	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
AAD16139.1	AF096299	Nicotiana tabacum
AAD27591.1	AF121354	Petroselinum crispum
AAC49529.1	U58540	Petroselinum crispum
AAC37515.1	L44134	Cucumis sativus
AAC49527.1	U48831	Petroselinum crispum
CAA88331.1	Z48431	Avena fatua
CAA88326.1	Z48429	Avena fatua

AAD16138.1	AF096298	Nicotiana tabacum
AAF61864.1	AF193771	Nicotiana tabacum
BAA87069.1	AB035271	Matricaria chamomilla
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 2276

BAA87043.1	AB035183	Ipomoea batatas
CAB11466.1	Z98758	Dianthus caryophyllus
CAB06429.1	Z84385	Dianthus caryophyllus
CAB06427.1	Z84383	Dianthus caryophyllus
CAB06430.1	Z84386	Dianthus caryophyllus
CAB06538.1	Z84571	Dianthus caryophyllus
CAB06428.1	Z84384	Dianthus caryophyllus

SEQ ID NO. 2277

CAA67291.1	X98739	Pisum sativum
CAA67290.1	X98738	Pisum sativum

SEQ ID NO. 2278

BAA22422.1	AB001379	Glycyrrhiza echinata
BAA74465.1	AB022732	Glycyrrhiza echinata
BAA93634.1	AB025016	Lotus japonicus
CAB43505.1	AJ239051	Cicer arietinum
CAB41490.1	AJ238439	Cicer arietinum
CAA10067.1	AJ012581	Cicer arietinum
CAA04117.1	AJ000478	Helianthus tuberosus
CAA04116.1	AJ000477	Helianthus tuberosus
AAB94590.1	AF022461	Glycine max
CAB56742.1	AJ249800	Cicer arietinum
AAD56282.1	AF155332	Petunia x hybrida
AAG09208.1	AF175278	Pisum sativum
AAC49188.2	U29333	Pisum sativum
BAA12159.1	D83968	Glycine max
AAC39454.1	AF014802	Eschscholzia californica
CAA65580.1	X96784	Nicotiana tabacum
BAA13076.1	D86351	Glycine max
AAA32913.1	M32885	Persea americana
AAG44132.1	AF218296	Pisum sativum
CAA64635.1	X95342	Nicotiana tabacum
AAB94587.1	AF022458	Glycine max
AAD38930.1	AF135485	Glycine max
BAA84072.1	AB028152	Torenia hybrida
BAA74466.1	AB022733	Glycyrrhiza echinata
BAA22423.1	AB001380	Glycyrrhiza echinata
BAA92894.1	AB006790	Petunia x hybrida
AAC32274.1	AF081575	Petunia x hybrida
CAB56743.1	AJ249801	Cicer arietinum
BAA84071.1	AB028151	Antirrhinum majus

SEQ ID NO. 2279

AAD16139.1	AF096299	Nicotiana tabacum
AAC37515.1	L44134	Cucumis sativus
CAA88326.1	Z48429	Avena fatua
AAC49527.1	U48831	Petroselinum crispum
AAD16138.1	AF096298	Nicotiana tabacum
AAC49529.1	U58540	Petroselinum crispum
CAA88331.1	Z48431	Avena fatua
BAA77358.1	AB020023	Nicotiana tabacum
AAC49528.1	U56834	Petroselinum crispum
CAB66338.1	AJ279697	Betula pendula
AAD27591.1	AF121354	Petroselinum crispum
AAF61864.1	AF193771	Nicotiana tabacum
AAF61863.1	AF193770	Nicotiana tabacum

SEQ ID NO. 2280

BAB19757.1	AB052785	Glycine max
BAB19756.1	AB052784	Glycine max
BAB19760.1	AB052788	Glycine max
AAC32034.1	AF023472	Hordeum vulgare
AAD01600.1	AF016713	Lycopersicon esculentum
CAA93316.1	Z69370	Cucumis sativus
AAF20002.1	AF213936	Prunus dulcis
AAF07875.1	AF140606	Oryza sativa
CAC07206.1	AJ278966	Brassica napus
AAB69642.1	AF000392	Lotus japonicus
AAD16016.1	AF080545	Nepenthes alata
AAD42860.1	AF154930	Prunus dulcis

SEQ ID NO. 2282

CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii

AAC49358.1	U35831	Pisum sativum
CAA53900.1	X76269	Pisum sativum
CAA35826.1	X51462	Spinacia oleracea
CAA35827.1	X51463	Spinacia oleracea
CAA06736.1	AJ005841	Oryza sativa
CAA06735.1	AJ005840	Triticum aestivum
AAB52409.1	U76831	Brassica napus
AAD45358.1	AF160870	Brassica napus
CAA41415.1	X58527	Nicotiana tabacum
AAC32111.1	AF051206	Picea mariana
CAA94534.1	Z70677	Ricinus communis
BAA05546.1	D26547	Oryza sativa
AAB51522.1	U92541	Oryza sativa
AAF88067.1	AF286593	Triticum aestivum
BAA04864.1	D21836	Oryza sativa
BAA13524.1	D87984	Fagopyrum esculentum
CAA05081.1	AJ001903	Triticum turgidum subsp. durum
BAB20886.1	AB053294	Oryza sativa
CAA56850.1	X80887	Chlamydomonas reinhardtii
CAA55399.1	X78822	Chlamydomonas reinhardtii
AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA77847.1	Z11803	Nicotiana tabacum
BAA25681.1	AB010434	Brassica rapa
AAB53694.1	U59379	Brassica napus
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAD33596.1	AF133127	Hevea brasiliensis
AAD49232.1	AF159387	Lolium perenne
AAD56954.1	AF186240	Secale cereale
BAB39913.1	AP002912	Oryza sativa
AAD49234.1	AF159389	Phalaris coerulescens
AAD49233.1	AF159388	Phalaris coerulescens
AAD49230.1	AF159385	Hordeum bulbosum

SEQ ID NO. 2283

BAA85440.1	AP000616	Oryza sativa
CAB53493.1	AJ245900	Oryza sativa

SEQ ID NO. 2285

AAD03693.1	AF084554	Brassica napus

SEQ ID NO. 2290

CAA36396.1	X52148	Pisum sativum
AAA34075.1	M14417	Nicotiana tabacum
AAA33780.1	L26923	Pinus sylvestris
CAA33455.1	X15408	Zea mays
AAA33464.1	M18976	Zea mays
AAA34076.1	M14418	Nicotiana tabacum
AAA84543.1	M55147	Chloroplast Pisum sativum
BAA85402.1	AP000615	Oryza sativa
AAA86855.1	L27668	Chloroplast Chlamydomonas reinhardtii
AAB82133.1	AF022730	Oryza sativa
BAA94304.1	AB035312	Chlamydomonas sp. W80
AAB66887.1	AF010582	Oryza sativa
AAG23799.1	AF260733	Cucurbita pepo
CAA06030.1	AJ003783	Marsilea quadrifolia
AAA33352.1	L26924	Ginkgo biloba
AAA33779.1	L07501	Pinus sylvestris
AAD10215.1	L32560	Chloroplast Pinus sylvestris
AAD10214.1	L32561	Chloroplast Pinus sylvestris
CAA55116.1	X78307	Craterostigma plantagineum
AAA89207.1	L26922	Taxus baccata
CAA51071.1	X72381	Physcomitrella patens
CAA04942.1	AJ001706	Pinus sylvestris
CAB39974.1	AJ133422	Nicotiana tabacum
AAA33031.1	M29956	Mesembryanthemum crystallinum
AAA33033.1	J05223	Mesembryanthemum crystallinum
CAA42901.1	X60343	Hordeum vulgare
AAA82047.1	U31676	Oryza sativa
AAA87579.1	U45856	Zea mays
AAA03442.1	U02886	Atriplex nummularia
CAA53269.1	X75597	Atriplex nummularia
AAB59010.1	U96623	Selaginella lepidophylla
CAA42904.1	X60346	Petunia x hybrida
CAA42905.1	X60347	Magnolia liliiflora
CAA42103.1	X59517	Antirrhinum majus
CAA51676.1	X73151	Zea mays
AAA87580.1	U45857	Zea mays
CAA51675.1	X73150	Pisum sativum
AAA87880.1	U45858	Zea mays
AAA87578.1	U45855	Zea mays

AAA33667.1	L07500	Pisum sativum

SEQ ID NO. 2294

CAA71992.1	Y11105	Pisum sativum
BAB40790.1	AB058642	Lilium hybrid division I
AAK08983.1	AY026332	Oryza sativa
CAA64615.1	X95297	Lycopersicon esculentum
BAA81730.1	AB029159	Glycine max
CAA67600.1	X99210	Lycopersicon esculentum
BAA81731.1	AB029160	Glycine max
AAF22256.1	AF161711	Pimpinella brachycarpa
AAK19615.1	AF336282	Gossypium hirsutum
CAA78388.1	Z13998	Petunia x hybrida
BAA88221.1	AB028649	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
BAA81732.1	AB029161	Glycine max
CAA64614.1	X95296	Lycopersicon esculentum
AAK19617.1	AF336284	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
BAA23337.1	D88617	Oryza sativa
CAA78387.1	Z13997	Petunia x hybrida
CAC19439.1	AJ237661	Oryza sativa
AAK19619.1	AF336286	Gossypium hirsutum
CAB40189.1	AJ133638	Avena sativa
BAA96421.1	AB044084	Triticum aestivum
BAA88223.1	AB028651	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
CAA61021.1	X87690	Hordeum vulgare
AAG22863.1	AY008692	Hordeum vulgare
AAD31395.1	AF114162	Lolium temulentum
BAA88222.1	AB028650	Nicotiana tabacum
CAA50221.1	X70876	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
CAA50224.1	X70879	Hordeum vulgare
CAA72218.1	Y11415	Oryza sativa
AAG28526.1	AF198499	Nicotiana tabacum
BAA81736.1	AB029165	Glycine max
CAA78386.1	Z13996	Petunia x hybrida

SEQ ID NO. 2296

AAF75791.1	AF271892	Pisum sativum
BAA03763.1	D16247	Nicotiana sylvestris
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95705.1	AB042644	Oryza sativa
BAA95704.1	AB042643	Oryza sativa

SEQ ID NO. 2298

CAA44216.1	X62343	Nicotiana tabacum
BAA03099.1	D13991	Aralia cordata
CAA79622.1	Z19568	Populus deltoides
CAC07423.1	AJ295837	Populus balsamifera subsp. trichocarpa
AAF43140.1	AF217957	Populus tremuloides
CAA44217.1	X62344	Nicotiana tabacum
CAA79625.1	Z19573	Medicago sativa
AAC35845.1	AF083332	Medicago sativa
AAC07987.1	AF038561	Eucalyptus globulus
CAA46585.1	X65631	Eucalyptus gunnii
AAG15553.1	AF294793	Eucalyptus saligna
CAA53211.1	X75480	Eucalyptus gunnii
AAB70908.1	AF010290	Lolium perenne
CAA74070.1	Y13733	Zea mays
CAA06687.1	AJ005702	Zea mays
CAA13177.1	AJ231135	Saccharum officinarum
BAA19487.1	D86590	Zinnia elegans
CAA51226.1	X72675	Picea abies
CAA05097.1	AJ001926	Picea abies
CAA05096.1	AJ001925	Picea abies
CAA05095.1	AJ001924	Picea abies
AAB38774.1	U62394	Pinus radiata
AAC31166.1	AF060491	Pinus radiata
CAA86073.1	Z37992	Pinus taeda
CAA86072.1	Z37991	Pinus taeda
BAA04046.1	D16624	Eucalyptus botryoides
AAD10327.1	U63534	Fragaria x ananassa
AAK28509.1	AF320110	Fragaria x ananassa
AAB38503.1	U79770	Mesembryanthemum crystallinum
AAC35846.1	AF083333	Medicago sativa
AAA74882.1	L36823	Stylosanthes humilis
AAF23409.1	AF207552	Brassica napus

AAC15467.1	U24561	Apium graveolens
AAF23411.1	AF207554	Brassica oleracea
AAF23412.1	AF207555	Brassica rapa
AAC61854.1	AF067082	Apium graveolens
AAF23410.1	AF207553	Brassica napus
AAA74883.1	L36456	Stylosanthes humilis
AAD18000.1	AF109157	Eucalyptus globulus
AAF72100.1	AF146691	Lycopersicon esculentum
CAA63410.1	X92754	Hordeum vulgare
AAF23416.1	AF207559	Brassica rapa

SEQ ID NO. 2299

AAA87047.1	U45958	Nicotiana alata
AAC15893.1	U88587	Nicotiana alata

SEQ ID NO. 2301

AAC34983.1	AF039598	Prunus persica
CAA38025.1	X54090	Gossypium hirsutum
CAA28639.1	X04966	Petunia x hybrida
CAA41188.1	X58230	Nicotiana tabacum
CAA74179.1	Y13865	Beta vulgaris
CAA84525.1	Z35160	Solanum tuberosum
CAA52750.1	X74732	Amaranthus hypochondriacus
AAF89205.1	AF279248	Vigna radiata
AAD48017.1	AF165529	Rumex palustris
CAA40365.1	X57082	Pisum sativum
AAA34141.1	M17558	Lycopersicon esculentum
AAA33392.1	M12152	Lemna gibba
CAA43907.1	X61915	Pinus thunbergii
AAC15992.1	AF061577	Oryza sativa
BAA00537.1	D00642	Oryza sativa
CAA31773.1	X13407	Pinus thunbergii
AAB19040.1	U51632	Pinus palustris
CAA89823.1	Z49749	Pseudotsuga menziesii
AAA34142.1	M17559	Lycopersicon esculentum
AAB82142.1	AF022739	Oryza sativa
AAA60965.1	L23107	Ginkgo biloba
CAA48641.1	X68682	Zea mays
AAA80594.1	U21114	Solanum tuberosum
AAA80591.1	U21111	Solanum tuberosum
AAA34147.1	M14443	Lycopersicon esculentum
BAA25392.1	AB012638	Nicotiana sylvestris
AAA80593.1	U21113	Solanum tuberosum
AAA80589.1	U20983	Solanum tuberosum
BAA25389.1	AB012637	Nicotiana sylvestris
AAA80592.1	U21112	Solanum tuberosum
CAA32900.1	X14794	Zea mays
BAA25394.1	AB012639	Nicotiana sylvestris
BAA25391.1	AB012637	Nicotiana sylvestris
AAA50172.1	U01964	Glycine max
BAA25396.1	AB012641	Nicotiana sylvestris
BAA25390.1	AB012637	Nicotiana sylvestris
BAA77273.1	AB026686	Physcomitrella patens
AAA50310.1	L36064	Prunus persica
BAA25393.1	AB012638	Nicotiana sylvestris
BAA25388.1	AB012636	Nicotiana sylvestris
BAA03104.1	D14002	Lactuca sativa
AAA34148.1	M14444	Lycopersicon esculentum
AAA68425.1	M34396	Polystichum munitum

SEQ ID NO. 2302

AAF78062.1	AF266760	Vicia faba
BAA32777.1	AB012044	Raphanus sativus
CAA64895.1	X95639	Brassica oleracea
CAA64896.1	X95640	Brassica oleracea
BAA92259.1	AB030696	Raphanus sativus
BAA92258.1	AB030695	Raphanus sativus
AAF80556.1	AF188843	Vitis vinifera
CAA04652.1	AJ001292	Craterostigma plantagineum
AAK26755.1	AF326488	Zea mays
AAK26754.1	AF326487	Zea mays
AAD29676.1	AF131201	Zea mays
AAB81601.1	AF024511	Nicotiana tabacum
AAB67870.1	U60149	Beta vulgaris
CAA54233.1	X76911	Hordeum vulgare
CAA52068.1	X73848	Lycopersicon esculentum
BAB40142.1	AB058679	Pyrus communis
AAF80557.1	AF188844	Vitis vinifera
CAC33802.1	AJ271796	Zea mays
AAK26756.1	AF326489	Zea mays
AAB82140.1	AF022737	Oryza sativa
CAA11025.1	AJ222973	Lupinus albus

CAB46350.1	Y18311	Solanum tuberosum

SEQ ID NO. 2303

AAG28503.1	AF196966	Citrus sinensis
AAF18584.1	AF118132	Spinacia oleracea
AAF18585.1	AF118133	Nicotiana tabacum
AAF14186.1	AF106068	Solanum tuberosum
AAG35735.1	AF208543	Lycopersicon esculentum
CAA63966.1	X94302	Solanum tuberosum

SEQ ID NO. 2304

AAB88537.1	AF035944	Fragaria x ananassa
BAA81750.1	AB017516	Marchantia polymorpha
BAA81751.1	AB017517	Marchantia polymorpha
BAA81749.1	AB017515	Marchantia polymorpha
BAA81748.1	AB017515	Marchantia polymorpha
AAD17800.1	AF090835	Mesembryanthemum crystallinum
BAA12715.1	D85039	Zea mays
AAB70706.1	U82087	Tortula ruralis
AAB49984.1	U90262	Cucurbita pepo
AAC49405.1	U08140	Vigna radiata
CAA57157.1	X81394	Oryza sativa
AAA69507.1	U28376	Zea mays
CAA07481.1	AJ007366	Zea mays
BAA13232.1	D87042	Zea mays
BAA12338.1	D84408	Zea mays
AAB80693.1	U69174	Glycine max
AAC25423.1	AF072908	Nicotiana tabacum
AAD28192.2	AF115406	Solanum tuberosum
BAA13440.1	D87707	Ipomoea batatas
CAA65500.1	X96723	Medicago sativa
AAA61682.1	L27484	Zea mays
AAA33443.1	L15390	Zea mays
BAA85396.1	AP000615	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
CAA39936.1	X56599	Daucus carota
CAA57156.1	X81393	Oryza sativa
AAB80692.1	U69173	Glycine max
BAA02698.1	D13436	Oryza sativa
AAG46110.1	AC073166	Oryza sativa
AAK26164.1	AY027885	Cucumis sativus
CAB46228.1	Y18055	Arachis hypogaea
AAF21062.1	AF216527	Dunaliella tertiolecta
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF23900.1	AF194413	Oryza sativa
AAF23901.2	AF194414	Oryza sativa
AAC78558.1	AF030879	Solanum tuberosum
CAA58750.1	X83869	Daucus carota
AAB47181.1	S82324	Zea mays
BAA22410.1	D38452	Zea mays
BAA12691.1	D84507	Zea mays
BAA12692.1	D84508	Zea mays
AAG01179.1	AF289237	Zea mays
AAC24961.1	AF009337	Tradescantia virginiana
BAA90814.1	AP001168	Oryza sativa
AAC32116.1	AF051211	Picea mariana
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
AAF06969.1	AF162661	Kalanchoe fedtschenkoi

SEQ ID NO. 2305

AAB05871.2	U63784	Catharanthus roseus
CAB65911.1	AJ249831	Lemna minor
AAF18999.1	AF212155	Allium cepa
AAC26855.1	AF069951	Enteromorpha intestinalis
AAC49896.1	AF027727	Chlamydomonas reinhardtii
AAD02069.1	AF036939	Chlamydomonas reinhardtii

SEQ ID NO. 2313

CAA73067.1	Y12464	Sorghum bicolor
CAA73068.1	Y12465	Sorghum bicolor
AAB62693.1	AF004947	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA83688.1	AB011967	Oryza sativa
BAA34675.1	AB011670	Triticum aestivum
BAA83689.1	AB011968	Oryza sativa
BAA96628.1	AP002482	Oryza sativa
BAA05649.1	D26602	Nicotiana tabacum
AAD23582.1	AF128443	Glycine max
CAA71142.1	Y10036	Cucumis sativus
CAA57898.1	X82548	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
CAA65244.1	X95997	Solanum tuberosum

AAB05457.1	U55768	Oryza sativa
CAA07813.1	AJ007990	Hordeum vulgare
CAA46556.1	X65606	Hordeum vulgare
CAA46554.1	X65604	Hordeum vulgare
CAA89202.1	Z49233	Chlamydomonas eugametos
AAD00239.1	U73938	Nicotiana tabacum
AAB68962.1	L38855	Glycine max
AAF21062.1	AF216527	Dunaliella tertiolecta
AAB58348.1	U29095	Triticum aestivum
AAD00240.1	U73939	Nicotiana tabacum
BAA13608.1	D88399	Oryza sativa
AAG60195.1	AC084763	Oryza sativa
CAA39936.1	X56599	Daucus carota
BAA19573.1	AB002109	Oryza sativa
CAA06503.1	AJ005373	Craterostigma plantagineum
BAA13440.1	D87707	Ipomoea batatas
AAB88537.1	AF035944	Fragaria x ananassa

SEQ ID NO. 2314

AAD32146.1	AF123508	Nicotiana tabacum
AAD32147.1	AF123509	Nicotiana tabacum
BAA85821.1	AB026822	Cucumis sativus
AAD32145.1	AF123507	Nicotiana tabacum
AAD32144.1	AF123506	Nicotiana tabacum
CAA48297.1	X68215	Pisum sativum
AAD32142.1	AF123504	Nicotiana tabacum
BAA85822.1	AB026823	Cucumis sativus
CAA48298.1	X68216	Pisum sativum
AAD32143.1	AF123505	Nicotiana tabacum
AAC13260.1	AF022020	Lycopersicon esculentum
AAC13258.1	AF022018	Lycopersicon esculentum
BAA85820.1	AB026821	Cucumis sativus
CAA48300.1	X68218	Pisum sativum
AAC13261.1	AF022021	Lycopersicon esculentum
AAC13255.1	AF022015	Lycopersicon esculentum
AAC13257.1	AF022017	Lycopersicon esculentum
BAA78739.1	AB023482	Oryza sativa
AAC13259.1	AF022019	Lycopersicon esculentum
BAA95840.1	AP002070	Oryza sativa
CAB61882.1	AJ249996	Lycopersicon esculentum
AAC13254.1	AF022014	Lycopersicon esculentum
AAC13252.1	AF022012	Lycopersicon esculentum
AAC13262.1	AF022022	Lycopersicon esculentum
AAC13253.1	AF022013	Lycopersicon esculentum

SEQ ID NO. 2315

BAB19880.1	AB052887	Oryza sativa
AAF12877.1	AF205377	Chlamydomonas reinhardtii
AAF27916.1	AF220199	Pinus taeda
BAB17626.1	AB033537	Oryza sativa

SEQ ID NO. 2316

AAD00708.1	U91857	Stylosanthes hamata
AAC49741.1	U89257	Lycopersicon esculentum
BAB03248.1	AB037183	Oryza sativa
BAA97123.1	AB016265	Nicotiana sylvestris
AAC29516.1	U77655	Solanum tuberosum
BAA76734.1	AB024575	Nicotiana tabacum
AAB38748.1	U81157	Nicotiana tabacum
BAA97124.1	AB016266	Nicotiana sylvestris

SEQ ID NO. 2322

AAA33376.1	L36129	Helianthus annuus
BAA07108.1	D37870	Spinacia oleracea
BAA04864.1	D21836	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA36283.1	D85751	Oryza sativa
BAA37092.1	AB009592	Oryza sativa
CAA06835.1	AJ006055	Zea mays

SEQ ID NO. 2326

AAA83439.1	U16123	Zea mays
AAA50305.1	L29099	Solanum tuberosum
AAB48484.1	U87849	Capsicum annuum
BAA01954.1	D11350	Lycopersicon esculentum
CAA47636.1	X67163	Daucus carota

SEQ ID NO. 2327

AAD27878.1	AF139466	Vigna radiata
AAC14566.1	AF058796	Oryza sativa
CAA90681.1	Z50801	Zea mays

AAA34140.1	M17633	Lycopersicon esculentum
CAA45523.1	X64198	Nicotiana tabacum
AAA34186.1	J03558	Lycopersicon esculentum
CAA41405.1	X58515	Pinus sylvestris
CAA41404.1	X58514	Pinus sylvestris
AAF23819.1	AF218305	Hordeum vulgare
AAC67558.1	AF094776	Oryza sativa
CAA06961.1	AJ006296	Hordeum vulgare
AAG28464.1	AF195794	Chlamydomonas reinhardtii
AAF44702.1	AF241524	Asarina barclaiana
CAA78900.1	Z16408	Pinus sylvestris
AAA64414.1	U23188	Zea mays
CAA44777.1	X63052	Hordeum vulgare
CAA65042.1	X95727	Brassica juncea
AAA64415.1	U23189	Zea mays
CAA43590.1	X61287	Lycopersicon esculentum
AAA50172.1	U01964	Glycine max
CAA34459.1	X16436	Sinapis alba
AAD27877.1	AF139465	Vigna radiata
CAA33903.1	X15894	Sinapis alba
BAA25390.1	AB012637	Nicotiana sylvestris
BAA00536.1	D00641	Oryza sativa
CAA99993.1	Z75663	Apium graveolens
CAA39883.1	X56538	Pisum sativum
AAC79711.1	AF093617	Acetabularia acetabulum
CAA32109.1	X13909	Oryza sativa
CAA32108.1	X13908	Oryza sativa
AAA68425.1	M34396	Polystichum munitum
AAA80594.1	U21114	Solanum tuberosum
BAA77273.1	AB026686	Physcomitrella patens
CAA10284.1	AJ131044	Cicer arietinum
AAF89207.1	AF279250	Vigna radiata
CAA49149.1	X69215	Pisum sativum
BAA32346.1	AB013728	Cryptomeria japonica
CAA43804.1	X61610	Brassica napus
AAB70556.1	AF017998	Tetraselmis sp. RG-15

SEQ ID NO. 2328

AAB31704.1	S72356	Chloroplast Nicotiana sylvestris
AAB31705.1	S72358	Chloroplast Nicotiana sylvestris
BAA07667.1	D42070	Nicotiana sylvestris
BAA78581.1	AU066497	Chlamydomonas sp. HS-5

SEQ ID NO. 2329

CAA09881.1	AJ011939	Trifolium repens
CAA62228.1	X90695	Medicago sativa
AAB41812.1	L36158	Medicago sativa
CAA71495.1	Y10469	Spinacia oleracea
BAA77387.1	AB024437	Scutellaria baicalensis
CAA62226.1	X90693	Medicago sativa
CAB94692.1	AJ242742	Ipomoea batatas
AAF63024.1	AF244921	Spinacia oleracea
CAA62227.1	X90694	Medicago sativa
AAD11483.1	U51193	Glycine max
AAC49818.1	AF014467	Oryza sativa
CAA46916.1	X66125	Oryza sativa
CAC21393.1	AJ401276	Zea mays
CAB67121.1	Y19023	Lycopersicon esculentum
AAB41811.1	L36157	Medicago sativa
CAA50597.1	X71593	Lycopersicon esculentum
AAC98519.1	AF007211	Glycine max
CAA62225.1	X90692	Medicago sativa
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAA20473.1	U12315	Cenchrus ciliaris
AAA98491.1	L36981	Petroselinum crispum
CAA71488.1	Y10462	Spinacia oleracea
CAA71490.1	Y10464	Spinacia oleracea
BAA03911.1	D16442	Oryza sativa
BAA07663.1	D42064	Nicotiana tabacum
AAC49821.1	AF014470	Oryza sativa
CAA80502.1	Z22920	Spirodela polyrrhiza
AAD11484.1	U51194	Glycine max
AAD37430.1	AF149280	Phaseolus vulgaris
BAA01950.1	D11337	Vigna angularis
CAA59485.1	X85228	Triticum aestivum
BAA07664.1	D42065	Nicotiana tabacum
AAD37427.1	AF149277	Phaseolus vulgaris
CAA39486.1	X56011	Triticum aestivum

AAD11482.1	U51192	Glycine max
BAA82306.1	AB027752	Nicotiana tabacum
BAA01877.1	D11102	Populus kitakamiensis
BAA06335.1	D30653	Populus kitakamiensis
AAD37376.1	AF145350	Glycine max
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
AAB41810.1	L36156	Medicago sativa
AAC49819.1	AF014468	Oryza sativa
AAD11481.1	U51191	Glycine max
BAA96643.1	AP002482	Oryza sativa

SEQ ID NO. 2330

CAB77243.2	AJ133146	Persea americana
BAA08845.1	D50307	Oryza sativa
BAA08830.1	D50301	Oryza sativa
CAA06308.1	AJ005041	Cicer arietinum
CAA61947.1	X89829	Pisum sativum
AAG21429.1	AF308587	Fragaria x ananassa
CAA37290.1	X53130	Oryza sativa
BAA02729.1	D13512	Oryza sativa
AAB61592.1	AF003124	Mesembryanthemum crystallinum
CAA46649.1	X65742	Spinacia oleracea
CAA31366.1	X12872	Zea mays
AAA33435.1	M16220	Zea mays
CAA61946.1	X89828	Pisum sativum
AAK19324.1	AF329673	Dunaliella salina
BAA77604.1	AB027001	Nicotiana paniculata
BAA77603.1	AB027002	Nicotiana paniculata
CAA71408.1	Y10380	Solanum tuberosum
AAA33642.1	M97476	Pisum sativum
BAA02730.1	D13513	Oryza sativa
AAA33643.1	M97477	Pisum sativum
AAF74220.1	AF216582	Avena sativa
CAA09669.1	AJ011516	Scherffelia dubia
CAA47293.1	X66814	Spinacia oleracea
AAK19325.1	AF329674	Dunaliella salina
AAC60574.1	S72951	Chloroplast Chlamydomonas reinhardtii
CAA49590.1	X69969	Chlamydomonas reinhardtii
AAB70542.1	AF017362	Oryza sativa
BAA76430.1	AB025002	Cicer arietinum
BAA78593.1	AU066535	Chlamydomonas sp. HS-5
CAC34412.1	Y18576	Flaveria trinervia

SEQ ID NO. 2333

CAA66952.1	X98308	Lycopersicon esculentum
CAA78387.1	Z13997	Petunia x hybrida
CAA78386.1	Z13996	Petunia x hybrida
CAA67575.1	X99134	Lycopersicon esculentum
CAB43399.1	AJ006292	Antirrhinum majus
BAA88222.1	AB028650	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
CAA64614.1	X95296	Lycopersicon esculentum
AAG36774.1	AF210616	Zea mays
AAA33500.1	M73028	Zea mays
CAA67600.1	X99210	Lycopersicon esculentum
AAF22256.1	AF161711	Pimpinella brachycarpa

SEQ ID NO. 2334

AAB49984.1	U90262	Cucurbita pepo
CAA07481.1	AJ007366	Zea mays
AAB70706.1	U82087	Tortula ruralis
BAA85396.1	AP000615	Oryza sativa
CAA57156.1	X81393	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
AAC49405.1	U08140	Vigna radiata
BAA81749.1	AB017515	Marchantia polymorpha
BAA81750.1	AB017516	Marchantia polymorpha
BAA81748.1	AB017515	Marchantia polymorpha
BAA13232.1	D87042	Zea mays
AAA33443.1	L15390	Zea mays
BAA81751.1	AB017517	Marchantia polymorpha
BAA12338.1	D84408	Zea mays
AAB80692.1	U69173	Glycine max
AAC25423.1	AF072908	Nicotiana tabacum
AAB80693.1	U69174	Glycine max
CAA65500.1	X96723	Medicago sativa
AAD17800.1	AF090835	Mesembryanthemum crystallinum

BAA12715.1	D85039	Zea mays
AAA61682.1	L27484	Zea mays
CAA57157.1	X81394	Oryza sativa
AAA69507.1	U28376	Zea mays
AAD28192.2	AF115406	Solanum tuberosum
BAA13440.1	D87707	Ipomoea batatas
CAA39936.1	X56599	Daucus carota
AAG46110.1	AC073166	Oryza sativa
BAA02698.1	D13436	Oryza sativa
AAK26164.1	AY027885	Cucumis sativus
AAB88537.1	AF035944	Fragaria x ananassa
AAF21062.1	AF216527	Dunaliella tertiolecta
CAA89202.1	Z49233	Chlamydomonas eugametos
AAF23900.1	AF194413	Oryza sativa
AAF23901.2	AF194414	Oryza sativa
AAC78558.1	AF030879	Solanum tuberosum
AAC32116.1	AF051211	Picea mariana
CAB46228.1	Y18055	Arachis hypogaea
CAA58750.1	X83869	Daucus carota
BAA12691.1	D84507	Zea mays
AAB47181.1	S82324	Zea mays
BAA22410.1	D38452	Zea mays
BAA12692.1	D84508	Zea mays
AAG01179.1	AF289237	Zea mays
AAC24961.1	AF009337	Tradescantia virginiana
BAA90814.1	AP001168	Oryza sativa
AAC49008.1	U24188	Lilium longiflorum
AAD52098.1	U70923	Nicotiana tabacum

SEQ ID NO. 2337

AAD56042.1	AF184598	Citrus unshiu
AAC49941.1	U88089	Lycopersicon esculentum
AAB91467.1	AF032472	Citrullus lanatus
CAA52917.1	X74982	Solanum tuberosum
AAB91463.1	AF030383	Cucumis melo
AAF66436.1	AF249917	Perilla frutescens
AAB91464.1	AF030384	Cucumis melo
AAD56405.1	AF184345	Lycopersicon hirsutum
AAB40723.1	U81033	Lycopersicon esculentum
AAB40724.1	U81034	Lycopersicon esculentum
AAC49942.1	U85496	Lycopersicon esculentum
CAA55516.1	X78900	Beta vulgaris
CAA65541.1	X96766	Pisum sativum
AAC21562.1	AF068260	Ipomoea batatas
CAB52196.1	AJ252316	Ipomoea batatas
CAA79980.1	Z21969	Triticum aestivum
CAA43490.1	X61187	Solanum tuberosum
AAK27719.1	AF356003	Cicer arietinum
CAB55495.1	AJ249256	Ipomoea batatas
AAB91468.1	AF032473	Citrullus lanatus
CAA47626.1	X67151	Hordeum vulgare
BAA23490.1	D50317	Oryza sativa
AAC49943.1	U85497	Lycopersicon esculentum
AAC49729.1	U66876	Hordeum vulgare
CAB55496.1	AJ249257	Ipomoea batatas
CAA32533.1	X14350	Triticum aestivum
AAK27727.1	AY028314	Oryza sativa
AAK27685.1	AF347698	Brassica rapa subsp. pekinensis
CAA86227.1	Z38111	Zea mays
AAB94012.1	AF010283	Sorghum bicolor
AAB24191.2	S48563	Zea mays
AAB38781.1	U66041	Oryza sativa
CAA69978.1	Y08728	Pisum sativum
CAB51610.1	AJ245392	Ipomoea batatas
CAA65540.1	X96765	Pisum sativum
CAB89863.1	AJ271162	Brassica napus
CAA65539.1	X96764	Pisum sativum
CAA54259.1	X76940	Vicia faba
CAA54260.1	X76941	Vicia faba
CAB01911.1	Z79635	Ipomoea batatas
AAB91466.1	AF032471	Citrullus lanatus
AAK27721.1	AF356005	Cicer arietinum

SEQ ID NO. 2339

CAA55641.1	X79008	Nicotiana tabacum
CAA55642.1	X79009	Nicotiana tabacum
CAA43513.1	X61205	Nicotiana plumbaginifolia
CAA55738.1	X79137	Nicotiana tabacum
CAA55739.1	X79138	Nicotiana tabacum
CAA55742.1	X79141	Nicotiana tabacum
CAA55737.1	X79136	Nicotiana tabacum
CAA55736.1	X79135	Nicotiana tabacum

CAA55640.1	X79005	Nicotiana tabacum
CAA55639.1	X79004	Nicotiana tabacum
AAA82736.1	U17979	Zea mays
AAB67607.1	U73459	Zea mays
AAB64289.1	AF007580	Zea mays
BAA02152.1	D12627	Oryza sativa
BAB21260.1	AB046416	Oryza sativa
CAA55741.1	X79140	Nicotiana tabacum
BAB21259.1	AB046415	Oryza sativa
BAB21258.1	AB046414	Oryza sativa
AAF19805.1	AF180356	Brassica oleracea
CAA43514.1	X61206	Nicotiana plumbaginifolia
CAA55740.1	X79139	Nicotiana tabacum
CAA76677.1	Y17186	Pisum sativum
AAD20980.1	AF079782	Zea mays

SEQ ID NO. 2342

AAD10489.1	U76746	Triticum aestivum
AAD10490.1	U76895	Triticum aestivum
AAK09229.1	AC084320	Oryza sativa
BAA02505.1	D13224	Oryza sativa
AAD20178.1	AF059287	Eleusine indica
CAA83847.1	Z33382	Solanum tuberosum
AAD20180.1	AF059289	Eleusine indica
BAA06381.1	D30716	Oryza sativa
BAA06382.1	D30717	Oryza sativa
AAA19708.1	L10634	Zea mays
CAA55022.1	X78143	Oryza sativa
CAA70891.1	Y09741	Hordeum vulgare
CAA67056.1	X98406	Cicer arietinum
AAD10487.1	U76744	Triticum aestivum
CAA55912.1	X79367	Oryza sativa
CAA83853.1	Z33402	Solanum tuberosum
BAA82637.1	D63136	Zinnia elegans
AAD20181.1	AF059290	Eleusine indica
BAA82638.1	D63137	Zinnia elegans
AAD10488.1	U76745	Triticum aestivum
AAD20179.1	AF059288	Eleusine indica
CAA52720.1	X74656	Zea mays
CAA52719.1	X74655	Zea mays
CAA37061.1	X52879	Zea mays

AAA20186.1	L10633	Zea mays
CAA49736.1	X70184	Lupinus albus
AAA19709.1	L10636	Zea mays
CAA37060.1	X52878	Zea mays
AAD10492.1	U76896	Triticum aestivum
AAB03267.1	U47660	Lupinus albus
CAA48929.1	X69185	Anemia phyllitidis
CAA38613.1	X54844	Pisum sativum
AAA99439.1	L24547	Volvox carteri
CAA31334.1	X12855	Volvox carteri
AAA34009.1	M21296	Glycine max
AAA33102.1	K03281	Chlamydomonas reinhardtii
AAA33101.1	M10064	Chlamydomonas reinhardtii
AAB60936.1	AF001379	Chlamydomonas incerta
AAA34010.1	M21297	Glycine max
AAB64308.1	U63927	Daucus carota
AAA19707.1	L10635	Zea mays
CAA52718.1	X74654	Zea mays
AAA33804.1	M33371	Polytomella agilis
AAA33803.1	M33373	Polytomella agilis
AAB03892.1	M33372	Polytomella agilis
CAA38614.1	X54845	Pisum sativum
BAA82639.1	D63138	Zinnia elegans
CAA38615.1	X54846	Pisum sativum

SEQ ID NO. 2345

BAA21926.1	AB006604	Petunia x hybrida
BAA21924.1	AB006602	Petunia x hybrida
BAA19112.1	AB000453	Petunia x hybrida

SEQ ID NO. 2346

AAK19619.1	AF336286	Gossypium hirsutum
CAA64614.1	X95296	Lycopersicon esculentum
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
CAA50221.1	X70876	Hordeum vulgare
BAA23337.1	D88617	Oryza sativa
BAA23338.1	D88618	Oryza sativa
CAA72218.1	Y11415	Oryza sativa
CAA50225.1	X70880	Hordeum vulgare
CAA78386.1	Z13996	Petunia x hybrida

BAA81732.1	AB029161	Glycine max
AAK19616.1	AF336283	Gossypium hirsutum
AAK19611.1	AF336278	Gossypium hirsutum
AAK19617.1	AF336284	Gossypium hirsutum
AAK19615.1	AF336282	Gossypium hirsutum
CAB43399.1	AJ006292	Antirrhinum majus
CAA72185.1	Y11350	Oryza sativa
AAF22256.1	AF161711	Pimpinella brachycarpa
AAG13574.1	AC037425	Oryza sativa
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
CAA72186.1	Y11351	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum
CAA75509.1	Y15219	Oryza sativa subsp. indica
CAA78387.1	Z13997	Petunia x hybrida
BAA81736.1	AB029165	Glycine max
AAK19618.1	AF336285	Gossypium hirsutum
CAA72217.1	Y11414	Oryza sativa
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays
BAA88222.1	AB028650	Nicotiana tabacum
BAA81733.2	AB029162	Glycine max
BAA23339.1	D88619	Oryza sativa
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum

SEQ ID NO. 2347

CAA70968.1	Y09825	Solanum tuberosum
AAF15946.1	AF061436	Vicia faba
CAA70969.1	Y09826	Solanum tuberosum
AAB96830.1	U64823	Nicotiana sylvestris
CAA07563.1	AJ007574	Ricinus communis
AAB48944.1	U31932	Nicotiana sylvestris
AAD16015.1	AF080544	Nepenthes alata
CAA70778.1	Y09591	Vicia faba
AAF15944.1	AF061434	Vicia faba
AAF15945.1	AF061435	Vicia faba
AAF76897.1	AF274032	Atriplex hortensis
AAD16014.1	AF080543	Nepenthes alata
AAD25161.1	AF014809	Lycopersicon esculentum
CAA10608.1	AJ132228	Ricinus communis

SEQ ID NO. 2348

AAF36491.1	AF129479	Hordeum vulgare
BAB32443.1	AB055630	Phragmites australis
BAB32444.1	AB055631	Phragmites australis
BAB32445.1	AB055632	Phragmites australis
BAB32442.1	AB055629	Phragmites australis
AAF36497.1	AF129485	Oryza sativa
AAF36496.1	AF129484	Hordeum vulgare
AAF36492.1	AF129480	Hordeum vulgare
CAC15061.1	AJ300161	Hordeum vulgare

SEQ ID NO. 2349

AAF40430.1	AF234652	Mesembryanthemum crystallinum
AAC04324.1	U73937	Nicotiana tabacum
BAA19553.1	D64036	Oryza sativa
AAA33479.1	M60526	Zea mays
AAG01534.1	AF289467	Nicotiana tabacum
CAA66233.1	X97637	Antirrhinum majus
CAA76700.1	Y17225	Lycopersicon esculentum
CAC15504.1	AJ297917	Lycopersicon esculentum
AAD28617.1	AF129087	Medicago sativa
AAC41680.1	L34206	Petroselinum crispum
CAC15503.1	AJ297916	Lycopersicon esculentum
BAA33152.1	AB008187	Pisum sativum
CAA50038.1	X70707	Medicago sativa
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAA76701.1	Y17226	Lycopersicon esculentum
CAA71242.1	Y10160	Chenopodium rubrum
AAB41548.1	L07042	Medicago sativa
CAA73323.1	Y12785	Petroselinum crispum
CAA47099.1	X66469	Medicago sativa
CAA58761.1	X83880	Nicotiana tabacum
BAA21673.1	AB006033	Allium cepa
BAA09600.1	D61377	Nicotiana tabacum
CAA50036.1	X70703	Pisum sativum
AAF81419.1	AF247135	Capsicum annuum
AAD37790.1	AF149424	Ipomoea batatas
CAA57719.1	X82268	Medicago sativa
CAA73997.1	Y13646	Petunia x hybrida

AAF65766.1	AF242308	Euphorbia esula
AAA34241.1	M99497	Vigna aconitifolia
CAA41172.1	X58194	Oryza sativa
AAF81420.1	AF247136	Capsicum annuum
AAG01532.1	AF289465	Nicotiana tabacum
CAA61581.1	X89400	Vigna unguiculata
AAG01533.1	AF289466	Nicotiana tabacum
AAF73236.1	AF153061	Pisum sativum
CAA58594.1	X83619	Petunia x hybrida
CAA57721.1	X82270	Medicago sativa
CAA99991.1	Z75661	Sesbania rostrata
AAD30506.1	AF129886	Vigna radiata

SEQ ID NO. 2352

AAF03236.1	AF180143	Glycine max
AAA34309.1	M28059	Triticum aestivum
AAA34125.1	L23762	Lycopersicon esculentum
AAA64427.1	L29077	Pisum sativum
CAA51821.1	X73419	Lycopersicon esculentum
AAB88617.1	AF034946	Zea mays
AAD51109.1	AF176040	Mesembryanthemum crystallinum
BAB40310.1	AB026055	Nicotiana tabacum
AAA34310.1	M62720	Triticum aestivum
AAF73016.1	AF262934	Avicennia marina
BAB40311.1	AB026056	Nicotiana tabacum
AAB02168.1	U15971	Oryza sativa
CAA58111.1	X82938	Lycopersicon esculentum
AAD42941.1	AF091621	Catharanthus roseus
AAA86089.1	U17250	Brassica oleracea
AAG23847.1	AY004247	Lycopersicon esculentum
BAA90392.1	AP001081	Oryza sativa
AAB63513.1	AF008910	Prunus armeniaca
CAA05772.1	AJ002959	Zea mays
AAC12662.1	AF032468	Zea mays
BAA21006.1	D17786	Oryza sativa
AAF22280.1	AF165420	Mesembryanthemum crystallinum
CAA10494.1	AJ131733	Pseudotsuga menziesii
AAC32141.1	AF051240	Picea mariana

SEQ ID NO. 2354

AAA32913.1	M32885	Persea americana

AAA19701.1	L24438	Thlaspi arvense
AAC39318.1	AF029858	Sorghum bicolor
BAB40323.1	AB037244	Asparagus officinalis
BAB40324.1	AB037245	Asparagus officinalis
AAB94589.1	AF022460	Glycine max
CAA70575.1	Y09423	Nepeta racemosa
AAB94584.1	AF022157	Glycine max
AAF27282.1	AF122821	Capsicum annuum
CAB56503.1	AJ238612	Catharanthus roseus
AAD47832.1	AF166332	Nicotiana tabacum
AAB94588.1	AF022459	Glycine max
CAA50645.1	X71654	Solanum melongena
BAA03635.1	D14990	Solanum melongena
CAA50312.1	X70981	Solanum melongena
CAA70576.1	Y09424	Nepeta racemosa
AAD44151.1	AF124816	Mentha x piperita
CAA83941.1	Z33875	Mentha x piperita
AAD44152.1	AF124817	Mentha x piperita
AAD44150.1	AF124815	Mentha spicata
CAA57423.1	X81829	Zea mays
CAA72208.1	Y11404	Zea mays
CAC27827.1	AJ295719	Catharanthus roseus
AAG44132.1	AF218296	Pisum sativum
AAG14963.1	AF214009	Brassica napus
CAA57424.2	X81830	Zea mays
CAA72207.1	Y11403	Zea mays
AAG14962.1	AF214008	Brassica napus
AAG14961.1	AF214007	Brassica napus
BAA12159.1	D83968	Glycine max
BAB40322.1	AB036772	Triticum aestivum

SEQ ID NO. 2355

CAA70587.1	Y09437	Brassica napus
AAC08048.1	U59443	Brassica napus
AAC08049.1	U59444	Brassica napus
AAC08051.1	U59446	Brassica napus
AAC08050.1	U59445	Brassica napus
AAG10403.1	AF233284	Convolvulus arvensis

SEQ ID NO. 2356

AAB72110.1	U79958	Pisum sativum

AAF80450.1	AF161719	Triticum aestivum
AAK31596.1	AY029172	Helianthus annuus
AAF22842.1	AF209910	Prunus dulcis
AAB72113.1	U79961	Zea mays
BAA92985.1	AP001550	Oryza sativa

SEQ ID NO. 2357

AAA86532.1	U31544	Pisum sativum
CAA06338.1	AJ005081	Cyamopsis tetragonoloba
CAA06339.1	AJ005082	Cyamopsis tetragonoloba
CAB61752.1	AJ275318	Cicer arietinum
CAC14890.1	AJ295156	Phragmites australis

SEQ ID NO. 2358

CAA48474.1	X68411	Medicago sativa
CAA54803.1	X77763	Nicotiana tabacum
BAA92214.1	AP001278	Oryza sativa
BAB40983.1	AB059621	Oryza sativa
CAA48472.1	X68409	Medicago sativa
CAA48473.1	X68410	Medicago sativa
CAA58594.1	X83619	Petunia x hybrida
CAC08564.1	AJ295939	Medicago sativa
CAA58595.1	X83620	Petunia x hybrida
CAA69899.1	Y08607	Nicotiana tabacum
CAA11860.1	AJ224163	Nicotiana tabacum
CAA11862.1	AJ224165	Petunia x hybrida
CAA11861.1	AJ224164	Petunia x hybrida
CAA67554.1	X99100	Trifolium repens
CAA73214.1	Y12674	Brassica napus
CAA05329.1	AJ002315	Nicotiana tabacum
BAA92966.1	AP001551	Oryza sativa
CAA05328.1	AJ002314	Nicotiana tabacum
CAA73848.1	Y13437	Oryza sativa
CAA10288.1	AJ131048	Cicer arietinum
CAA72330.1	Y11591	Ricinus communis
CAA72291.1	Y11527	Oryza sativa
AAC24574.1	AF061509	Zea mays
CAA47099.1	X66469	Medicago sativa
AAB41548.1	L07042	Medicago sativa
AAF65766.1	AF242308	Euphorbia esula
AAF23903.1	AF194416	Oryza sativa

CAA58761.1	X83880	Nicotiana tabacum
CAA50036.1	X70703	Pisum sativum
CAC13967.1	AJ250311	Oryza sativa
AAF23902.1	AF194415	Oryza sativa
AAD52659.1	AF177392	Oryza sativa
AAF81420.1	AF247136	Capsicum annuum
AAK01710.1	AF332873	Oryza sativa
AAG40579.1	AF216315	Oryza sativa
BAA09600.1	D61377	Nicotiana tabacum
AAB58396.1	U94192	Nicotiana tabacum
CAA57721.1	X82270	Medicago sativa
AAD37790.1	AF149424	Ipomoea batatas
CAA56314.1	X79993	Avena sativa
AAF73236.1	AF153061	Pisum sativum
CAA49592.1	X69971	Nicotiana tabacum
BAB18271.1	AB035141	Chlamydomonas reinhardtii
CAC15504.1	AJ297917	Lycopersicon esculentum
AAF73257.1	AF154329	Pisum sativum
CAA57719.1	X82268	Medicago sativa
AAG40580.1	AF216316	Oryza sativa
CAA58466.1	X83440	Petunia x hybrida
CAA58760.1	X83879	Nicotiana tabacum

SEQ ID NO. 2361

AAB97617.1	U83687	Apium graveolens
BAA01853.1	D11080	Malus x domestica
AAC97607.1	AF057134	Malus x domestica

SEQ ID NO. 2362

AAD21872.1	AF078082	Phaseolus vulgaris
CAA73134.1	Y12531	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
AAB93834.1	U82481	Zea mays
BAA23676.1	AB000970	Brassica rapa
AAC23542.1	U20948	Ipomoea trifida
CAB41879.1	Y18260	Brassica oleracea
CAA74662.1	Y14286	Brassica oleracea
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
AAA62232.1	U00443	Brassica napus

CAA74661.1	Y14285	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
BAA07577.2	D38564	Brassica rapa
BAA92836.1	AB032473	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
BAA92837.1	AB032474	Brassica oleracea
AAD52097.1	AF088885	Nicotiana tabacum
AAK21965.1	AY028699	Brassica napus
AAA33915.1	L27821	Oryza sativa
BAA94529.2	AP001800	Oryza sativa
AAF34428.1	AF172282	Oryza sativa
AAG03090.1	AC073405	Oryza sativa
BAA94516.1	AP001800	Oryza sativa

SEQ ID NO. 2364

AAC03055.1	AF045770	Oryza sativa
AAA34025.1	M31480	Spinacia oleracea
AAB41696.1	U69142	Spinacia oleracea
BAA21098.1	AB001348	Oryza sativa
BAA96794.1	AB037421	Oryza sativa
BAB18543.1	AB043539	Avicennia marina
CAA41376.1	X58462	Beta vulgaris
CAA41377.1	X58463	Beta vulgaris
AAG43988.1	AF215823	Zea mays
BAB19052.1	AB044537	Oryza sativa
CAA71003.1	Y09876	Nicotiana tabacum
AAF73828.1	AF162665	Oryza sativa
AAB70010.1	AF017150	Amaranthus hypochondriacus
CAA49425.1	X69770	Atriplex hortensis
AAB58165.1	AF000132	Amaranthus hypochondriacus
BAA96793.1	AB030939	Oryza sativa
BAB18544.1	AB043540	Avicennia marina
BAA05466.1	D26448	Hordeum vulgare
AAF08296.1	AF196292	Apium graveolens
AAB47571.1	U87848	Nicotiana plumbaginifolia
CAA53075.1	X75326	Zea mays
CAA53076.1	X75327	Pisum sativum
AAB33843.1	S77096	Brassica napus
AAG43027.1	AF323586	Oryza sativa
AAC49268.1	U12196	Sorghum bicolor
AAC49267.1	U12195	Sorghum bicolor

SEQ ID NO. 2367

AAB67737.1	L77080	Stylosanthes humilis
AAA32676.1	M37637	Arachis hypogaea
CAA64413.1	X94943	Lycopersicon esculentum
CAA71494.1	Y10468	Spinacia oleracea
BAA82307.1	AB027753	Nicotiana tabacum
BAA11853.1	D83225	Populus nigra
AAC05277.1	AF049881	Linum usitatissimum
CAA80502.1	Z22920	Spirodela polyrrhiza
BAA08499.1	D49551	Oryza sativa
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
AAD37430.1	AF149280	Phaseolus vulgaris
CAB94692.1	AJ242742	Ipomoea batatas
AAD37429.2	AF149279	Phaseolus vulgaris
AAF63027.1	AF244924	Spinacia oleracea
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
CAA40796.1	X57564	Armoracia rusticana
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
BAA06334.1	D30652	Populus kitakamiensis
AAD11481.1	U51191	Glycine max
BAA77389.1	AB024439	Scutellaria baicalensis
CAB67121.1	Y19023	Lycopersicon esculentum
CAA50597.1	X71593	Lycopersicon esculentum
AAD11482.1	U51192	Glycine max
CAA71489.1	Y10463	Spinacia oleracea
BAA07241.1	D38051	Populus kitakamiensis
CAA59487.1	X85230	Triticum aestivum
AAA65637.1	L13654	Lycopersicon esculentum
AAG02215.1	AF291667	Pinus sylvestris
CAA76374.2	Y16776	Spinacia oleracea
BAA11852.1	D83224	Populus nigra
AAB41811.1	L36157	Medicago sativa

AAC98519.1	AF007211	Glycine max
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
BAA01992.1	D11396	Nicotiana tabacum
CAC21393.1	AJ401276	Zea mays
CAA39486.1	X56011	Triticum aestivum
BAA92500.1	AP001383	Oryza sativa
AAB06183.1	M37636	Arachis hypogaea
AAD43561.1	AF155124	Gossypium hirsutum
BAA14143.1	D90115	Armoracia rusticana
AAA34108.1	J02979	Nicotiana tabacum
BAA94962.1	AB042103	Asparagus officinalis
AAA34050.1	M74103	Nicotiana sylvestris

SEQ ID NO. 2368

AAC78466.1	AF053311	Zantedeschia aethiopica
CAA04142.1	AJ000508	Pisum sativum
CAB59893.1	AJ238697	Hordeum vulgare
CAB59895.1	AJ238745	Hordeum vulgare
CAB96145.1	AJ250951	Mesembryanthemum crystallinum
BAA22194.1	D63425	Spinacia oleracea
CAA75009.1	Y14707	Helianthus annuus
CAA75054.1	Y14762	Lycopersicon esculentum
CAA42780.1	X60219	Nicotiana sylvestris
BAB16430.1	AB041518	Nicotiana tabacum
AAB94892.1	AF037051	Gossypium hirsutum
CAA74775.1	Y14429	Helianthus annuus
CAB59894.1	AJ238744	Hordeum vulgare
BAA83594.1	AB009083	Chlamydomonas sp. W80
AAB66330.1	AF014927	Chlamydomonas reinhardtii
CAA75055.1	Y14763	Lycopersicon esculentum
CAA09194.1	AJ010455	Triticum aestivum
CAB66331.1	AJ279689	Betula pendula

SEQ ID NO. 2369

CAB56570.1	AJ011623	Antirrhinum majus
CAB56569.1	AJ011622	Antirrhinum majus
CAA63061.1	X92079	Antirrhinum majus
CAA63113.1	X92369	Antirrhinum majus
CAB56568.1	AJ011621	Antirrhinum majus
AAB51071.1	U89496	Zea mays

SEQ ID NO. 2372

AAC77926.1	AF084200	Medicago sativa
AAD46189.1	AF157017	Tortula ruralis

SEQ ID NO. 2373

AAK08983.1	AY026332	Oryza sativa
CAA71992.1	Y11105	Pisum sativum
BAB40790.1	AB058642	Lilium hybrid division I
AAK19618.1	AF336285	Gossypium hirsutum
CAA78387.1	Z13997	Petunia x hybrida
BAA88221.1	AB028649	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
AAK19617.1	AF336284	Gossypium hirsutum
AAK19615.1	AF336282	Gossypium hirsutum
BAA81733.2	AB029162	Glycine max
BAA81732.1	AB029161	Glycine max
BAA81730.1	AB029159	Glycine max
BAA88223.1	AB028651	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
BAA81736.1	AB029165	Glycine max
BAA81731.1	AB029160	Glycine max
CAA72218.1	Y11415	Oryza sativa
CAA67000.1	X98355	Oryza sativa
AAK19611.1	AF336278	Gossypium hirsutum
CAA67575.1	X99134	Lycopersicon esculentum
CAA64614.1	X95296	Lycopersicon esculentum
AAD31395.1	AF114162	Lolium temulentum
AAC22863.1	AY008692	Hordeum vulgare
BAA96421.1	AB044084	Triticum aestivum
CAA61021.1	X87690	Hordeum vulgare
CAA66952.1	X98308	Lycopersicon esculentum
BAA88222.1	AB028650	Nicotiana tabacum
AAG36774.1	AF210616	Zea mays
AAA33500.1	M73028	Zea mays
CAC19439.1	AJ237661	Oryza sativa
CAB40189.1	AJ133638	Avena sativa
AAK19619.1	AF336286	Gossypium hirsutum
AAG28526.1	AF198499	Nicotiana tabacum
CAA78388.1	Z13998	Petunia x hybrida
AAK09327.1	AF320614	Zea mays

AAK09326.1	AF320613	Zea mays

SEQ ID NO. 2375

AAF14244.1	AF110228	Spinacia oleracea
AAF14242.1	AF110226	Nicotiana tabacum
AAF14245.1	AF110229	Spinacia oleracea
AAF14246.1	AF110230	Spinacia oleracea

SEQ ID NO. 2379

CAA57285.1	X81629	Brassica oleracea
AAA32981.1	L27664	Brassica napus
CAA57284.1	X81628	Brassica oleracea
AAF65472.1	AF252628	Brassica juncea
AAC98808.1	U68215	Carica papaya
AAA33697.1	L21978	Petunia x hybrida
AAF64528.1	AF254125	Carica papaya
AAB70883.1	U19856	Pelargonium x hortorum
BAA21541.1	AB003514	Actinidia deliciosa
AAC48977.1	U07953	Pelargonium x hortorum
CAA71738.1	Y10749	Betula pendula
AAC37381.1	L21976	Petunia x hybrida
CAA86468.1	Z46349	Nicotiana tabacum
BAA94601.1	AB033504	Populus euramericana
BAA34924.1	AB013101	Lycopersicon esculentum
BAA83466.1	AB012857	Nicotiana tabacum
AAF36484.1	AF129074	Prunus persica
AAB70884.1	U67861	Pelargonium x hortorum
CAA64799.1	X95553	Cucumis melo
CAA90904.1	Z54199	Lycopersicon esculentum
CAA41212.1	X58273	Lycopersicon esculentum
AAA33698.1	L21979	Petunia x hybrida
CAA04895.1	AJ001646	Malus x domestica
CAA82646.1	Z29529	Nicotiana tabacum
CAA54449.1	X77232	Prunus persica
AAF36483.1	AF129073	Prunus persica
AAC67233.1	AF033582	Cucumis sativus
AAC33524.1	AF026793	Prunus armeniaca
BAA90550.1	AB031027	Prunus mume
CAA74328.1	Y14005	Malus x domestica
AAC36461.1	AF030859	Malus x domestica
AAA99792.1	U54565	Nicotiana glutinosa
BAA76387.1	D67038	Pyrus pyrifolia
CAA67216.1	X98627	Malus x domestica
CAA68538.1	Y00478	Lycopersicon esculentum
AAA33644.1	M98357	Pisum sativum
CAA71140.1	Y10034	Rumex palustris
AAA99793.1	U54566	Nicotiana glutinosa
CAA60576.1	X87097	Pyrus communis
AAB71421.1	L29405	Helianthus annuus
AAC48922.1	U06047	Vigna radiata
CAA67119.1	X98493	Nicotiana tabacum
CAA58232.1	X83229	Nicotiana tabacum

SEQ ID NO. 2381

AAF98390.1	AF287143	Brassica napus
BAA93039.1	AB033758	Citrus unshiu
BAA89009.1	AB027455	Petunia x hybrida
AAF61647.1	AF190634	Nicotiana tabacum
BAA36421.1	AB013596	Perilla frutescens
BAA36423.1	AB013598	Verbena x hybrida
AAA59054.1	L34847	Zea mays
BAA36422.1	AB013597	Perilla frutescens
AAF17077.1	AF199453	Sorghum bicolor
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
BAA12737.1	D85186	Gentiana triflora
AAK28303.1	AF346431	Nicotiana tabacum
BAA83484.1	AB031274	Scutellaria baicalensis
BAA19659.1	AB002818	Perilla frutescens
AAD21086.1	AF127218	Forsythia x intermedia
CAA59450.1	X85138	Lycopersicon esculentum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAB48444.1	U82367	Solanum tuberosum
BAB41020.1	AB047093	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera

BAB41025.1	AB047098	Vitis vinifera
BAA89008.1	AB027454	Petunia x hybrida
AAB81683.1	AF000372	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
CAA31855.1	X13500	Zea mays

SEQ ID NO. 2385

AAB31704.1	S72356	Chloroplast Nicotiana sylvestris
AAB31705.1	S72358	Chloroplast Nicotiana sylvestris
BAA07667.1	D42070	Nicotiana sylvestris
BAA78581.1	AU066497	Chlamydomonas sp. HS-5

SEQ ID NO. 2386

AAD37696.1	AF145727	Oryza sativa
BAA93463.1	AB028075	Physcomitrella patens
CAA63222.1	X92489	Glycine max
CAA64221.1	X94449	Pimpinella brachycarpa
AAK31270.1	AC079890	Oryza sativa
AAF19980.1	AF211193	Oryza sativa
CAA65456.2	X96681	Oryza sativa
CAA64152.1	X94375	Pimpinella brachycarpa
CAA64491.1	X95193	Pimpinella brachycarpa
AAD37695.1	AF145726	Oryza sativa
AAD37700.1	AF145731	Oryza sativa
CAA06728.1	AJ005833	Craterostigma plantagineum
CAA06717.1	AJ005820	Craterostigma plantagineum
BAA05622.1	D26573	Daucus carota
BAA93462.1	AB028074	Physcomitrella patens
AAD37698.1	AF145729	Oryza sativa
BAA93465.1	AB028077	Physcomitrella patens
BAA05624.1	D26575	Daucus carota
BAA93468.1	AB028080	Physcomitrella patens
BAA05625.1	D26576	Daucus carota
BAA93466.1	AB028078	Physcomitrella patens
BAA93464.1	AB028076	Physcomitrella patens
BAA93467.1	AB028079	Physcomitrella patens
BAA93461.1	AB028073	Physcomitrella patens
AAF01765.1	AF184278	Glycine max
BAA05623.1	D26574	Daucus carota
AAD37697.1	AF145728	Oryza sativa
AAF01764.2	AF184277	Glycine max
BAA21017.1	D26578	Daucus carota
AAF73482.1	AF268422	Brassica rapa subsp. pekine
BAA93460.1	AB028072	Physcomitrella patens

SEQ ID NO. 2387

BAA97745.1	AB037887	Lupinus albus
BAA82130.1	AB023385	Lupinus albus
CAA06921.1	AJ006224	Ipomoea batatas
AAF19822.1	AF200826	Ipomoea batatas
BAA92365.1	AB039746	Spirodela punctata
CAA04644.1	AJ001270	Phaseolus vulgaris
AAF19820.1	AF200824	Glycine max
AAF19821.1	AF200825	Ipomoea batatas
AAD20634.1	AF126255	Anchusa officinalis
CAA07280.1	AJ006870	Ipomoea batatas
BAA97038.1	AB029086	Tagetes patula
BAA82133.1	AB023388	Lycopersicon esculentum
BAA82131.1	AB023386	Glycine max
BAA82132.1	AB023387	Oryza sativa

SEQ ID NO. 2389

BAA07395.1	D38220	Brassica napus
BAA07394.1	D38219	Brassica napus
AAG30576.1	AF314093	Ricinus communis
CAA32217.1	X14059	Nicotiana tabacum
CAA32218.1	X14060	Lycopersicon esculentum
AAA33712.1	L11563	Petunia x hybrida
CAA32216.1	X14058	Nicotiana tabacum
CAA56696.1	X80670	Lotus japonicus
AAB52786.1	U95317	Solanum tuberosum
AAB18985.1	U76701	Solanum tuberosum
AAA95940.1	U01029	Phaseolus vulgaris
AAA34033.1	M32600	Spinacia oleracea
CAA38031.1	X54097	Betula pendula
BAA13047.1	D86226	Spinacia oleracea
AAA33114.1	M33154	Cucurbita maxima
AAD19790.1	AF055369	Glycine max
CAA58909.1	X84103	Cichorium intybus

AAA96813.1	U13987	Glycine max
CAA37672.1	X53603	Phaseolus vulgaris
AAA96727.1	L23854	Glycine max
AAA62316.1	U20450	Zea mays
AAD38068.1	AF153448	Zea mays
CAA40975.1	X57844	Hordeum vulgare
CAA40976.1	X57845	Hordeum vulgare
CAA42739.1	X60173	Hordeum vulgare
AAB93560.1	AF022780	Glycine max
AAF17595.1	AF203033	Chlamydomonas reinhardtii
CAA45497.1	X64136	Volvox carteri
AAC49460.1	U39931	Chlorella vulgaris
AAC49459.1	U39930	Chlorella vulgaris
CAA29497.1	X06134	Nicotiana tabacum
AAA18377.1	U08029	Spinacia oleracea
AAB39553.1	U64308	Agrostemma githago
AAA03202.1	M27821	Zea mays
AAA33483.1	M77792	Zea mays
AAB39555.1	U64310	Agrostemma githago
AAB39554.1	U64309	Agrostemma githago
CAA33819.1	X15820	Oryza sativa
CAA33817.1	X15819	Oryza sativa
AAA33998.1	L23853	Glycine max
CAA58908.1	X84102	Cichorium intybus
CAA40090.1	X56771	Chlorella vulgaris
CAA45776.1	X64446	Zea mays
AAD17694.1	AF077372	Zea mays
AAA96242.1	L40147	Avena strigosa
AAB20155.1	S61885	Nicotiana plumbaginifolia
AAA96245.1	L40151	Hordeum pusillum
AAA96247.1	L40153	Hordeum stenostachys

SEQ ID NO. 2390

AAG36871.1	AF239818	Zea mays
AAG36870.1	AF239817	Zea mays
AAG36869.1	AF239816	Zea mays

SEQ ID NO. 2395

AAC49600.1	U30304	Solanum brevidens

SEQ ID NO. 2397

AAG13663.1	AF263457	Zea mays
AAC98090.1	AF067400	Zea mays
BAA90816.1	AP001168	Oryza sativa
AAC98091.1	AF067401	Oryza sativa

SEQ ID NO. 2398

BAA81862.1	AB026295	Oryza sativa
AAB39995.1	U82432	Dianthus caryophyllus
AAD56580.1	AF184273	Daucus carota
AAD56581.1	AF184274	Daucus carota
CAA50498.1	X71360	Malus sp.
AAD26205.1	AF117269	Malus x domestica
AAB82287.1	AF026058	Matthiola incana
BAA20143.1	AB003779	Perilla frutescens
AAB66560.1	AF015885	Callistephus chinensis
BAB21477.1	AB044091	Torenia fournieri
CAA53580.1	X75966	Vitis vinifera
BAA75305.1	AB023786	Ipomoea batatas
AAB84049.1	AF028602	Ipomoea purpurea
BAA75306.1	AB023787	Ipomoea batatas
CAA73094.1	Y12489	Forsythia x intermedia
CAA69252.1	Y07955	Oryza sativa

SEQ ID NO. 2399

CAC12822.1	AJ299252	Nicotiana tabacum
AAF63205.1	AF245119	Mesembryanthemum crystallinum
AAC24587.1	AF071893	Prunus armeniaca
BAB16083.1	AB036883	Oryza sativa
BAB03248.1	AB037183	Oryza sativa
AAF76898.1	AF274033	Atriplex hortensis
CAB96900.1	AJ251250	Catharanthus roseus
CAB96899.1	AJ251249	Catharanthus roseus
BAA07321.1	D38123	Nicotiana tabacum
AAG43545.1	AF211527	Nicotiana tabacum
BAA99376.1	AP002526	Oryza sativa
AAF23899.1	AF193803	Oryza sativa
BAA78738.1	AB023482	Oryza sativa
AAC62619.1	AF057373	Nicotiana tabacum
AAG43549.1	AF211531	Nicotiana tabacum
AAG43548.1	AF211530	Nicotiana tabacum
AAG32659.1	AF253971	Picea abies

SEQ ID NO. 2400

AAA80651.1	U27116	Populus tremuloides
AAC49915.1	U62735	Nicotiana tabacum
CAA12198.1	AJ224894	Populus balsamifera subsp. trichocarpa
AAC08395.1	AF053553	Mesembryanthemum crystallinum
CAA11496.1	AJ223621	Populus balsamifera subsp. trichocarpa
AAD02050.1	AF036095	Pinus taeda
CAB45149.1	AJ242980	Zea mays
AAC28973.1	U20736	Medicago sativa subsp. sativa
CAA90969.1	Z54233	Vitis vinifera
CAB05369.1	Z82982	Nicotiana tabacum
AAF44689.1	AF240466	Populus tomentosa
BAA78733.1	AB023482	Oryza sativa
AAC49916.1	U62736	Nicotiana tabacum
AAC49913.1	U38612	Nicotiana tabacum
CAA90894.1	Z54183	Petroselinum crispum
AAB80931.1	AF022775	Nicotiana tabacum
AAA33851.1	M69184	Petroselinum crispum
CAA83943.1	Z33878	Petroselinum crispum
CAA11495.1	AJ223620	Populus balsamifera subsp. trichocarpa
CAA12200.1	AJ224896	Populus balsamifera subsp. trichocarpa
CAA12199.1	AJ224895	Populus balsamifera subsp. trichocarpa
CAB45150.1	AJ242981	Zea mays
AAC49914.1	U62734	Nicotiana tabacum
CAA72911.1	Y12228	Eucalyptus gunnii
AAK16714.1	AF327458	Populus alba x Populus glandulosa
AAA59389.1	U13151	Zinnia elegans
AAD50443.1	AF168780	Eucalyptus globulus
CAA91228.1	Z56282	Nicotiana tabacum
AAC26191.1	AF046122	Eucalyptus globulus
AAB61680.1	L22203	Stellaria longipes
BAA81774.1	AP000364	Oryza sativa
BAA88234.1	AB035144	Citrus natsudaidai
BAA19102.1	AB000408	Populus kitakamiensis
BAA81777.1	AP000364	Oryza sativa
CAA10217.1	AJ130841	Populus balsamifera subsp. trichocarpa
AAD50441.1	AF168778	Eucalyptus globulus
AAD50442.1	AF168779	Eucalyptus globulus
AAC15067.1	AF060180	Nicotiana tabacum

SEQ ID NO. 2402

CAB82852.1	Z30329	Mesembryanthemum crystalli
CAA82991.1	Z30330	Spinacia oleracea
BAB03409.1	AP002816	Oryza sativa
CAA50374.1	X71057	Nicotiana tabacum
CAA82994.1	Z30333	Mesembryanthemum crystalli
CAA82993.1	Z30332	Spinacia oleracea
BAB18104.1	AB042714	Chlamydomonas reinhardtii
BAB18105.1	AB042715	Chlamydomonas reinhardtii
CAA62476.1	X90990	Solanum tuberosum
AAA50304.1	M92989	Pisum sativum
AAF66637.1	AF143505	Lycopersicon esculentum
BAA96593.1	AP002481	Oryza sativa
CAA66616.1	X97980	Solanum berthaultii
CAA73067.1	Y12464	Sorghum bicolor
CAA73068.1	Y12465	Sorghum bicolor
BAA83689.1	AB011968	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
AAB62693.1	AF004947	Oryza sativa
AAD23582.1	AF128443	Glycine max
AAF22219.1	AF141378	Zea mays
BAA05649.1	D26602	Nicotiana tabacum
CAA71142.1	Y10036	Cucumis sativus
CAA82992.1	Z30331	Mesembryanthemum crystallinum

SEQ ID NO. 2403

CAB41474.1	AJ238402	Catharanthus roseus
AAK31592.1	AY029178	Brassica rapa subsp. pekinensis
AAG17470.1	AF123609	Triticum aestivum
AAG33645.1	AF092917	Vicia sativa
AAD10204.1	AF030260	Vicia sativa
AAB94586.1	AF022457	Glycine max
BAA93632.1	AB024931	Lotus japonicus
BAA76380.1	AB023636	Glycyrrhiza echinata

BAA74465.1	AB022732	Glycyrrhiza echinata
CAA70576.1	Y09424	Nepeta racemosa
AAC49188.2	U29333	Pisum sativum
AAG09208.1	AF175278	Pisum sativum
BAA84071.1	AB028151	Antirrhinum majus
CAA89260.1	Z49263	Pisum sativum
BAA22422.1	AB001379	Glycyrrhiza echinata
AAF34538.1	AF195817	Beta vulgaris
AAF34531.1	AF195810	Trifolium pratense
AAD38929.1	AF135484	Glycine max
AAF34525.1	AF195804	Lens culinaris
BAA93634.1	AB025016	Lotus japonicus
AAF34530.1	AF195809	Vigna radiata
BAA84072.1	AB028152	Torenia hybrida
AAB94591.1	AF022462	Glycine max
AAF34529.1	AF195808	Vigna radiata
AAF45143.1	AF195819	Glycine max
AAF34532.1	AF195811	Trifolium pratense
AAF45142.1	AF195818	Glycine max
AAF34528.1	AF195807	Vigna radiata
AAF34527.1	AF195806	Vigna radiata

SEQ ID NO. 2404

AAG09919.1	AF112149	Zea mays
AAB51377.1	U91964	Medicago sativa
BAA94342.1	AB041020	Oryza sativa
AAF66997.2	AF139664	Oryza sativa
CAB97354.1	AJ249146	Hordeum vulgare
AAD10625.1	AF035378	Lolium temulentum
AAG43200.1	AF112150	Zea mays
BAA33457.1	AB007504	Triticum aestivum
AAB00081.1	L46400	Zea mays
AAD10626.1	AF035379	Lolium temulentum
AAF19047.1	AF058697	Oryza sativa
BAA81883.1	AB003325	Oryza sativa
AAF19721.1	AF176782	Petunia x hybrida
AAF19048.1	AF058698	Oryza sativa
AAD39035.1	AF068724	Nicotiana tabacum
CAA04321.1	AJ000759	Malus x domestica
AAF04972.1	AF091458	Oryza sativa
CAB56800.1	AJ011675	Oryza sativa

AAB65161.1	AF002666	Solanum commersonii
CAB97352.1	AJ249144	Hordeum vulgare
CAA67969.1	X99655	Betula pendula
CAA67967.1	X99653	Betula pendula
AAG09136.1	AF150932	Physcomitrella patens
AAG09135.1	AF150931	Physcomitrella patens
AAC83170.1	U78948	Malus x domestica
BAA25246.1	D89671	Ceratopteris richardii
AAF13261.1	AF198175	Dendrobium grex Madame Tho:
CAC35027.1	AJ291298	Pisum sativum
CAC37031.1	AJ279089	Pisum sativum
AAD39037.1	AF068726	Nicotiana sylvestris
AAB08875.1	U67451	Brassica oleracea
AAG30923.1	AF306349	Eucalyptus globulus
AAG27459.1	AF305696	Eucalyptus globulus
AAG24909.1	AF305076	Eucalyptus globulus
AAB08876.1	U67452	Brassica oleracea
AAD39036.1	AF068725	Nicotiana sylvestris
CAA67968.1	X99654	Betula pendula
AAD20329.1	AF109403	Sinapis alba

SEQ ID NO. 2405

AAG34803.1	AF243368	Glycine max
AAF64450.1	AF239928	Euphorbia esula
AAG34798.1	AF243363	Glycine max
AAG34801.1	AF243366	Glycine max
AAG34797.1	AF243362	Glycine max
AAG34796.1	AF243361	Glycine max
AAG34807.1	AF243372	Glycine max
AAG34804.1	AF243369	Glycine max
AAG34810.1	AF243375	Glycine max
AAG34809.1	AF243374	Glycine max
AAG34805.1	AF243370	Glycine max
AAC18566.1	AF048978	Glycine max
AAG34808.1	AF243373	Glycine max
AAG34800.1	AF243365	Glycine max
AAG34829.1	AF244686	Zea mays
AAG34802.1	AF243367	Glycine max
AAG34837.1	AF244694	Zea mays
CAA09187.1	AJ010448	Alopecurus myosuroides
CAA09188.1	AJ010449	Alopecurus myosuroides

AAG34849.1	AF244706	Zea mays
AAG34844.1	AF244701	Zea mays
AAG34806.1	AF243371	Glycine max
CAA71784.1	Y10820	Glycine max
AAA68430.1	J03679	Solanum tuberosum
CAA04391.1	AJ000923	Carica papaya
AAG34836.1	AF244693	Zea mays
AAG34831.1	AF244688	Zea mays
AAG34847.1	AF244704	Zea mays
AAC32118.1	AF051214	Picea mariana
AAF29773.1	AF159229	Gossypium hirsutum
AAG41204.1	AF321437	Suaeda maritima
CAC24549.1	AJ296343	Cichorium intybus x Cichorium endivia

SEQ ID NO. 2407

AAG43509.1	AF210049	Petunia x hybrida
AAC15460.1	AF060569	Lavatera thuringiaca

SEQ ID NO. 2409

BAB20583.1	AB042270	Zea mays
AAK13126.1	AC083945	Oryza sativa
CAC09578.1	AJ298990	Fagus sylvatica
AAA85479.1	U41103	Lycopersicon esculentum
AAB39386.1	U47279	Lycopersicon esculentum
AAB97160.1	AF022727	Nicotiana tabacum

SEQ ID NO. 2410

AAD01541.1	AF004810	Glycine max
AAB01552.1	L47607	Picea glauca
AAD09208.1	U38246	Glycine soja
AAD09209.1	U38247	Glycine soja

SEQ ID NO. 2413

BAA03763.1	D16247	Nicotiana sylvestris
AAF40306.1	AF156667	Vigna radiata
AAF75791.1	AF271892	Pisum sativum
CAA68193.1	X99937	Spinacia oleracea

SEQ ID NO. 2415

BAA88904.1	AB022091	Citrus unshiu
BAA88981.1	AB025778	Citrus unshiu
CAA49428.1	X69773	Vicia faba
CAB38022.1	AJ132000	Craterostigma plantagineum
CAA09593.1	AJ011319	Lycopersicon esculentum
CAA09910.1	AJ012080	Pisum sativum
CAA65639.1	X96938	Tulipa gesneriana
CAA65640.1	X96939	Tulipa gesneriana
CAB40794.1	AJ131943	Medicago truncatula
AAC17867.1	AF049487	Medicago sativa
AAC39323.1	AF030231	Glycine max
CAA76057.1	Y16091	Daucus carota
BAA89049.1	AB029401	Citrus unshiu
CAA63122.1	X92378	Alnus glutinosa
CAA76056.1	Y16090	Daucus carota
CAA53081.1	X75332	Daucus carota
AAC28107.1	AF079851	Pisum sativum
CAB40795.1	AJ131964	Medicago truncatula
AAA34196.1	L19762	Lycopersicon esculentum
BAA01108.1	D10266	Vigna radiata
BAA88905.1	AB022092	Citrus unshiu
CAA09681.1	AJ011535	Lycopersicon esculentum
AAA97571.1	U24087	Solanum tuberosum
AAD28641.1	U73588	Gossypium hirsutum
AAA97572.1	U24088	Solanum tuberosum
CAA04512.1	AJ001071	Pisum sativum
BAB20799.1	AB045710	Pyrus pyrifolia
CAA57881.1	X82504	Chenopodium rubrum
AAF85966.1	AF263384	Saccharum officinarum
CAA26229.1	X02382	Zea mays
CAA26247.1	X02400	Zea mays
CAA46017.1	X64770	Oryza sativa
CAA78747.1	Z15028	Oryza sativa
CAA04543.1	AJ001117	Triticum aestivum
CAA46701.1	X65871	Hordeum vulgare
CAC32462.1	AJ311496	Pisum sativum
CAA75793.1	Y15802	Hordeum vulgare
AAA33515.1	L33244	Zea mays
CAA41774.1	X59046	Oryza sativa
AAC41682.1	L03366	Oryza sativa
CAA49551.1	X69931	Hordeum vulgare
CAA03935.1	AJ000153	Triticum aestivum

CAB38021.1	AJ131999	Craterostigma plantagineum
CAA57499.1	X81974	Beta vulgaris
CAA47264.1	X66728	Hordeum vulgare

SEQ ID NO. 2416

CAA80358.1	Z22645	Solanum tuberosum
CAA79676.1	Z21486	Solanum tuberosum
CAA57428.1	X81834	Nicotiana tabacum
CAA49162.1	X69321	Daucus carota
CAA57389.1	X81792	Chenopodium rubrum
AAC17166.1	AF063246	Pisum sativum
CAA59677.1	X85327	Pisum sativum
AAD02263.1	AF043346	Zea mays
CAA84526.1	Z35162	Vicia faba
AAC96065.1	AF030420	Triticum aestivum
CAA53099.1	X75353	Daucus carota
AAB68679.1	U92438	Phaseolus vulgaris
CAA89992.1	Z49831	Vicia faba
CAA53097.1	X75351	Daucus carota
CAA77267.1	Y18707	Daucus carota
CAA53098.1	X75352	Daucus carota
CAA77266.1	Y18706	Daucus carota
AAC96066.1	AF030421	Triticum aestivum
AAG36943.1	AF274299	Brassica oleracea

SEQ ID NO. 2417

AAF61647.1	AF190634	Nicotiana tabacum
BAA89009.1	AB027455	Petunia x hybrida
AAA59054.1	L34847	Zea mays
BAA93039.1	AB033758	Citrus unshiu
BAA36423.1	AB013598	Verbena x hybrida
BAA36421.1	AB013596	Perilla frutescens
AAF98390.1	AF287143	Brassica napus
BAA36422.1	AB013597	Perilla frutescens
BAA83484.1	AB031274	Scutellaria baicalensis
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAD21086.1	AF127218	Forsythia x intermedia
AAB36653.1	U32644	Nicotiana tabacum
BAA12737.1	D85186	Gentiana triflora
AAK28303.1	AF346431	Nicotiana tabacum

AAF17077.1	AF199453	Sorghum bicolor
CAA59450.1	X85138	Lycopersicon esculentum
BAB41017.1	AB047090	Vitis labrusca x Vitis vini
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAA89008.1	AB027454	Petunia x hybrida
BAB41018.1	AB047091	Vitis labrusca x Vitis vini
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAB81683.1	AF000372	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAA19659.1	AB002818	Perilla frutescens
BAA90787.1	AB038248	Ipomoea batatas
AAD04166.1	AF101972	Phaseolus lunatus
AAB86473.1	AF028237	Ipomoea purpurea

SEQ ID NO. 2420

CAA64614.1	X95296	Lycopersicon esculentum
AAF22256.1	AF161711	Pimpinella brachycarpa
CAA78386.1	Z13996	Petunia x hybrida
CAA67600.1	X99210	Lycopersicon esculentum
CAB43399.1	AJ006292	Antirrhinum majus
CAA78387.1	Z13997	Petunia x hybrida
BAA88222.1	AB028650	Nicotiana tabacum
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
CAA66952.1	X98308	Lycopersicon esculentum
AAG08962.1	AF122054	Solanum tuberosum
BAA88223.1	AB028651	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
AAF66731.1	AF146706	Petunia x hybrida
AAF66727.1	AF146702	Petunia x hybrida
AAF66729.1	AF146704	Petunia integrifolia
AAF66728.1	AF146703	Petunia integrifolia
AAF66732.1	AF146707	Petunia x hybrida
AAF66730.1	AF146705	Petunia x hybrida

AAF66734.1	AF146709	Petunia axillaris
AAF66733.1	AF146708	Petunia axillaris

SEQ ID NO. 2421

AAF01764.2	AF184277	Glycine max
BAB18171.1	AB042769	Zinnia elegans
BAA21017.1	D26578	Daucus carota
AAD37697.1	AF145728	Oryza sativa
BAA05625.1	D26576	Daucus carota
AAF01765.1	AF184278	Glycine max
BAA05623.1	D26574	Daucus carota
BAA93465.1	AB028077	Physcomitrella patens
CAA64417.1	X94947	Lycopersicon esculentum
BAA93461.1	AB028073	Physcomitrella patens
BAA93464.1	AB028076	Physcomitrella patens
BAA93466.1	AB028078	Physcomitrella patens
BAA05624.1	D26575	Daucus carota
BAA05622.1	D26573	Daucus carota
BAA93467.1	AB028079	Physcomitrella patens
AAD37698.1	AF145729	Oryza sativa
BAA93460.1	AB028072	Physcomitrella patens
BAB18164.1	AB042762	Zinnia elegans
BAA93468.1	AB028080	Physcomitrella patens
AAD37699.1	AF145730	Oryza sativa
AAD38144.1	AF139497	Prunus armeniaca
AAA63768.2	AF339748	Helianthus annuus
CAA62608.1	X91212	Lycopersicon esculentum
BAA93463.1	AB028075	Physcomitrella patens
CAA06717.1	AJ005820	Craterostigma plantagineum
BAB18170.1	AB042768	Zinnia elegans
CAA64221.1	X94449	Pimpinella brachycarpa
CAA64491.1	X95193	Pimpinella brachycarpa
CAA64152.1	X94375	Pimpinella brachycarpa
AAD37695.1	AF145726	Oryza sativa
AAD37700.1	AF145731	Oryza sativa
CAA06728.1	AJ005833	Craterostigma plantagineum
CAA65456.2	X96681	Oryza sativa
AAK31270.1	AC079890	Oryza sativa
AAF19980.1	AF211193	Oryza sativa
AAD37696.1	AF145727	Oryza sativa
CAA63222.1	X92489	Glycine max
AAA74017.1	U30475	Glycine max

SEQ ID NO. 2422

AAD17230.1	AF117339	Nicotiana tabacum
CAA09935.1	AJ012165	Capsicum annuum
BAA33755.2	AB017480	Nicotiana tabacum
AAK15322.1	AF332134	Chloroplast Medicago sativa
CAA06853.1	AJ006095	Cicer arietinum
BAA57906.1	AB001684	Chlorella vulgaris

SEQ ID NO. 2423

CAA55739.1	X79138	Nicotiana tabacum
CAA55742.1	X79141	Nicotiana tabacum
CAA55641.1	X79008	Nicotiana tabacum
CAA55642.1	X79009	Nicotiana tabacum
CAA55737.1	X79136	Nicotiana tabacum
CAA55741.1	X79140	Nicotiana tabacum

SEQ ID NO. 2431

AAB18669.1	U11716	Pisum sativum
AAA33662.1	M18250	Pisum sativum
AAD25355.1	AF115574	Pisum sativum

SEQ ID NO. 2442

AAC33475.1	AF082531	Pimpinella brachycarpa
AAF19968.1	AF207699	Elaeis guineensis
AAK21252.1	AF335239	Petunia x hybrida
AAK21251.1	AF335238	Petunia x hybrida
CAA53782.1	X76188	Nicotiana tabacum
BAA81886.1	AB003328	Oryza sativa
AAD38369.1	AF141965	Oryza sativa
AAK21257.1	AF335244	Petunia x hybrida
AAB41526.1	U25696	Sinapis alba
AAK21253.1	AF335240	Petunia x hybrida
AAG43199.1	AF112148	Zea mays
AAK21254.1	AF335241	Petunia x hybrida
AAB50187.1	U49734	Sorghum bicolor
BAA85630.1	AB022665	Gnetum parvifolium
CAA04322.1	AJ000760	Malus x domestica
AAB58907.1	U76726	Pinus radiata
AAF22138.1	AF129875	Capsicum annuum

AAB64250.1	U78782	Oryza sativa
AAD01266.1	AF006210	Pinus resinosa
CAB56800.1	AJ011675	Oryza sativa
AAK21249.1	AF335236	Petunia x hybrida
AAC97158.1	U69483	Picea mariana
AAC97157.1	U69482	Picea mariana
AAC97146.1	U46582	Picea mariana
AAC49817.1	U78892	Oryza sativa
AAB00078.1	L46397	Zea mays
AAD09342.1	AF023615	Pinus radiata
AAF04972.1	AF091458	Oryza sativa
AAF77579.1	AF072534	Capsicum annuum
CAB97353.1	AJ249145	Hordeum vulgare
AAB00079.1	L46398	Zea mays
AAD51423.1	U78950	Malus x domestica
BAA33458.1	AB007505	Triticum aestivum
AAF21900.1	AF109153	Oryza sativa

SEQ ID NO. 2444

AAD22975.1	AF126551	Solanum tuberosum subsp. tuberosum
CAA48638.1	X68678	Zea mays
AAF65770.1	AF242312	Euphorbia esula
AAC05639.1	AF052206	Chlamydomonas reinhardtii
AAG03106.1	AC073405	Oryza sativa
BAA84791.1	AP000559	Oryza sativa

SEQ ID NO. 2445

AAB71833.1	AF008568	Chlamydomonas reinhardtii
AAA33858.1	M62757	Petroselinum crispum
AAA73483.1	U27348	Populus deltoides
BAA21726.1	AB006187	Nicotiana tabacum
CAA59508.1	X85252	Cicer arietinum
BAA08531.1	D49655	Hordeum vulgare

SEQ ID NO. 2446

CAA76376.1	Y16778	Spinacia oleracea
AAD11483.1	U51193	Glycine max
AAD11484.1	U51194	Glycine max
BAA77387.1	AB024437	Scutellaria baicalensis
BAA03644.1	D14997	Oryza sativa
AAF63024.1	AF244921	Spinacia oleracea
CAA80502.1	Z22920	Spirodela polyrrhiza
AAD11481.1	U51191	Glycine max
AAD11482.1	U51192	Glycine max
CAA59487.1	X85230	Triticum aestivum
CAC21393.1	AJ401276	Zea mays
AAB97734.1	AF014502	Glycine max
CAA71495.1	Y10469	Spinacia oleracea
AAB48986.1	U16727	Medicago truncatula
AAA98491.1	L36981	Petroselinum crispum
AAA65637.1	L13654	Lycopersicon esculentum
AAA65636.1	L13653	Lycopersicon esculentum
AAF63027.1	AF244924	Spinacia oleracea
BAA92500.1	AP001383	Oryza sativa
CAA76374.2	Y16776	Spinacia oleracea
CAA62226.1	X90693	Medicago sativa
CAA40796.1	X57564	Armoracia rusticana
CAA71490.1	Y10464	Spinacia oleracea
AAC49820.1	AF014469	Oryza sativa
BAA82306.1	AB027752	Nicotiana tabacum
CAA62597.1	X91172	Raphanus sativus
BAA77388.1	AB024438	Scutellaria baicalensis
CAA62225.1	X90692	Medicago sativa
BAA92497.1	AP001383	Oryza sativa
AAF65464.2	AF247700	Oryza sativa
BAA92422.1	AP001366	Oryza sativa
BAA01950.1	D11337	Vigna angularis
AAD37427.1	AF149277	Phaseolus vulgaris
AAB41812.1	L36158	Medicago sativa
BAA07664.1	D42065	Nicotiana tabacum
BAA96643.1	AP002482	Oryza sativa
CAA71491.1	Y10465	Spinacia oleracea
BAA94962.1	AB042103	Asparagus officinalis
BAA03911.1	D16442	Oryza sativa
AAA32676.1	M37637	Arachis hypogaea
CAA09881.1	AJ011939	Trifolium repens
CAA71488.1	Y10462	Spinacia oleracea
AAB02926.1	U59284	Linum usitatissimum
AAC49819.1	AF014468	Oryza sativa
CAA62615.1	X91232	Mercurialis annua
AAC49821.1	AF014470	Oryza sativa

AAB67737.1	L77080	Stylosanthes humilis
CAA71496.1	Y10470	Spinacia oleracea

SEQ ID NO. 2447

AAB71887.1	AF020791	Hordeum vulgare
BAA05101.1	D26105	Hordeum vulgare
BAA05102.1	D26106	Cucumis sativus
BAB20760.1	AB037113	Cucumis sativus
BAA22284.1	AB007120	Oryza sativa
CAA06705.1	AJ005802	Solanum tuberosum
AAK16728.1	AF332962	Chlamydomonas reinhardtii
AAK16729.1	AF332963	Polytomella sp. 'Pringsheim 198.80'
AAC84139.1	AF101426	Cichorium intybus

SEQ ID NO. 2448

AAA16209.1	M95747	Triticum aestivum
AAA74724.1	M95746	Triticum aestivum

SEQ ID NO. 2449

CAB17076.1	Z99954	Phaseolus vulgaris
BAA88898.1	AB020961	Zea mays
CAA05894.1	AJ003137	Lycopersicon esculentum
AAD48496.1	AF172856	Lycopersicon esculentum
CAB53515.1	AJ245924	Solanum tuberosum
AAB88263.1	AF019147	Zea mays
CAB17074.1	Z99952	Phaseolus vulgaris
CAA12118.1	AJ224766	Phaseolus vulgaris
AAB68374.1	U52970	Phaseolus vulgaris
AAA79915.1	U17135	Dianthus caryophyllus
CAA53377.1	X75749	Vicia sativa
CAB16317.1	Z99173	Nicotiana tabacum
AAC49455.1	U41902	Pseudotsuga menziesii
CAA57538.1	X82011	Cicer arietinum
AAB41816.1	U44947	Pisum sativum
AAB70820.2	AF019145	Zea mays
AAB88262.1	AF019146	Zea mays
AAC62396.1	AF050756	Ricinus communis
CAB09699.1	Z97023	Hordeum vulgare
CAB09697.1	Z97021	Hordeum vulgare
AAD10337.1	U94591	Hordeum vulgare

BAA83472.1	AB004648	Oryza sativa
CAA56844.1	X80876	Oryza sativa
AAD28476.1	AF133838	Sandersonia aurantiaca
BAA83473.1	AB004819	Oryza sativa
AAK27968.1	AF242372	Ipomoea batatas
CAA84378.1	Z34895	Vicia sativa
AAC35211.1	U12637	Hemerocallis hybrid cultiv.
AAD28477.1	AF133839	Sandersonia aurantiaca
BAA11170.1	D76415	Oryza sativa
AAD20453.1	AF099203	Oryza sativa
CAB38314.1	AJ131995	Carica papaya
AAD53012.1	AF089849	Brassica napus
AAB37233.1	U34747	Phalaenopsis sp. SM9108

SEQ ID NO. 2454

CAB55395.1	AL117264	Oryza sativa
BAA93021.1	AP001552	Oryza sativa
BAA92501.1	AP001383	Oryza sativa
AAA17740.1	U08285	Nicotiana tabacum

SEQ ID NO. 2455

AAF87216.1	AF231351	Nicotiana tabacum
CAA67782.1	X99405	Nicotiana tabacum
AAB69317.1	AF012861	Petroselinum crispum
CAB52708.1	AJ010712	Solanum tuberosum
CAB52685.1	AJ132346	Dunaliella bioculata
CAA04994.1	AJ001772	Nicotiana tabacum
CAA58775.1	X83923	Solanum tuberosum
CAA03941.1	AJ000184	Spinacia oleracea
CAA03939.1	AJ000182	Spinacia oleracea
CAA03940.1	AJ000183	Spinacia oleracea
AAB41552.1	U18238	Medicago sativa subsp. sativa
AAD11426.1	AF097663	Mesembryanthemum crystallinum
AAB69319.1	AF012863	Petroselinum crispum
CAA52442.1	X74421	Solanum tuberosum
AAB69318.1	AF012862	Petroselinum crispum
BAA97662.1	AB029454	Triticum aestivum
BAA97663.1	AB029455	Triticum aestivum
CAA04993.1	AJ001770	Nicotiana tabacum
CAA04992.1	AJ001769	Nicotiana tabacum
BAA97664.1	AB029456	Triticum aestivum

AAG23802.1	AF260736	Cucurbita pepo
CAB66330.1	AJ279688	Betula pendula
BAA82155.1	AB011441	Triticum aestivum
CAA06200.1	AJ004900	Glycine max

SEQ ID NO. 2456

CAA48611.1	X68652	Raphanus sativus
CAA48610.1	X68651	Raphanus sativus
AAC05089.1	AF038046	Gossypium hirsutum
AAA33108.1	M96068	Catharanthus roseus
AAB52551.1	U51985	Solanum tuberosum
AAB87727.1	U60452	Nicotiana tabacum
CAA70440.1	Y09238	Zea mays
CAA45181.1	X63649	Nicotiana sylvestris
AAD28179.1	AF110383	Capsicum annuum
AAB52552.1	U51986	Solanum tuberosum
BAA93631.1	AB022690	Solanum tuberosum
AAB62581.1	U68072	Lycopersicon esculentum
AAB69726.1	U72145	Camptotheca acuminata
AAB53748.1	U95816	Oryza sativa
BAB20771.1	AB041031	Solanum tuberosum
AAB69727.1	U72146	Camptotheca acuminata
AAD47596.1	AF142473	Artemisia annua
AAA34169.1	M63642	Lycopersicon esculentum
AAA68966.1	U14625	Artemisia annua
AAA33358.1	M74798	Hevea brasiliensis
AAA68965.1	U14624	Artemisia annua
AAD08820.1	U43961	Oryza sativa
AAA33360.1	M74800	Hevea brasiliensis
CAA92821.1	Z68504	Oryza sativa
AAC05088.1	AF038045	Gossypium hirsutum
AAC15475.1	AF034760	Tagetes erecta
AAC15476.1	AF034761	Tagetes erecta
CAA38469.1	X54659	Hevea brasiliensis
CAA38467.1	X54657	Hevea brasiliensis
AAD38873.1	AF110382	Oryza sativa
AAA33040.1	L10390	Camptotheca acuminata
AAD03789.1	U43711	Morus alba
AAC72378.1	AF096838	Solanum tuberosum
AAB04043.1	L40938	Lycopersicon esculentum
CAA38468.1	X54658	Hevea brasiliensis

CAA52787.1	X74783	Lithospermum erythrorhizon
AAD09278.1	U97683	Glycine max
AAG43469.1	AF196964	Bixa orellana
BAA09705.1	D63389	Cucumis sativus
AAB47161.1	S82272	Gossypium barbadense

/gene="3-hydroxy-3-methylglutaryl coenzyn
reductase,. This

AAA33359.1	M74799	Hevea brasiliensis
AAC37432.1	L34825	Solanum tuberosum
AAC37434.1	L34827	Solanum tuberosum
AAC37431.1	L34823	Solanum tuberosum
AAC37433.1	L34826	Solanum tuberosum
AAC37435.1	L34828	Solanum tuberosum
AAC37436.1	L34829	Solanum tuberosum

SEQ ID NO. 2459

CAA33932.1	X15901	Plastid Oryza sativa

SEQ ID NO. 2460

CAA85362.1	Z36894	Solanum tuberosum
AAB88618.1	AF034947	Zea mays
AAC78101.1	AF093629	Oryza sativa
AAD46520.1	AF149116	Populus tremula x Populus

tremuloides

AAF27918.1	AF220202	Malus x domestica
CAA12415.1	AJ225172	Solanum tuberosum
AAC50012.1	AF009675	Hordeum vulgare var. distichum
AAB82136.1	AF022733	Oryza sativa

SEQ ID NO. 2462

BAA83711.1	AB014484	Nicotiana tabacum
AAF37579.1	AF235958	Medicago sativa
CAA58117.1	X82943	Zea mays
CAA47868.1	X67599	Lycopersicon esculentum
CAA47869.1	X67600	Lycopersicon peruvianum
CAA47870.1	X67601	Lycopersicon peruvianum
AAF74563.1	AF208544	Lycopersicon peruvianum
CAA87080.1	Z46956	Glycine max
CAA87076.1	Z46952	Glycine max
CAA39034.1	X55347	Lycopersicon peruvianum
BAA83710.1	AB014483	Nicotiana tabacum

CAA87077.1	Z46953	Glycine max
CAA09301.1	AJ010644	Pisum sativum
CAA87079.1	Z46955	Glycine max
CAA87075.1	Z46951	Glycine max
CAA09300.1	AJ010643	Pisum sativum

SEQ ID NO. 2463

CAA50218.1	X70868	Cucurbita sp.
CAA50217.1	X70867	Cucurbita sp.
CAA78100.1	Z12114	Zea mays
AAA33450.1	L21007	Zea mays
AAA33452.1	L21006	Zea mays
AAA33451.1	L21008	Zea mays
CAA77645.1	Z11546	Zea mays
CAA78101.1	Z12115	Zea mays
CAA81689.1	Z27165	Brassica napus
AAB39827.1	U46136	Solanum tuberosum
BAA92724.1	AP001389	Oryza sativa
AAA66365.1	U21139	Chloroplast Pisum sativum
AAA32980.1	M35600	Brassica napus
AAA32979.1	M35599	Brassica napus
CAA93139.1	Z68903	Secale cereale
CAA81736.1	Z27222	Brassica napus
AAC68501.1	AF030515	Canavalia lineata
BAB16318.1	AB049590	Avicennia marina
AAB39828.1	U46137	Solanum tuberosum
CAA89836.1	Z49766	Pseudotsuga menziesii
CAA09989.1	AJ012318	Glycine max

SEQ ID NO. 2467

BAA85440.1	AP000616	Oryza sativa
CAB53493.1	AJ245900	Oryza sativa

SEQ ID NO. 2468

AAD22518.1	AF001136	Pinus radiata
BAA33205.1	AB001887	Oryza sativa
AAC35496.1	AF052690	Raphanus sativus
BAA33204.1	AB001886	Oryza sativa
BAA33200.1	AB001882	Oryza sativa
BAA33206.1	AB001888	Oryza sativa
BAA33202.1	AB001884	Oryza sativa

SEQ ID NO. 2474

AAG13663.1	AF263457	Zea mays
BAB39155.1	AB048713	Pisum sativum
BAA90816.1	AP001168	Oryza sativa
AAC98090.1	AF067400	Zea mays
BAB39156.1	AB048714	Pisum sativum
AAC98091.1	AF067401	Oryza sativa

SEQ ID NO. 2475

CAA83655.1	Z32743	Pisum sativum
AAB02720.1	U58597	Solanum tuberosum

SEQ ID NO. 2479

AAB97366.1	AF039531	Oryza sativa

SEQ ID NO. 2485

BAA21089.1	D50085	Cucumis sativus
CAA44786.1	X63060	Pisum sativum
AAF20949.1	AF207691	Daucus carota
AAF89208.1	AF279251	Vigna radiata
AAC60560.2	S63824	Pinus mugo
CAA54042.1	X76532	Triticum aestivum
BAA31693.1	AB007321	Marchantia paleacea
CAA34913.1	X17067	Avena sativa
AAF82475.1	AF243522	Lycopersicon esculentum
AAB86734.1	AF027356	Pinus strobus
AAB04951.1	U36752	Chlamydomonas reinhardtii
AAD20020.1	AF126871	Chloroplast Vigna radiata
AAF82471.1	AF243520	Lycopersicon esculentum
AAC60561.2	S63825	Pinus mugo
AAF82474.1	AF243524	Lycopersicon esculentum
AAB86728.1	AF027350	Pinus taeda
AAF82473.1	AF243523	Lycopersicon esculentum
AAF82472.1	AF243521	Lycopersicon esculentum
AAB86733.1	AF027355	Pinus strobus
AAC78100.1	AF093628	Oryza sativa
AAB05205.1	L22765	Medicago truncatula
AAB05206.1	L22766	Medicago truncatula
BAA83744.1	AB024081	Cucumis sativus

SEQ ID NO. 2487

AAD00829.1	U96736	Selaginella lepidophylla

SEQ ID NO. 2489

AAA86365.1	U21743	Brassica napus
CAC34417.1	AJ311624	Pisum sativum
BAB17848.1	AB015593	Oryza sativa
AAC04836.1	AF032975	Oryza sativa
BAA74702.1	AB010876	Oryza sativa
AAC05682.1	AF051156	Oryza sativa
CAB77393.1	AJ276491	Phaseolus vulgaris
CAA75907.1	Y15962	Hordeum vulgare
BAA08266.1	D45425	Ipomoea nil
AAK28807.1	AF310960	Linum usitatissimum
AAG36666.1	AF310017	Beta vulgaris
AAG36667.1	AF310018	Beta vulgaris
AAG36665.1	AF310016	Beta vulgaris
CAA11031.1	AJ222979	Pisum sativum
AAC04835.1	AF032974	Oryza sativa
BAB39965.1	AP003018	Oryza sativa
BAB39980.1	AP003020	Oryza sativa
CAB55394.1	AL117264	Oryza sativa
BAA86880.1	AB028454	Barbula unguiculata
AAF03355.1	AF132671	Nicotiana plumbaginifolia
AAC99473.1	AF039201	Pinus caribaea
AAC05146.1	AF049065	Pinus radiata
AAC25777.1	AF072694	Oryza sativa
AAA20245.1	U01963	Hordeum vulgare
BAA78563.1	AB024338	Atriplex lentiformis
AAA34268.1	M21962	Triticum aestivum
AAA34270.1	M63223	Triticum aestivum
AAA33030.1	M93041	Mesembryanthemum crystallinum
CAA71052.1	Y09917	Triticum aestivum
CAB65371.1	AJ250834	Pisum sativum
CAB65370.1	AJ250833	Pisum sativum
AAA34271.1	M63224	Triticum aestivum
CAB65369.1	AJ250832	Pisum sativum
AAC78470.1	AF067731	Solanum tuberosum
AAC04832.1	AF032971	Oryza sativa
CAA71050.1	Y09915	Triticum aestivum
AAC04833.1	AF032972	Oryza sativa
BAA25197.1	AB012138	Lycopersicon esculentum
AAD43972.1	AF141879	Oryza sativa

SEQ ID NO. 2495

AAB63262.1	U82815	Zea mays
AAF68624.1	AF254072	Zea mays
AAC61674.1	AF026917	Zea mays
AAF68625.1	AF254073	Zea mays

SEQ ID NO. 2501

AAG09635.1	AY007281	Medicago truncatula
AAD30548.1	AF136579	Lycopersicon esculentum
AAF97509.1	AF246266	Lycopersicon esculentum
AAC17441.1	AF065444	Pisum sativum
AAF61374.1	AF133267	Thlaspi caerulescens
AAF97510.1	AF246266	Lycopersicon esculentum
AAD30549.1	AF136580	Lycopersicon esculentum

SEQ ID NO. 2503

CAB82852.1	Z30329	Mesembryanthemum crystallinum
BAB18104.1	AB042714	Chlamydomonas reinhardtii
BAB18105.1	AB042715	Chlamydomonas reinhardtii
BAA83689.1	AB011968	Oryza sativa
BAA83688.1	AB011967	Oryza sativa
AAF22219.1	AF141378	Zea mays
CAA73067.1	Y12464	Sorghum bicolor
BAA96628.1	AP002482	Oryza sativa
CAA89202.1	Z49233	Chlamydomonas eugametos
CAA73068.1	Y12465	Sorghum bicolor
BAA34675.1	AB011670	Triticum aestivum
AAF06970.1	AF162662	Kalanchoe fedtschenkoi
AAF06969.1	AF162661	Kalanchoe fedtschenkoi
CAA39936.1	X56599	Daucus carota
BAA90814.1	AP001168	Oryza sativa
AAB62693.1	AF004947	Oryza sativa
CAA71142.1	Y10036	Cucumis sativus
BAA05649.1	D26602	Nicotiana tabacum
AAC25423.1	AF072908	Nicotiana tabacum
AAF19403.1	AF203481	Lycopersicon esculentum
AAF21062.1	AF216527	Dunaliella tertiolecta
AAF19402.1	AF203480	Lycopersicon esculentum

CAA65244.1	X95997	Solanum tuberosum
CAA57898.1	X82548	Hordeum vulgare
BAA13608.1	D88399	Oryza sativa
CAA08995.1	AJ010091	Brassica napus
AAF19401.1	AF203479	Glycine max
BAA05648.1	D26601	Nicotiana tabacum
AAD23582.1	AF128443	Glycine max
AAD00239.1	U73938	Nicotiana tabacum
AAG60195.1	AC084763	Oryza sativa

SEQ ID NO. 2506

AAD50305.1	AF175385	Chlamydomonas reinhardtii
AAG17879.1	AF293406	Phaseolus coccineus
CAA54255.1	X76932	Spinacia oleracea

SEQ ID NO. 2508

CAA73134.1	Y12531	Brassica oleracea
AAB93834.1	U82481	Zea mays
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
AAA62232.1	U00443	Brassica napus
BAA92836.1	AB032473	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
AAC23542.1	U20948	Ipomoea trifida
BAA23676.1	AB000970	Brassica rapa
CAB41879.1	Y18260	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
AAA33008.1	M97667	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
CAA74662.1	Y14286	Brassica oleracea
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
BAA07577.2	D38564	Brassica rapa
CAA79355.1	Z18921	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
BAB21001.1	AB054061	Brassica rapa
BAA92837.1	AB032474	Brassica oleracea
AAD21872.1	AF078082	Phaseolus vulgaris
AAF34428.1	AF172282	Oryza sativa
AAD52097.1	AF088885	Nicotiana tabacum

BAA94516.1	AP001800	Oryza sativa

SEQ ID NO. 2509

AAB48305.1	U79733	Beta procumbens

SEQ ID NO. 2510

CAA77988.1	Z11931	Oryza sativa
CAA62918.1	X91808	Oryza sativa
AAC05719.1	AF008122	Eleusine indica
CAA44863.1	X63178	Zea mays
CAA67942.1	X99623	Hordeum vulgare
AAA16225.1	U05258	Zea mays
CAA44862.1	X63177	Zea mays
CAB77671.1	AJ133709	Miscanthus sinensis
CAA66075.1	X97446	Avena sativa
CAB77672.1	AJ133710	Miscanthus sinensis
CAA47635.1	X67162	Prunus dulcis
BAA03955.1	D16504	Chlorella vulgaris
AAA79910.1	U12589	Pisum sativum
CAA48927.1	X69183	Anemia phyllitidis
CAB66336.1	AJ279695	Betula pendula
AAG02564.1	AY007250	Daucus carota
CAA10663.1	AJ132399	Hordeum vulgare
CAA06618.1	AJ005598	Eleusine indica
AAC05717.1	AF008120	Eleusine indica
BAB19779.1	AB052822	Nicotiana tabacum
CAA33734.1	X15704	Zea mays
CAA33733.1	X15704	Zea mays
AAA99438.1	L24546	Volvox carteri
CAA31326.1	X12846	Volvox carteri
CAA69724.1	Y08490	Hordeum vulgare
CAA06619.1	AJ005599	Eleusine indica
AAA33095.1	M11447	Chlamydomonas reinhardtii
AAC05718.1	AF008121	Eleusine indica
AAB86648.1	AF032877	Chloromonas sp. ANT3
AAB86649.1	AF032876	Chloromonas sp. ANT1
AAD10486.1	U76558	Triticum aestivum
AAG16905.1	AF182523	Oryza sativa
AAA33098.1	M11448	Chlamydomonas reinhardtii
CAA62916.1	X91806	Oryza sativa
CAA62917.1	X91807	Oryza sativa

AAB08791.1	U40042	Hordeum vulgare
CAA44861.1	X63176	Zea mays
AAA33518.1	M60171	Zea mays
AAB84298.1	AF030548	Oryza sativa
BAA92148.1	AB038515	Chlorella ellipsoidea
AAB36609.1	U37794	Eucalyptus globulus subsp. bicostata
CAA48928.1	X69184	Anemia phyllitidis
AAD11425.1	AF097662	Mesembryanthemum crystallinum
CAB76917.1	AJ276012	Hordeum vulgare
CAA52158.1	X73980	Zea mays
BAA82638.1	D63137	Zinnia elegans
CAA38614.1	X54845	Pisum sativum
AAB64308.1	U63927	Daucus carota
AAA20186.1	L10633	Zea mays

SEQ ID NO. 2511

AAC32114.1	AF051209	Picea mariana

SEQ ID NO. 2514

BAA84780.1	AB018444	Oryza sativa
BAA84779.1	AB018443	Oryza sativa

SEQ ID NO. 2515

BAA85438.1	AP000616	Oryza sativa
AAG43550.1	AF211532	Nicotiana tabacum
BAA90357.1	AP001080	Oryza sativa

SEQ ID NO. 2516

AAF67053.1	AF190304	Adiantum raddianum
AAF67052.1	AF190303	Adiantum raddianum
AAF67051.1	AF190302	Secale cereale
AAF67050.1	AF190301	Secale cereale
AAG08959.1	AF122051	Solanum tuberosum
AAG08960.1	AF122052	Solanum tuberosum
AAG08961.1	AF122053	Solanum tuberosum
AAF34434.1	AF172282	Oryza sativa
CAA67000.1	X98355	Oryza sativa
AAG22863.1	AY008692	Hordeum vulgare
CAA61021.1	X87690	Hordeum vulgare
AAD31395.1	AF114162	Lolium temulentum
BAA96421.1	AB044084	Triticum aestivum
CAB40189.1	AJ133638	Avena sativa
CAA67575.1	X99134	Lycopersicon esculentum
CAA78387.1	Z13997	Petunia x hybrida
CAA66952.1	X98308	Lycopersicon esculentum
CAA78388.1	Z13998	Petunia x hybrida
CAA72218.1	Y11415	Oryza sativa
BAA81736.1	AB029165	Glycine max
BAA81733.2	AB029162	Glycine max
BAA88224.1	AB028652	Nicotiana tabacum
BAA23341.1	D88621	Oryza sativa
CAA50223.1	X70878	Hordeum vulgare
BAA88222.1	AB028650	Nicotiana tabacum
CAA50226.1	X70881	Hordeum vulgare
CAA72217.1	Y11414	Oryza sativa
BAA88221.1	AB028649	Nicotiana tabacum
AAB41101.1	U72762	Nicotiana tabacum
BAA88223.1	AB028651	Nicotiana tabacum
BAB40790.1	AB058642	Lilium hybrid division I
AAG28526.1	AF198499	Nicotiana tabacum
AAG28525.1	AF198498	Nicotiana tabacum
CAA72187.1	Y11352	Oryza sativa
CAA78386.1	Z13996	Petunia x hybrida
BAA81730.1	AB029159	Glycine max
BAA81731.1	AB029160	Glycine max

SEQ ID NO. 2518

CAA62476.1	X90990	Solanum tuberosum
AAF66637.1	AF143505	Lycopersicon esculentum
CAA66616.1	X97980	Solanum berthaultii
BAA96593.1	AP002481	Oryza sativa
AAA50304.1	M92989	Pisum sativum
CAA82993.1	Z30332	Spinacia oleracea
CAA82994.1	Z30333	Mesembryanthemum crystallinum
CAA82992.1	Z30331	Mesembryanthemum crystallinum
CAB82852.1	Z30329	Mesembryanthemum crystallinum
CAA50374.1	X71057	Nicotiana tabacum
CAA82991.1	Z30330	Spinacia oleracea
AAD50585.1	AF089099	Salvia columbariae
AAD50584.1	AF089097	Salvia columbariae
BAB03409.1	AP002816	Oryza sativa

AAB93859.1	U89678	Lycopersicon esculentum
AAD50586.1	AF089100	Salvia columbariae
AAD50587.1	AF089101	Salvia columbariae
AAB93861.1	U89680	Lycopersicon esculentum
AAB93860.1	U89679	Lycopersicon esculentum
AAD50588.1	AF089102	Salvia columbariae
AAD50589.1	AF089103	Salvia columbariae
AAB93862.1	U89681	Lycopersicon esculentum
AAB93863.1	U89682	Lycopersicon esculentum

SEQ ID NO. 2521

CAA33924.1	X15901	Plastid Oryza sativa

SEQ ID NO. 2522

BAA01181.1	D10335	Oryza sativa
BAA01180.1	D10334	Oryza sativa
BAA94761.1	AB041773	Oryza sativa
AAB68604.1	U82330	Prunus armeniaca
AAF23372.1	AF187063	Oryza sativa
AAF23371.1	AF187062	Oryza sativa
AAD41679.1	AF086603	Ceratopteris richardii
BAA85443.1	AP000616	Oryza sativa

SEQ ID NO. 2523

CAB65369.1	AJ250832	Pisum sativum
AAF03355.1	AF132671	Nicotiana plumbaginifolia
AAC78470.1	AF067731	Solanum tuberosum
BAB39965.1	AP003018	Oryza sativa
BAB39980.1	AP003020	Oryza sativa
AAC04835.1	AF032974	Oryza sativa
BAA25197.1	AB012138	Lycopersicon esculentum
AAC04833.1	AF032972	Oryza sativa
AAC04832.1	AF032971	Oryza sativa
CAB55394.1	AL117264	Oryza sativa
AAB97470.1	AF042489	Oryza sativa
CAB55558.1	AJ237942	Triticum aestivum
AAG00425.1	AF250933	Hordeum vulgare
CAA63659.1	X93171	Hordeum vulgare
CAB55559.1	AJ237943	Triticum aestivum
AAD43973.1	AF141880	Oryza sativa
AAD43971.1	AF141878	Oryza sativa
AAC04837.1	AF032976	Oryza sativa
AAD43972.1	AF141879	Oryza sativa
AAG00427.1	AF250935	Hordeum vulgare
AAG00426.1	AF250934	Hordeum vulgare
BAA86880.1	AB028454	Barbula unguiculata
AAC25777.1	AF072694	Oryza sativa
BAA78563.1	AB024338	Atriplex lentiformis
AAA34270.1	M63223	Triticum aestivum
AAC04834.1	AF032973	Oryza sativa
AAA34268.1	M21962	Triticum aestivum
AAG00428.1	AF250936	Hordeum vulgare
AAA20245.1	U01963	Hordeum vulgare
AAA34271.1	M63224	Triticum aestivum
AAG00429.1	AF250937	Hordeum vulgare
AAC99473.1	AF039201	Pinus caribaea
CAA71052.1	Y09917	Triticum aestivum
AAA33030.1	M93041	Mesembryanthemum crystallinum
AAC05146.1	AF049065	Pinus radiata
CAB65371.1	AJ250834	Pisum sativum
CAB65370.1	AJ250833	Pisum sativum
CAA71050.1	Y09915	Triticum aestivum
CAC34417.1	AJ311624	Pisum sativum
AAA86365.1	U21743	Brassica napus

SEQ ID NO. 2524

CAA90681.1	Z50801	Zea mays
AAC14566.1	AF058796	Oryza sativa
AAD27878.1	AF139466	Vigna radiata
CAA45523.1	X64198	Nicotiana tabacum
AAA34140.1	M17633	Lycopersicon esculentum
AAF23819.1	AF218305	Hordeum vulgare
AAA34186.1	J03558	Lycopersicon esculentum
CAA41404.1	X58514	Pinus sylvestris
CAA41405.1	X58515	Pinus sylvestris
AAC67558.1	AF094776	Oryza sativa
CAA65042.1	X95727	Brassica juncea
AAF44702.1	AF241524	Asarina barclaiana
AAA64415.1	U23189	Zea mays
AAA64414.1	U23188	Zea mays
AAG28464.1	AF195794	Chlamydomonas reinhardtii
CAA44777.1	X63052	Hordeum vulgare

CAA32109.1	X13909	Oryza sativa
AAA68425.1	M34396	Polystichum munitum
CAA34459.1	X16436	Sinapis alba
CAA33903.1	X15894	Sinapis alba
CAA38635.1	X54856	Chlamydomonas moewusii
BAA00536.1	D00641	Oryza sativa
AAA80594.1	U21114	Solanum tuberosum
BAA32346.1	AB013728	Cryptomeria japonica
AAF89205.1	AF279248	Vigna radiata
AAD48017.1	AF165529	Rumex palustris
AAA33392.1	M12152	Lemna gibba
BAA00537.1	D00642	Oryza sativa
CAA32657.1	X14505	Pinus sylvestris
AAC34983.1	AF039598	Prunus persica
AAA34141.1	M17558	Lycopersicon esculentum
AAA34142.1	M17559	Lycopersicon esculentum
CAA31418.1	X12980	Glycine max
AAF89207.1	AF279250	Vigna radiata
CAA38025.1	X54090	Gossypium hirsutum
CAA28639.1	X04966	Petunia x hybrida
CAA40365.1	X57082	Pisum sativum
AAF89206.1	AF279249	Vigna radiata
AAB19040.1	U51632	Pinus palustris
CAA89823.1	Z49749	Pseudotsuga menziesii

SEQ ID NO. 2529

AAB82766.1	U89510	Hordeum vulgare
AAB82767.1	U89509	Zea mays
AAB82764.1	U89511	Allium porrum
CAC19810.1	AJ292343	Solanum tuberosum
CAB52307.1	AJ245634	Solanum tuberosum
AAB09776.1	L20485	Hyoscyamus niger
BAA85845.1	AB026545	Hyoscyamus niger
AAA33282.1	L20474	Datura stramonium
CAA45866.1	X64566	Cuphea lanceolata
CAC34420.1	AJ307584	Solanum tuberosum
BAA13547.1	D88156	Hyoscyamus niger
BAA85844.1	AB026544	Hyoscyamus niger
AAA33281.1	L20473	Datura stramonium
AAA33280.1	L20475	Datura stramonium

SEQ ID NO. 2530

AAC39333.1	AF030052	Oryza sativa subsp. japonic
AAD39534.2	AF150630	Gossypium hirsutum

SEQ ID NO. 2531

AAG43043.1	AY014277	Lolium perenne
AAG43044.1	AY014280	Lolium perenne
CAA74331.1	Y14008	Triticum aestivum
CAA74330.1	Y14007	Triticum aestivum

SEQ ID NO. 2532

AAD19839.1	AF067602	Clarkia concinna
AAC49395.1	U58314	Clarkia breweri
AAD19840.1	AF067603	Clarkia breweri
AAD19841.1	AF067604	Oenothera arizonica
AAD19838.1	AF067601	Clarkia breweri

SEQ ID NO. 2533

BAA88183.1	AP000836	Oryza sativa

SEQ ID NO. 2534

AAA50763.1	U15605	Nicotiana glutinosa
AAG43546.1	AF211528	Nicotiana tabacum
CAA08797.1	AJ009719	Solanum tuberosum
CAA08798.1	AJ009720	Solanum tuberosum
AAB47618.1	U73916	Linum usitatissimum
AAG09951.1	AF175388	Glycine max
AAG01052.1	AF175395	Glycine max
AAD25966.1	AF093639	Linum usitatissimum
AAD25969.1	AF093642	Linum usitatissimum
AAD25975.1	AF093648	Linum usitatissimum
AAD25965.1	AF093638	Linum usitatissimum
AAD25971.1	AF093644	Linum usitatissimum
AAD25970.1	AF093643	Linum usitatissimum
AAD25967.1	AF093640	Linum usitatissimum
AAD25974.1	AF093647	Linum usitatissimum
AAD25972.1	AF093645	Linum usitatissimum
CAC35331.1	AJ310156	Linum usitatissimum
CAC35323.1	AJ310150	Linum usitatissimum
AAD25968.1	AF093641	Linum usitatissimum
AAA91021.1	U27081	Linum usitatissimum

AAA91022.1	U27081	Linum usitatissimum
AAG09954.1	AF175399	Glycine max
AAD25973.1	AF093646	Linum usitatissimum
CAC35327.1	AJ310152	Linum usitatissimum
AAD25976.1	AF093649	Linum usitatissimum
AAG01051.1	AF175394	Glycine max
CAC35336.1	AJ310161	Linum usitatissimum
CAC35332.1	AJ310157	Linum usitatissimum
CAC35328.1	AJ310153	Linum usitatissimum
CAC35325.1	AJ310150	Linum usitatissimum
AAK28810.1	AF310964	Linum usitatissimum
CAC35330.1	AJ310155	Linum usitatissimum
AAK28812.1	AF310968	Linum usitatissimum
CAC35326.1	AJ310151	Linum usitatissimum
CAC35339.1	AJ310164	Linum usitatissimum
CAC35321.1	AJ310150	Linum usitatissimum
CAC35337.1	AJ310162	Linum usitatissimum
CAC35329.1	AJ310154	Linum usitatissimum
CAC35334.1	AJ310159	Linum usitatissimum
CAC35338.1	AJ310163	Linum usitatissimum
CAC35333.1	AJ310158	Linum usitatissimum
AAK28806.1	AF310960	Linum usitatissimum
AAK28811.1	AF310966	Linum usitatissimum
AAK28809.1	AF310962	Linum usitatissimum
AAK28803.1	AF310958	Linum usitatissimum
AAK28804.1	AF310959	Linum usitatissimum
AAK28808.1	AF310961	Linum usitatissimum
AAK28805.1	AF310960	Linum usitatissimum

SEQ ID NO. 2536

AAF67342.1	AF229795	Vigna radiata
AAF67341.1	AF229794	Vigna radiata
BAB21492.1	AB046543	Pyrus pyrifolia
CAA10128.1	AJ012687	Cicer arietinum
CAA10174.1	AJ012797	Lycopersicon esculentum
AAF21626.1	AF023847	Lycopersicon esculentum
CAA09457.1	AJ011010	Cicer arietinum
CAA59162.1	X84684	Brassica oleracea
CAA06309.1	AJ005042	Cicer arietinum
AAF70821.1	AF154420	Lycopersicon esculentum
AAB61470.1	AF004812	Mangifera indica
CAA10175.1	AJ012798	Lycopersicon esculentum
AAC77377.1	AF064786	Carica papaya
CAA54525.1	X77319	Asparagus officinalis
AAC25984.1	AF020390	Lycopersicon esculentum
CAA10173.1	AJ012796	Lycopersicon esculentum
AAF70822.1	AF154421	Lycopersicon esculentum
CAA07236.1	AJ006771	Cicer arietinum
AAG12249.1	AF184080	Prunus armeniaca
CAA10064.1	AJ012578	Carica papaya
CAA06310.1	AJ005043	Cicer arietinum
AAC28739.1	AF079874	Carica papaya
AAD45349.1	AF159124	Vitis vinifera

SEQ ID NO. 2537

AAD54821.1	AF137379	Chloroplast Nephroselmis olivacea
AAF43860.1	AF166114	Chloroplast Mesostigma viride
AAA18546.1	M94204	Nicotiana tabacum
CAA74893.1	Y14561	Pisum sativum
AAK08141.1	AF234537	Pelargonium graveolens
AAF15312.1	AF145053	Oryza sativa
AAG32661.1	AF264877	Zea mays
CAA75382.1	Y15108	Glycine max

SEQ ID NO. 2539

BAA07280.1	D38091	Triticum aestivum
BAA07278.1	D38089	Triticum aestivum
CAA64356.1	X94693	Triticum aestivum
AAB66346.1	AF013803	Pinus taeda
CAA48030.1	X67819	Picea abies
AAA34249.1	M31922	Volvox carteri
AAA34247.1	M31921	Volvox carteri
AAA98453.1	U16726	Chlamydomonas reinhardtii
CAA07234.1	AJ006768	Cicer arietinum
AAA98451.1	U16725	Chlamydomonas reinhardtii
AAA98447.1	U16724	Chlamydomonas reinhardtii
AAF65769.1	AF242311	Euphorbia esula
AAB04687.1	U08225	Zea mays
CAA37828.1	X53831	Petroselinum crispum
BAA85117.1	AB018242	Solanum melongena
BAA07276.1	D38087	Triticum aestivum

BAA07279.1	D38090	Triticum aestivum
BAA07277.1	D38088	Triticum aestivum
AAA86947.1	U10041	Pisum sativum
CAA64423.1	X94973	Triticum aestivum
CAB53509.1	AJ245999	Brassica napus
CAA65069.1	X95763	Allium cepa
AAF07182.1	AF193345	Oryza sativa
BAA96096.1	AB003781	Lilium longiflorum
BAA96097.1	AB003782	Lilium longiflorum
CAB40356.1	AJ010974	Lilium longiflorum

SEQ ID NO. 2541

AAD26942.1	AF119050	Datisca glomerata
BAA05079.1	D26086	Petunia x hybrida
AAC06243.1	AF053077	Nicotiana tabacum
BAA05077.1	D26084	Petunia x hybrida
BAA05076.1	D26083	Petunia x hybrida
AAB53260.1	U76554	Brassica rapa
BAA05078.1	D26085	Petunia x hybrida
AAB53261.1	U76555	Brassica rapa
AAK01713.1	AF332876	Oryza sativa
BAA21920.1	AB006598	Petunia x hybrida
BAA21922.1	AB006600	Petunia x hybrida
BAA19112.1	AB000453	Petunia x hybrida
BAA21927.1	AB006605	Petunia x hybrida
BAA96071.1	AB035133	Petunia x hybrida
BAA96070.1	AB035132	Petunia x hybrida
BAA21919.1	AB006597	Petunia x hybrida
BAA19114.1	AB000455	Petunia x hybrida
BAA21921.1	AB006599	Petunia x hybrida
BAA21928.1	AB006606	Petunia x hybrida
BAA21925.1	AB006603	Petunia x hybrida
BAA19111.1	AB000452	Petunia x hybrida
BAA19926.1	AB000456	Petunia x hybrida
BAA21924.1	AB006602	Petunia x hybrida
BAA21923.1	AB006601	Petunia x hybrida
BAA21926.1	AB006604	Petunia x hybrida
BAA19110.1	AB000451	Petunia x hybrida
BAA19113.1	AB000454	Petunia x hybrida

SEQ ID NO. 2545

AAF63027.1	AF244924	Spinacia oleracea
AAF63026.1	AF244923	Spinacia oleracea
BAA94962.1	AB042103	Asparagus officinalis
BAA92500.1	AP001383	Oryza sativa
AAF63025.1	AF244922	Spinacia oleracea
CAA62615.1	X91232	Mercurialis annua
BAA92422.1	AP001366	Oryza sativa
BAA92497.1	AP001383	Oryza sativa
CAB65334.1	AJ250121	Picea abies
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAD43561.1	AF155124	Gossypium hirsutum
BAA82306.1	AB027752	Nicotiana tabacum
BAA06335.1	D30653	Populus kitakamiensis
CAA62226.1	X90693	Medicago sativa
CAB94692.1	AJ242742	Ipomoea batatas
AAD37430.1	AF149280	Phaseolus vulgaris
CAA62227.1	X90694	Medicago sativa
BAA07241.1	D38051	Populus kitakamiensis
BAA77389.1	AB024439	Scutellaria baicalensis
BAA14143.1	D90115	Armoracia rusticana
BAA06334.1	D30652	Populus kitakamiensis
CAA71492.1	Y10466	Spinacia oleracea
AAB02554.1	L37790	Stylosanthes humilis
AAD37427.1	AF149277	Phaseolus vulgaris
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
AAB97734.1	AF014502	Glycine max
AAC05277.1	AF049881	Linum usitatissimum
AAC49819.1	AF014468	Oryza sativa
AAC98519.1	AF007211	Glycine max
BAA11853.1	D83225	Populus nigra
CAA59487.1	X85230	Triticum aestivum
AAB41811.1	L36157	Medicago sativa
BAA11852.1	D83224	Populus nigra
CAA59485.1	X85228	Triticum aestivum
CAA66036.1	X97350	Populus balsamifera subsp. trichocarpa
CAA62225.1	X90692	Medicago sativa
AAB41810.1	L36156	Medicago sativa

CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
AAB48986.1	U16727	Medicago truncatula
CAA62597.1	X91172	Raphanus sativus
AAB47602.1	L07554	Linum usitatissimum
CAB99487.1	AJ276227	Hordeum vulgare
CAA37713.1	X53675	Triticum aestivum
BAA03911.1	D16442	Oryza sativa
AAC49821.1	AF014470	Oryza sativa
BAA14144.1	D90116	Armoracia rusticana
AAA34108.1	J02979	Nicotiana tabacum

SEQ ID NO. 2546

AAF98368.1	AF158027	Nicotiana tabacum
AAD22170.1	AF061282	Sorghum bicolor
AAD22169.1	AF061282	Sorghum bicolor
AAF98369.1	AF158253	Nicotiana tabacum
CAA73328.1	Y12793	Cucumis sativus
AAK27797.1	AF318315	Vigna unguiculata
AAK18751.1	AF193067	Vigna unguiculata
AAD22149.1	AF061282	Sorghum bicolor
AAB08428.1	U68484	Nicotiana tabacum
CAA11041.1	AJ223038	Hevea brasiliensis
CAA11042.1	AJ223039	Hevea brasiliensis
CAA27571.1	X03932	Solanum tuberosum
CAA25592.1	X01125	Solanum tuberosum
AAA66198.1	U09331	Solanum brevidens
CAA27588.1	X03956	Solanum tuberosum
AAA33819.1	M18880	Solanum tuberosum
CAA31576.1	X13179	Solanum tuberosum
AAA33828.1	M21879	Solanum tuberosum
CAA31575.1	X13178	Solanum tuberosum
CAA81735.1	Z27221	Solanum tuberosum
AAB08427.1	U68483	Nicotiana tabacum
AAF98370.1	AF158254	Nicotiana tabacum
AAK19055.1	AF151219	Solanum tuberosum

SEQ ID NO. 2547

AAA17740.1	U08285	Nicotiana tabacum
BAA93021.1	AP001552	Oryza sativa
BAA92501.1	AP001383	Oryza sativa
CAB55395.1	AL117264	Oryza sativa

SEQ ID NO. 2550

BAB41080.1	AB052729	Pisum sativum
AAA34054.1	M96432	Nicotiana tabacum
AAA34085.1	M93436	Nicotiana tabacum

SEQ ID NO. 2551

CAA10494.1	AJ131733	Pseudotsuga menziesii
AAA64427.1	L29077	Pisum sativum
AAA34125.1	L23762	Lycopersicon esculentum
AAB88617.1	AF034946	Zea mays
AAD51109.1	AF176040	Mesembryanthemum crystalli
CAA51821.1	X73419	Lycopersicon esculentum
AAC12662.1	AF032468	Zea mays
CAA05772.1	AJ002959	Zea mays
BAA90392.1	AP001081	Oryza sativa
BAB40310.1	AB026055	Nicotiana tabacum
AAF73016.1	AF262934	Avicennia marina
BAB40311.1	AB026056	Nicotiana tabacum
AAA34310.1	M62720	Triticum aestivum
AAB02168.1	U15971	Oryza sativa
AAD42941.1	AF091621	Catharanthus roseus
AAA86089.1	U17250	Brassica oleracea
CAA58111.1	X82938	Lycopersicon esculentum
AAB63513.1	AF008910	Prunus armeniaca
BAA21006.1	D17786	Oryza sativa
AAF22280.1	AF165420	Mesembryanthemum crystallinum
AAC32141.1	AF051240	Picea mariana

SEQ ID NO. 2552

AAG43405.1	AF172931	Picea abies
AAB37230.1	U34743	Phalaenopsis sp. SM9108
CAB51059.1	Y17898	Zea mays
AAK19610.1	AF336277	Gossypium hirsutum
AAD38144.1	AF139497	Prunus armeniaca
AAA63768.2	AF339748	Helianthus annuus
CAA64491.1	X95193	Pimpinella brachycarpa
CAA64221.1	X94449	Pimpinella brachycarpa
CAA64152.1	X94375	Pimpinella brachycarpa
BAA93462.1	AB028074	Physcomitrella patens

BAA93465.1	AB028077	Physcomitrella patens
BAA93468.1	AB028080	Physcomitrella patens
CAA64417.1	X94947	Lycopersicon esculentum
CAA63222.1	X92489	Glycine max
BAA93463.1	AB028075	Physcomitrella patens
BAB18171.1	AB042769	Zinnia elegans
BAA93466.1	AB028078	Physcomitrella patens
BAA93464.1	AB028076	Physcomitrella patens

SEQ ID NO. 2553

AAG28436.1	AF195029	Glycine max
AAG28435.1	AF195028	Glycine max
CAA68234.1	X99972	Brassica oleracea
AAD31896.1	AF145478	Mesembryanthemum crystallinum
BAA90510.2	AP001111	Oryza sativa
AAD11618.1	AF050496	Lycopersicon esculentum
AAD11617.1	AF050495	Lycopersicon esculentum
AAA34138.1	M96324	Lycopersicon esculentum
CAA63790.1	X93592	Dunaliella bioculata
AAF73985.1	AF096871	Zea mays
AAB58910.1	U82966	Oryza sativa
AAD46188.1	AF156691	Nicotiana plumbaginifolia
AAB17186.1	U72148	Lycopersicon esculentum
CAA47275.1	X66737	Nicotiana plumbaginifolia
CAA54045.1	X76535	Solanum tuberosum
AAD46186.1	AF156679	Nicotiana plumbaginifolia
CAA59800.1	X85805	Zea mays
BAA06629.1	D31843	Oryza sativa
AAB35314.2	S79323	Vicia faba
CAA59799.1	X85804	Phaseolus vulgaris
AAB41898.1	U84891	Mesembryanthemum crystallinum
AAA34094.1	M80489	Nicotiana plumbaginifolia
AAB84202.2	AF029256	Kosteletzkya virginica
AAA34052.1	M27888	Nicotiana plumbaginifolia
AAA34173.1	M60166	Lycopersicon esculentum
AAA34098.1	M80490	Nicotiana plumbaginifolia
AAF98344.1	AF275745	Lycopersicon esculentum
AAD55399.1	AF179442	Lycopersicon esculentum
CAC29436.1	AJ310524	Vicia faba
BAA08134.1	D45189	Zostera marina
BAA01058.1	D10207	Oryza sativa
CAB69824.1	AJ271439	Prunus persica
CAA54046.1	X76536	Solanum tuberosum
AAB60276.1	U09989	Zea mays
CAB69823.1	AJ271438	Prunus persica
AAK31799.1	AY029190	Lilium longiflorum
BAA37150.1	AB022442	Vicia faba
CAC29435.1	AJ310523	Vicia faba
CAB85495.1	AJ132892	Medicago truncatula
CAB85494.1	AJ132891	Medicago truncatula
AAD46187.1	AF156683	Nicotiana plumbaginifolia
AAD29712.1	AF140499	Oryza sativa
AAK32118.1	AF308816	Hordeum vulgare
AAG01028.1	AF289025	Cucumis sativus
AAF97591.1	AF263917	Lycopersicon esculentum
AAA81348.1	U38965	Vicia faba
AAA20600.1	U08984	Zea mays
AAA20601.1	U08985	Zea mays
AAK32119.1	AF308817	Hordeum vulgare

SEQ ID NO. 2555

AAF01250.1	AF188832	Fragaria x ananassa
CAA66900.2	X98244	Zea mays
AAD24540.1	AF113545	Nicotiana tabacum
CAA10261.1	AJ130956	Capsicum annuum
CAA66901.1	X98245	Zea mays
AAC33305.1	U89609	Gossypium hirsutum
AAC97494.1	AF079232	Lycopersicon esculentum
AAB67994.1	U73747	Gossypium hirsutum
CAA75308.1	Y15036	Medicago truncatula
CAA52903.1	X74947	Medicago sativa
AAC97493.1	AF079231	Lycopersicon esculentum
CAB92956.1	AJ401032	Solanum tuberosum
AAB71830.1	AF006197	Lavatera thuringiaca
CAA75213.1	Y14972	Nicotiana tabacum
CAA76769.1	Y17502	Nicotiana tabacum
CAA63710.1	X93308	Capsicum annuum
CAA75214.1	Y14973	Nicotiana tabacum
CAA76770.1	Y17503	Nicotiana tabacum
CAA10210.1	AJ130829	Capsicum annuum
AAB67993.1	U73746	Gossypium hirsutum
AAA79922.1	U19941	Fragaria x ananassa

AAG32468.1	AF308589	Ceratopteris richardii
CAA72183.1	Y11348	Medicago sativa
AAG32467.1	AF308588	Ceratopteris richardii
CAA06492.1	AJ005347	Cicer arietinum
AAA73894.1	L41393	Malus x domestica

SEQ ID NO. 2557

AAC79430.1	AF067961	Malus x domestica
AAF01765.1	AF184278	Glycine max
AAD37698.1	AF145729	Oryza sativa
AAD37695.1	AF145726	Oryza sativa
BAA93466.1	AB028078	Physcomitrella patens
CAA64491.1	X95193	Pimpinella brachycarpa
CAA64152.1	X94375	Pimpinella brachycarpa
BAA93467.1	AB028079	Physcomitrella patens
AAK31270.1	AC079890	Oryza sativa
AAF19980.1	AF211193	Oryza sativa
CAA06728.1	AJ005833	Craterostigma plantagineum
CAA65456.2	X96681	Oryza sativa
BAA05625.1	D26576	Daucus carota
BAA93462.1	AB028074	Physcomitrella patens
AAD37700.1	AF145731	Oryza sativa
CAB67118.1	Y17306	Lycopersicon esculentum
BAA93464.1	AB028076	Physcomitrella patens
BAA21017.1	D26578	Daucus carota
CAA64221.1	X94449	Pimpinella brachycarpa
BAA93463.1	AB028075	Physcomitrella patens

SEQ ID NO. 2558

AAB03893.1	M11318	Glycine max
CAA41547.1	X58711	Medicago sativa
AAD30454.1	AF123257	Lycopersicon esculentum
CAA25578.1	X01104	Glycine max
AAA33975.1	M11395	Glycine max
AAD30452.1	AF123255	Lycopersicon esculentum
AAA33672.1	M33899	Pisum sativum
CAA39603.1	X56138	Lycopersicon esculentum
AAD30453.1	AF123256	Lycopersicon esculentum
AAA33974.1	M11317	Glycine max
CAA37847.1	X53851	Daucus carota
CAB55634.2	AJ237596	Helianthus annuus
CAB08441.1	Z95153	Helianthus annuus
CAA42222.1	X59701	Helianthus annuus
BAA33062.1	AB017273	Cuscuta japonica
AAB63310.1	U46544	Helianthus annuus
AAF34133.1	AF161179	Malus x domestica
AAA33671.1	M33900	Pisum sativum
AAB72109.1	AF022217	Brassica rapa
AAB63311.1	U46545	Helianthus annuus
CAA41546.1	X58710	Medicago sativa
AAD49336.1	AF166277	Nicotiana tabacum
AAC39360.1	U63631	Fragaria x ananassa
CAA37848.1	X53852	Daucus carota
AAA61632.1	U08601	Papaver somniferum
CAA63903.1	X94193	Pennisetum glaucum
CAA37864.1	X53870	Chenopodium rubrum
CAB36910.1	AJ000691	Quercus suber
AAA33910.1	M80939	Oryza sativa
CAA08908.1	AJ009880	Castanea sativa
AAA33909.1	M80938	Oryza sativa
CAA43210.1	X60820	Oryza sativa
AAC78392.1	U83669	Oryza sativa
CAA63902.1	X94192	Pennisetum glaucum
BAA02160.1	D12635	Oryza sativa
CAA63901.1	X94191	Pennisetum glaucum
CAA46641.1	X65725	Zea mays
AAB39856.1	U81385	Oryza sativa
CAA63570.1	X92983	Pseudotsuga menziesii
AAC78394.1	U83671	Oryza sativa
CAA63571.1	X92984	Pseudotsuga menziesii
AAC78393.1	U83670	Oryza sativa
CAA31785.1	X13431	Triticum aestivum

SEQ ID NO. 2559

AAD37427.1	AF149277	Phaseolus vulgaris
BAA94962.1	AB042103	Asparagus officinalis
BAA77388.1	AB024438	Scutellaria baicalensis
BAA92500.1	AP001383	Oryza sativa
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA82306.1	AB027752	Nicotiana tabacum
BAA92497.1	AP001383	Oryza sativa

BAA92422.1	AP001366	Oryza sativa
AAC98519.1	AF007211	Glycine max
BAA11853.1	D83225	Populus nigra
CAA62227.1	X90694	Medicago sativa
AAF63027.1	AF244924	Spinacia oleracea
AAC49819.1	AF014468	Oryza sativa
CAA62226.1	X90693	Medicago sativa
AAF63025.1	AF244922	Spinacia oleracea
BAA77389.1	AB024439	Scutellaria baicalensis
AAB48184.1	L24120	Linum usitatissimum
CAA62615.1	X91232	Mercurialis annua
AAB06183.1	M37636	Arachis hypogaea
AAD43561.1	AF155124	Gossypium hirsutum
AAB02554.1	L37790	Stylosanthes humilis
CAB94692.1	AJ242742	Ipomoea batatas
AAF63026.1	AF244923	Spinacia oleracea
CAA40796.1	X57564	Armoracia rusticana
CAA71491.1	Y10465	Spinacia oleracea
CAB65334.1	AJ250121	Picea abies
CAA59487.1	X85230	Triticum aestivum
AAA34050.1	M74103	Nicotiana sylvestris
AAC49821.1	AF014470	Oryza sativa
BAA03911.1	D16442	Oryza sativa
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
BAA06335.1	D30653	Populus kitakamiensis
AAB97734.1	AF014502	Glycine max
CAA71493.1	Y10467	Spinacia oleracea
AAB41810.1	L36156	Medicago sativa
AAB97853.1	AF043234	Striga asiatica
BAA92967.1	AP001551	Oryza sativa
AAB47602.1	L07554	Linum usitatissimum
BAA06334.1	D30652	Populus kitakamiensis
AAC49818.1	AF014467	Oryza sativa
BAA11852.1	D83224	Populus nigra
CAA66035.1	X97349	Populus balsamifera subsp. trichocarpa
CAA62225.1	X90692	Medicago sativa
BAA14144.1	D90116	Armoracia rusticana
BAA07241.1	D38051	Populus kitakamiensis
CAA46916.1	X66125	Oryza sativa
CAA62597.1	X91172	Raphanus sativus
CAA71492.1	Y10466	Spinacia oleracea
SEQ ID NO. 2560		
BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95705.1	AB042644	Oryza sativa
BAA95704.1	AB042643	Oryza sativa
SEQ ID NO. 2561		
AAF36491.1	AF129479	Hordeum vulgare
BAB32442.1	AB055629	Phragmites australis
BAB32445.1	AB055632	Phragmites australis
BAB32443.1	AB055630	Phragmites australis
BAB32444.1	AB055631	Phragmites australis
AAF36497.1	AF129485	Oryza sativa
AAF36496.1	AF129484	Hordeum vulgare
CAC15061.1	AJ300161	Hordeum vulgare
AAF36492.1	AF129480	Hordeum vulgare
SEQ ID NO. 2564		
BAA92965.1	AP001551	Oryza sativa
SEQ ID NO. 2569		
AAD21872.1	AF078082	Phaseolus vulgaris
AAC23542.1	U20948	Ipomoea trifida
CAA73134.1	Y12531	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
AAB93834.1	U82481	Zea mays
CAA73133.1	Y12530	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
CAA74662.1	Y14286	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
BAA92836.1	AB032473	Brassica oleracea
CAB89179.1	AJ245479	Brassica napus subsp. napus

AAA33008.1	M97667	Brassica napus
CAA79355.1	Z18921	Brassica oleracea
BAA21132.1	D88193	Brassica rapa
AAA62232.1	U00443	Brassica napus
BAA06285.1	D30049	Brassica rapa
BAA92837.1	AB032474	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
BAA07577.2	D38564	Brassica rapa
BAB21001.1	AB054061	Brassica rapa
AAD52097.1	AF088885	Nicotiana tabacum
AAK21965.1	AY028699	Brassica napus
AAA33915.1	L27821	Oryza sativa
BAA94509.1	AB041503	Populus nigra
CAB51836.1	AJ243961	Oryza sativa
AAG16628.1	AY007545	Brassica napus
BAA94510.1	AB041504	Populus nigra
AAG03090.1	AC073405	Oryza sativa

SEQ ID NO. 2570

AAD11483.1	U51193	Glycine max
AAD11484.1	U51194	Glycine max
CAA76376.1	Y16778	Spinacia oleracea
CAC21393.1	AJ401276	Zea mays
AAF63027.1	AF244924	Spinacia oleracea
AAA32676.1	M37637	Arachis hypogaea
CAA71495.1	Y10469	Spinacia oleracea
BAA77387.1	AB024437	Scutellaria baicalensis
BAA03644.1	D14997	Oryza sativa
BAA94962.1	AB042103	Asparagus officinalis
CAA09881.1	AJ011939	Trifolium repens
CAA64413.1	X94943	Lycopersicon esculentum
AAF63024.1	AF244921	Spinacia oleracea
BAA07664.1	D42065	Nicotiana tabacum
BAA07663.1	D42064	Nicotiana tabacum
AAD11482.1	U51192	Glycine max
BAA92497.1	AP001383	Oryza sativa
BAA92422.1	AP001366	Oryza sativa
AAD11481.1	U51191	Glycine max
AAB48986.1	U16727	Medicago truncatula
AAB67737.1	L77080	Stylosanthes humilis
AAB41812.1	L36158	Medicago sativa
BAA92500.1	AP001383	Oryza sativa
CAA62228.1	X90695	Medicago sativa
CAA40796.1	X57564	Armoracia rusticana
AAD43561.1	AF155124	Gossypium hirsutum
CAA62615.1	X91232	Mercurialis annua
AAA65637.1	L13654	Lycopersicon esculentum
BAA14143.1	D90115	Armoracia rusticana
BAA01877.1	D11102	Populus kitakamiensis
AAF63025.1	AF244922	Spinacia oleracea
CAB94692.1	AJ242742	Ipomoea batatas
CAA76374.2	Y16776	Spinacia oleracea
AAB47602.1	L07554	Linum usitatissimum
AAB97734.1	AF014502	Glycine max
AAF63026.1	AF244923	Spinacia oleracea
CAB65334.1	AJ250121	Picea abies
AAA65636.1	L13653	Lycopersicon esculentum
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
BAA11853.1	D83225	Populus nigra
BAA01950.1	D11337	Vigna angularis
CAA80502.1	Z22920	Spirodela polyrrhiza
AAA98491.1	L36981	Petroselinum crispum
CAA66034.1	X97348	Populus balsamifera subsp. trichocarpa
CAC21391.1	AJ401274	Zea mays
CAA71490.1	Y10464	Spinacia oleracea

SEQ ID NO. 2575

AAD17487.1	AF049347	Berberis stolonifera
AAB20352.1	S65550	Eschscholzia californica
AAC39358.1	AF005655	Eschscholzia californica
AAC61839.1	AF025430	Papaver somniferum

SEQ ID NO. 2577

BAA76896.1	AB022687	Lycopersicon esculentum
AAF97517.1	AF250047	Zea mays
BAA76895.1	AB022686	Lycopersicon esculentum

SEQ ID NO. 2578

AAD21872.1	AF078082	Phaseolus vulgaris
AAB93834.1	U82481	Zea mays

CAA73134.1	Y12531	Brassica oleracea
AAC23542.1	U20948	Ipomoea trifida
CAA67145.1	X98520	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
CAB41879.1	Y18260	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
CAA74662.1	Y14286	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
BAA92836.1	AB032473	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
AAA62232.1	U00443	Brassica napus
AAA33008.1	M97667	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAD52097.1	AF088885	Nicotiana tabacum
BAA92837.1	AB032474	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
BAA07576.1	D38563	Brassica rapa
BAA07577.2	D38564	Brassica rapa
CAA79324.1	Z18884	Brassica oleracea
AAK21965.1	AY028699	Brassica napus
CAB51836.1	AJ243961	Oryza sativa
AAA33915.1	L27821	Oryza sativa
BAA92954.1	AP001551	Oryza sativa
AAF66615.1	AF142596	Nicotiana tabacum

SEQ ID NO. 2579

AAD21872.1	AF078082	Phaseolus vulgaris
CAA73134.1	Y12531	Brassica oleracea
AAC23542.1	U20948	Ipomoea trifida
AAB93834.1	U82481	Zea mays
CAA73133.1	Y12530	Brassica oleracea
CAA67145.1	X98520	Brassica oleracea
CAB41879.1	Y18260	Brassica oleracea
AAA33000.1	M76647	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
BAA92836.1	AB032473	Brassica oleracea
AAA33008.1	M97667	Brassica napus

CAB89179.1	AJ245479	Brassica napus subsp. napus
CAA74661.1	Y14285	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
BAA06285.1	D30049	Brassica rapa
BAA21132.1	D88193	Brassica rapa
AAA62232.1	U00443	Brassica napus
CAA79355.1	Z18921	Brassica oleracea
CAA74662.1	Y14286	Brassica oleracea
BAA92837.1	AB032474	Brassica oleracea
BAA07577.2	D38564	Brassica rapa
BAA07576.1	D38563	Brassica rapa
BAB21001.1	AB054061	Brassica rapa
AAD52097.1	AF088885	Nicotiana tabacum
AAK21965.1	AY028699	Brassica napus
AAG03090.1	AC073405	Oryza sativa
AAA33915.1	L27821	Oryza sativa
AAG16628.1	AY007545	Brassica napus
BAA94510.1	AB041504	Populus nigra
BAA94509.1	AB041503	Populus nigra
CAA79324.1	Z18884	Brassica oleracea

SEQ ID NO. 2580

AAB60276.1	U09989	Zea mays
AAB41898.1	U84891	Mesembryanthemum crystallinum
BAA08134.1	D45189	Zostera marina
AAG28435.1	AF195028	Glycine max
BAA06629.1	D31843	Oryza sativa
AAD46188.1	AF156691	Nicotiana plumbaginifolia
AAB84202.2	AF029256	Kosteletzkya virginica
CAB69823.1	AJ271438	Prunus persica
CAC29436.1	AJ310524	Vicia faba
CAA54045.1	X76535	Solanum tuberosum
CAA47275.1	X66737	Nicotiana plumbaginifolia
AAB17186.1	U72148	Lycopersicon esculentum
AAB35314.2	S79323	Vicia faba
BAA37150.1	AB022442	Vicia faba
AAA34098.1	M80490	Nicotiana plumbaginifolia
CAB69824.1	AJ271439	Prunus persica
AAD46186.1	AF156679	Nicotiana plumbaginifolia
AAA34094.1	M80489	Nicotiana plumbaginifolia
BAA01058.1	D10207	Oryza sativa

AAK31799.1	AY029190	Lilium longiflorum
AAA34173.1	M60166	Lycopersicon esculentum
CAC29435.1	AJ310523	Vicia faba
AAF98344.1	AF275745	Lycopersicon esculentum
AAD55399.1	AF179442	Lycopersicon esculentum
CAA59800.1	X85805	Zea mays
CAA54046.1	X76536	Solanum tuberosum
AAA34052.1	M27888	Nicotiana plumbaginifolia
CAA63790.1	X93592	Dunaliella bioculata
AAB49042.1	U54690	Dunaliella acidophila
CAA59799.1	X85804	Phaseolus vulgaris
BAA90510.2	AP001111	Oryza sativa
AAA34138.1	M96324	Lycopersicon esculentum
AAD11617.1	AF050495	Lycopersicon esculentum
CAA52107.1	X73901	Dunaliella bioculata
AAD11618.1	AF050496	Lycopersicon esculentum
AAD31896.1	AF145478	Mesembryanthemum crystallinum
AAG28436.1	AF195029	Glycine max
CAA68234.1	X99972	Brassica oleracea
AAB58910.1	U82966	Oryza sativa
AAA34099.1	M80491	Nicotiana plumbaginifolia
AAA20600.1	U08984	Zea mays
AAA20601.1	U08985	Zea mays
AAG01028.1	AF289025	Cucumis sativus

SEQ ID NO. 2581

AAF70507.1	AF259801	Lycopersicon esculentum
AAC27714.1	AF076954	Zea mays
CAA78262.1	Z12616	Triticum aestivum
AAA34295.1	M95818	Triticum aestivum
AAA34296.1	M95819	Triticum aestivum
AAC27715.1	AF076955	Zea mays

SEQ ID NO. 2582

AAC49708.1	U39301	Pinus taeda
AAB09044.1	U70873	Pinus radiata
AAD24001.1	AF119225	Pinus radiata
AAB71213.1	U82011	Prunus armeniaca
BAB08005.1	D29812	Coptis japonica
BAB08004.1	D29811	Coptis japonica
CAA11131.1	AJ223151	Prunus dulcis

BAA86059.1	AB014456	Pyrus pyrifolia
AAC49926.1	AF000975	Medicago sativa
AAD38189.1	AF154917	Ocimum basilicum
AAA18532.1	L14063	Zea mays
AAC49928.1	U97125	Medicago sativa
AAC49927.1	AF000976	Medicago sativa
AAD38190.1	AF154918	Ocimum basilicum
AAD29842.1	AF064694	Thalictrum tuberosum
AAD29844.1	AF064696	Thalictrum tuberosum
AAD29841.1	AF064693	Thalictrum tuberosum
AAC49856.1	U69554	Pisum sativum
AAG43822.1	AF212316	Capsicum annuum
CAA52461.1	X74452	Nicotiana tabacum
AAD29845.1	AF064697	Thalictrum tuberosum
CAA52462.1	X74453	Nicotiana tabacum
BAA08559.1	D49711	Populus kitakamiensis
AAB61731.1	U13171	Populus tremuloides
CAA44006.1	X62096	Populus tremuloides
AAC17455.1	U83789	Capsicum annuum
AAD29843.1	AF064695	Thalictrum tuberosum
AAB68049.1	U50522	Populus tremuloides
AAC01533.1	U86760	Clarkia breweri
AAF60951.1	M73431	Populus x generosa
AAF63200.1	AF237777	Populus tomentosa
BAA08558.1	D49710	Populus kitakamiensis
CAA52814.1	X74814	Eucalyptus gunnii
AAB71141.1	AF006009	Clarkia breweri
CAA54616.1	X77467	Hordeum vulgare
AAB46623.1	M63853	Medicago sativa
AAC78475.1	AF081214	Capsicum chinense
CAA58218.1	X83217	Prunus dulcis
AAA86718.1	U19911	Zinnia elegans
CAA13175.1	AJ231133	Saccharum officinarum
AAD10485.1	U76384	Triticum aestivum
AAD48913.1	AF139533	Liquidambar styraciflua
AAC18623.1	AF010291	Lolium perenne
AAF44672.1	AF239740	Vitis vinifera
AAD50439.1	AF168776	Eucalyptus globulus
AAF28353.1	AF220491	Fragaria x ananassa
AAB03364.1	M73235	Zea mays
AAA80579.1	U16794	Chrysosplenium americanum

SEQ ID NO. 2590

AAC78591.1	AF053993	Lycopersicon esculentum
AAC78596.1	AF053998	Lycopersicon esculentum
AAC78593.1	AF053995	Lycopersicon esculentum
AAC78595.1	AF053997	Lycopersicon esculentum
AAC78592.1	AF053994	Lycopersicon esculentum
CAA05276.1	AJ002236	Lycopersicon pimpinellifolium
AAC78594.1	AF053996	Lycopersicon pimpinellifolium
CAA05279.1	AJ002237	Lycopersicon esculentum
CAA05268.1	AJ002235	Lycopersicon hirsutum
CAA05274.1	AJ002236	Lycopersicon pimpinellifolium
AAA65235.1	U15936	Lycopersicon pimpinellifolium
BAB08215.1	AP002539	Oryza sativa
BAA96776.1	AP002521	Oryza sativa
AAD50430.1	AF166121	Hordeum vulgare
CAB55409.1	AL117265	Oryza sativa

SEQ ID NO. 2592

AAB61598.1	AF004165	Lycopersicon pennellii

SEQ ID NO. 2593

AAK14408.1	AF349948	Nicotiana tabacum
AAC37400.1	L22584	Vigna aconitifolia

SEQ ID NO. 2594

AAC16330.1	AF061962	Pisum sativum
BAB41076.1	AB059832	Nicotiana tabacum
AAC16331.1	AF061963	Pisum sativum
BAA31260.1	AB015431	Oryza sativa

SEQ ID NO. 2595

BAB41137.1	AB060130	Zea mays
BAB20580.1	AB042267	Zea mays
BAB20579.1	AB042261	Zea mays
BAB20581.1	AB042268	Zea mays
BAA82873.1	AB024291	Zea mays
BAA85113.1	AB031012	Zea mays
AAK14395.1	AF339732	Dianthus caryophyllus
AAD55945.1	AF174480	Chlamydomonas reinhardtii
AAD55941.1	AF174532	Chlamydomonas reinhardtii
BAB17300.1	AB042260	Zea mays
BAB20582.1	AB042269	Zea mays
AAF32350.1	AF219972	Mesembryanthemum crystalli
BAA75253.1	AB004882	Zea mays
BAA85112.1	AB031011	Zea mays

SEQ ID NO. 2596

AAD03693.1	AF084554	Brassica napus
CAA10372.1	AJ131455	Plastid Solanum demissum
CAA50750.1	X71952	Capsicum annuum

SEQ ID NO. 2597

AAG28600.1	AF247134	Limnanthes douglasii
AAC49186.1	U37088	Simmondsia chinensis
AAA96054.1	U50771	Brassica napus
AAB72178.1	AF009563	Brassica napus
AAK11266.1	AF333040	Dunaliella salina
CAC17746.1	AJ291728	Zea mays
AAC25110.1	AF054498	Brassica napus
AAC25109.1	AF054497	Brassica napus
AAC25112.1	AF054500	Brassica oleracea
AAC25111.1	AF054499	Brassica rapa

SEQ ID NO. 2598

BAA96751.1	AP002521	Oryza sativa
AAF74345.1	AF150627	Cucurbita moschata
CAA80364.1	Z22647	Cucurbita maxima
CAA78979.1	Z17331	Cucurbita maxima
CAB71030.1	AJ271666	Cicer arietinum
CAB44031.1	AJ010265	Glycine max
BAA09704.1	D63388	Cucumis sativus

SEQ ID NO. 2600

BAA21876.1	AB006071	Arabis glabra
BAA21875.1	AB006070	Arabis gemmifera
BAA21877.1	AB006072	Arabidopsis lyrata subsp. kawasakiana
CAA92207.1	Z68123	Vitis vinifera
AAG25709.1	AF309514	Malus x domestica
BAA01948.1	D11335	Vigna angularis
CAA77656.1	Z11563	Nicotiana tabacum

BAA77676.1	AB007126	Glycine max
BAA21743.2	AB006188	Oryza sativa
BAA77605.1	AB026998	Oryza sativa
AAB28479.1	S66038	Beta vulgaris
BAA77677.1	AB007127	Glycine max
CAA61280.1	X88802	Vigna unguiculata
BAA25015.1	AB000097	Glycine max
CAB66334.1	AJ279692	Betula pendula

SEQ ID NO. 2606

CAA56125.1	X79677	Cuphea lanceolata

SEQ ID NO. 2612

CAA54609.1	X77459	Manihot esculenta
CAA54611.1	X77461	Manihot esculenta
CAA54613.1	X77463	Manihot esculenta
CAA54612.1	X77462	Manihot esculenta
AAB36653.1	U32644	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAK28304.1	AF346432	Nicotiana tabacum
CAA59450.1	X85138	Lycopersicon esculentum
AAF17077.1	AF199453	Sorghum bicolor
BAA83484.1	AB031274	Scutellaria baicalensis
AAF61647.1	AF190634	Nicotiana tabacum
BAA89008.1	AB027454	Petunia x hybrida
BAA93039.1	AB033758	Citrus unshiu
BAA36423.1	AB013598	Verbena x hybrida
BAA89009.1	AB027455	Petunia x hybrida
AAB48444.1	U82367	Solanum tuberosum
AAD04166.1	AF101972	Phaseolus lunatus
AAD55985.1	AF165148	Petunia x hybrida
CAA54614.1	X77464	Manihot esculenta
BAB41023.1	AB047096	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAA12737.1	D85186	Gentiana triflora
BAB41022.1	AB047095	Vitis vinifera
AAD21086.1	AF127218	Forsythia x intermedia
BAB41020.1	AB047093	Vitis vinifera
BAA19659.1	AB002818	Perilla frutescens
BAB41018.1	AB047091	Vitis labrusca x Vitis vini
AAB81683.1	AF000372	Vitis vinifera
CAA54610.1	X77460	Manihot esculenta

SEQ ID NO. 2613

CAA12358.1	AJ225027	Cicer arietinum
AAG13986.1	AF298827	Prunus avium
CAA63960.1	X94296	Hordeum vulgare

SEQ ID NO. 2614

AAA87182.1	U20808	Vigna radiata

SEQ ID NO. 2615

AAB70538.1	AF017358	Oryza sativa
CAA65680.1	X96979	Hordeum vulgare
AAF26451.1	AF221503	Pyrus communis
AAA70046.1	U29176	Oryza sativa
AAF28385.1	AF151214	Nicotiana glauca
BAA23548.1	AB007843	Picea abies
AAK01293.1	AF331710	Avicennia marina
BAA96206.1	AP002094	Oryza sativa
AAA86694.1	U18127	Hordeum vulgare
CAA41946.1	X59253	Hordeum vulgare
CAA44267.1	X62395	Nicotiana tabacum
CAA48621.1	X68654	Hordeum vulgare
AAG27707.1	AF302788	Triticum aestivum
CAA85484.1	Z37115	Hordeum vulgare
AAC63372.1	AF093751	Brassica oleracea
AAA73945.1	L33904	Brassica oleracea
AAB05812.1	U63993	Hordeum vulgare
AAB70540.1	AF017360	Oryza sativa
CAA91436.1	Z66529	Hordeum vulgare
CAA91435.1	Z66528	Hordeum vulgare
AAK20395.1	AF334185	Triticum aestivum
AAB80805.1	U90342	Pinus radiata
CAA50661.1	X71668	Sorghum bicolor
CAA50660.1	X71667	Sorghum bicolor

AAC49860.1	U72765	Phaseolus vulgaris
AAF71695.1	AF198168	Aerides japonica
CAA69949.1	Y08691	Oryza sativa
AAB18815.1	U77295	Oryza sativa
AAA74624.1	U31766	Oryza sativa
AAB70541.1	AF017361	Oryza sativa
AAF26450.1	AF221502	Malus x domestica
AAF14232.1	AF109195	Hordeum vulgare
AAF23459.1	AF208833	Capsicum annuum
AAB70539.1	AF017359	Oryza sativa
AAA73947.1	L33906	Brassica oleracea
AAA33493.1	J04176	Zea mays
CAA65475.1	X96714	Prunus dulcis
CAA48623.1	X68656	Hordeum vulgare
CAA80809.1	Z23271	Oryza sativa
CAA50662.1	X71669	Sorghum bicolor
AAB06443.1	U66105	Zea mays

SEQ ID NO. 2617

AAB51393.1	U92651	Brassica oleracea var. botrytis
AAD39372.1	AF118381	Brassica napus
BAB12722.1	AB048248	Pyrus communis
CAC01618.1	AJ251652	Medicago truncatula
AAF82790.1	AF275315	Lotus japonicus
AAC04846.1	AF020793	Medicago sativa
CAA69353.1	Y08161	Nicotiana tabacum
AAC09245.1	AF037061	Zea mays
AAD10494.1	U86762	Triticum aestivum
AAB17284.1	U43291	Mesembryanthemum crystallinum
AAK26767.1	AF326500	Zea mays
CAA64952.1	X95650	Tulipa gesneriana
CAA06335.1	AJ005078	Picea abies
AAB51394.1	U92652	Brassica oleracea var. botrytis
AAB04557.1	U62778	Gossypium hirsutum
CAA65185.1	X95951	Helianthus annuus
CAA65184.1	X95950	Helianthus annuus
AAC39480.1	AF047173	Vernicia fordii
CAA65187.1	X95953	Helianthus annuus
AAK26769.1	AF326502	Zea mays
CAA65186.1	X95952	Helianthus annuus
AAK26768.1	AF326501	Zea mays

AAD10495.1	U86763	Triticum aestivum
AAK26848.1	AF342809	Zea mays

SEQ ID NO. 2620

CAA53076.1	X75327	Pisum sativum
AAB47571.1	U87848	Nicotiana plumbaginifolia
AAF08296.1	AF196292	Apium graveolens
CAA53075.1	X75326	Zea mays
BAB18543.1	AB043539	Avicennia marina
AAB58165.1	AF000132	Amaranthus hypochondriacus
BAB18544.1	AB043540	Avicennia marina
BAA21098.1	AB001348	Oryza sativa
AAB70010.1	AF017150	Amaranthus hypochondriacus
AAA34025.1	M31480	Spinacia oleracea
AAB41696.1	U69142	Spinacia oleracea
CAA41376.1	X58462	Beta vulgaris
CAA41377.1	X58463	Beta vulgaris
CAA49425.1	X69770	Atriplex hortensis
CAA71003.1	Y09876	Nicotiana tabacum
AAF73828.1	AF162665	Oryza sativa
BAB19052.1	AB044537	Oryza sativa
AAG43988.1	AF215823	Zea mays
BAA96794.1	AB037421	Oryza sativa
BAA96793.1	AB030939	Oryza sativa
BAA05466.1	D26448	Hordeum vulgare
AAC49268.1	U12196	Sorghum bicolor
AAC03055.1	AF045770	Oryza sativa
AAB33843.1	S77096	Brassica napus
AAG43027.1	AF323586	Oryza sativa
AAC49267.1	U12195	Sorghum bicolor

SEQ ID NO. 2622

AAF74981.1	AF082891	Chloroplast Solanum tuberosum
AAD31520.2	AF144102	Solanum tuberosum
CAB57356.1	Y17185	Fragaria vesca
AAF74982.1	AF082892	Chloroplast Solanum tuberosum
AAD34548.1	AF141602	Glycine max
AAC19395.1	AF069317	Mesembryanthemum crystallinum
AAB61348.1	AF007786	Zea mays
AAB61347.1	AF007785	Zea mays
AAD16143.1	AF097180	Nicotiana tabacum

AAG38873.1	AF076495	Oryza sativa
BAA95820.1	AP002069	Oryza sativa
BAA95830.1	AP002069	Oryza sativa
AAF74980.1	AF082890	Chloroplast Solanum tuberosum
AAF64422.1	AF206626	Cucumis melo

SEQ ID NO. 2624

BAB03427.1	AP002816	Oryza sativa
BAA03949.1	D16499	Oryza sativa
CAA45772.1	X64434	Mesembryanthemum crystallinum
BAB07934.1	AP002836	Oryza sativa
BAB20887.1	AB053295	Oryza sativa
BAA24950.1	AB005808	Aloe arborescens
BAA74735.1	AB016804	Aloe arborescens
AAF73006.1	AF262997	Ricinus communis
CAA39690.1	X56233	Populus balsamifera subsp. trichocarpa
AAA67087.1	L34836	Vitis vinifera
AAB08874.1	U67426	Vitis vinifera
AAB58727.1	AF001269	Lycopersicon esculentum
AAA34174.1	L27509	Lycopersicon esculentum
AAB58728.1	AF001270	Lycopersicon esculentum
CAA40421.1	X57142	Flaveria trinervia
CAA54986.1	X78069	Flaveria pringlei
CAA12157.1	AJ224847	Zea mays
CAA56354.1	X80051	Phaseolus vulgaris
AAA19575.1	J03825	Phaseolus vulgaris
CAB66003.1	AJ132257	Apium graveolens
AAD10504.1	U39958	Zea mays
AAA33487.1	J05130	Zea mays
AAB41026.1	M59415	Flaveria linearis
CAA80559.1	Z23023	Solanum tuberosum
CAA80547.1	Z23002	Solanum tuberosum
AAA19014.1	U01162	Amaranthus hypochondriacus
AAD11429.1	AF097666	Mesembryanthemum crystallinum
AAB19243.1	M59416	Flaveria trinervia
AAA83963.1	L35306	Lycopersicon esculentum
AAG23801.1	AF260735	Cucurbita pepo
BAA76435.1	AB025007	Cicer arietinum
AAG23798.1	AF260732	Cucurbita pepo
AAB17593.1	U44922	Flaveria bidentis

SEQ ID NO. 2626

AAF33669.1	AF079871	Nicotiana tabacum
AAF33670.1	AF079872	Nicotiana tabacum
AAB53255.1	U65390	Nicotiana tabacum
CAA68912.1	Y07632	Zea mays
CAA65254.1	X96390	Lycopersicon esculentum
CAA71598.1	Y10579	Vicia faba
BAA84085.1	AB032074	Nicotiana paniculata
CAB54856.1	AJ132686	Zea mays
CAA12645.1	AJ225805	Egeria densa
AAD39492.1	AF145272	Samanea saman
AAF36832.1	AF207745	Triticum aestivum
CAC05489.1	AJ271447	Populus tremula x Populus tremuloides
AAD16278.1	AF099095	Samanea saman
CAC10514.1	AJ299019	Samanea saman
CAA56175.1	X79779	Solanum tuberosum
BAA96192.1	AP002093	Oryza sativa
BAA96150.1	AP002092	Oryza sativa
AAF81251.1	AF267755	Mesembryanthemum crystallinum
CAB62555.1	AJ249962	Daucus carota
CAC05488.1	AJ271446	Populus tremula x Populus tremuloides

SEQ ID NO. 2628

CAA58994.1	X84208	Sinapis alba
CAA76116.1	Y16190	Sinapis alba

SEQ ID NO. 2632

AAB72115.1	U81289	Pisum sativum
AAA88792.1	L38856	Glycine max
AAA70363.1	U26918	Triticum aestivum

SEQ ID NO. 2633

CAA49854.1	X70417	Antirrhinum majus
CAA38634.1	X54855	Nicotiana tabacum
AAK26769.1	AF326502	Zea mays
AAK26768.1	AF326501	Zea mays
AAK26770.1	AF326503	Zea mays
BAA31452.1	AB010416	Raphanus sativus

AAD31849.1	AF133533	Mesembryanthemum crystallinum
AAD31848.1	AF133532	Mesembryanthemum crystallinum
BAA12711.1	D84669	Raphanus sativus
AAF82790.1	AF275315	Lotus japonicus
AAC09245.1	AF037061	Zea mays
AAK26767.1	AF326500	Zea mays
CAC01618.1	AJ251652	Medicago truncatula
AAB17284.1	U43291	Mesembryanthemum crystallinum
AAD31847.1	AF133531	Mesembryanthemum crystallinum

SEQ ID NO. 2635

BAA77836.1	AB027456	Citrus unshiu

SEQ ID NO. 2636

AAK19619.1	AF336286	Gossypium hirsutum
CAA64614.1	X95296	Lycopersicon esculentum
CAA50221.1	X70876	Hordeum vulgare
CAA50224.1	X70879	Hordeum vulgare
CAA50222.1	X70877	Hordeum vulgare
BAA23337.1	D88617	Oryza sativa
BAA23338.1	D88618	Oryza sativa
CAA72218.1	Y11415	Oryza sativa
AAK19611.1	AF336278	Gossypium hirsutum
CAA78386.1	Z13996	Petunia x hybrida
CAA50225.1	X70880	Hordeum vulgare
AAK19618.1	AF336285	Gossypium hirsutum
AAK19616.1	AF336283	Gossypium hirsutum
AAK19615.1	AF336282	Gossypium hirsutum
AAF22256.1	AF161711	Pimpinella brachycarpa
AAK19617.1	AF336284	Gossypium hirsutum
CAA78387.1	Z13997	Petunia x hybrida
CAB43399.1	AJ006292	Antirrhinum majus
BAA81732.1	AB029161	Glycine max
BAA81731.1	AB029160	Glycine max
BAA81730.1	AB029159	Glycine max
BAA88224.1	AB028652	Nicotiana tabacum
BAA88221.1	AB028649	Nicotiana tabacum
AAA33500.1	M73028	Zea mays
AAG36774.1	AF210616	Zea mays
BAA81736.1	AB029165	Glycine max
BAA81733.2	AB029162	Glycine max

CAA72186.1	Y11351	Oryza sativa
CAA67600.1	X99210	Lycopersicon esculentum
BAA88222.1	AB028650	Nicotiana tabacum
CAA72217.1	Y11414	Oryza sativa
BAA23339.1	D88619	Oryza sativa
CAA75509.1	Y15219	Oryza sativa subsp. indica
CAA65525.1	X96749	Oryza sativa
AAB41101.1	U72762	Nicotiana tabacum
CAA72185.1	Y11350	Oryza sativa

SEQ ID NO. 2642

AAB41741.1	U82558	Lycopersicon esculentum

SEQ ID NO. 2643

AAB41742.1	U82559	Lycopersicon esculentum
AAB41741.1	U82558	Lycopersicon esculentum

SEQ ID NO. 2644

CAA73134.1	Y12531	Brassica oleracea
AAB93834.1	U82481	Zea mays
CAA67145.1	X98520	Brassica oleracea
CAA74661.1	Y14285	Brassica oleracea
CAA73133.1	Y12530	Brassica oleracea
AAA62232.1	U00443	Brassica napus
CAB89179.1	AJ245479	Brassica napus subsp. napus
AAA33008.1	M97667	Brassica napus
BAA92836.1	AB032473	Brassica oleracea
BAA23676.1	AB000970	Brassica rapa
AAC23542.1	U20948	Ipomoea trifida
AAA33000.1	M76647	Brassica oleracea
BAA21132.1	D88193	Brassica rapa
BAA06285.1	D30049	Brassica rapa
CAB41879.1	Y18260	Brassica oleracea
BAA07577.2	D38564	Brassica rapa
CAA74662.1	Y14286	Brassica oleracea
BAB21001.1	AB054061	Brassica rapa
BAA92837.1	AB032474	Brassica oleracea
CAB41878.1	Y18259	Brassica oleracea
CAA79355.1	Z18921	Brassica oleracea
BAA07576.1	D38563	Brassica rapa
AAF34428.1	AF172282	Oryza sativa

AAD21872.1	AF078082	Phaseolus vulgaris
AAD52097.1	AF088885	Nicotiana tabacum
BAA94516.1	AP001800	Oryza sativa
BAA94517.1	AP001800	Oryza sativa
AAA33915.1	L27821	Oryza sativa
BAA94529.2	AP001800	Oryza sativa

SEQ ID NO. 2645

CAA05713.1	AJ002741	Helianthus annuus
CAA09421.1	AJ010944	Helianthus annuus
AAF01697.1	AF181459	Hordeum vulgare
AAD02260.1	AF043094	Hordeum vulgare
CAA55194.1	X78431	Triticum turgidum subsp. durum
CAA33363.1	X15289	Hordeum vulgare
AAD02254.1	AF043088	Hordeum vulgare
AAF01699.1	AF181461	Hordeum vulgare
AAD02252.1	AF043086	Hordeum vulgare
AAD50291.1	AF172263	Prunus dulcis
AAB71225.1	AF004807	Glycine max
CAA33364.1	X15290	Zea mays
AAF01690.1	AF181452	Hordeum vulgare
AAD02253.1	AF043087	Hordeum vulgare
AAF01689.1	AF181451	Hordeum vulgare
CAA33362.1	X15288	Hordeum vulgare
AAD02257.1	AF043091	Hordeum vulgare
AAF01694.1	AF181456	Hordeum vulgare
AAF60172.1	AF236067	Elaeis guineensis
CAA50499.1	X71362	Hordeum vulgare
AAC05922.1	AF031248	Lophopyrum elongatum
CAA66970.1	X98326	Hordeum vulgare
CAA63339.1	X92647	Helianthus annuus
AAA19693.1	U11696	Sorghum bicolor
AAF37268.1	AF220407	Vitis riparia
AAB05927.1	U63831	Sorghum bicolor
CAA55192.1	X78429	Triticum turgidum subsp. durum
AAD38400.1	AF155129	Hordeum vulgare
AAF01691.1	AF181453	Hordeum vulgare

SEQ ID NO. 2647

AAB33843.1	S77096	Brassica napus
AAG43027.1	AF323586	Oryza sativa

AAB47996.1	U87982	Sorghum bicolor
BAB19052.1	AB044537	Oryza sativa
AAF73828.1	AF162665	Oryza sativa
BAA21098.1	AB001348	Oryza sativa
AAG43988.1	AF215823	Zea mays
CAA41377.1	X58463	Beta vulgaris
CAA41376.1	X58462	Beta vulgaris
AAA34025.1	M31480	Spinacia oleracea
AAB41696.1	U69142	Spinacia oleracea
BAA96793.1	AB030939	Oryza sativa
CAA71003.1	Y09876	Nicotiana tabacum
AAB70010.1	AF017150	Amaranthus hypochondriacus
BAB18544.1	AB043540	Avicennia marina
BAB18543.1	AB043539	Avicennia marina
AAB58165.1	AF000132	Amaranthus hypochondriacus
BAA96794.1	AB037421	Oryza sativa
CAA49425.1	X69770	Atriplex hortensis
BAA05466.1	D26448	Hordeum vulgare
AAC49268.1	U12196	Sorghum bicolor
CAA53075.1	X75326	Zea mays
AAC03055.1	AF045770	Oryza sativa
CAA53076.1	X75327	Pisum sativum
AAB47571.1	U87848	Nicotiana plumbaginifolia
AAF08296.1	AF196292	Apium graveolens
AAC49267.1	U12195	Sorghum bicolor

SEQ ID NO. 2649

CAB56570.1	AJ011623	Antirrhinum majus
CAB56568.1	AJ011621	Antirrhinum majus
CAB56569.1	AJ011622	Antirrhinum majus
CAA63113.1	X92369	Antirrhinum majus
AAB51071.1	U89496	Zea mays
CAA63061.1	X92079	Antirrhinum majus

SEQ ID NO. 2651

AAG13527.1	AC068924	Oryza sativa
CAA55326.1	X78589	Chlamydomonas reinhardtii
AAB37756.1	L46702	Solanum tuberosum
AAC49393.1	U52078	Nicotiana tabacum
AAG13460.1	AF223412	Zea mays
BAB40709.1	AB003037	Nicotiana tabacum

BAB03437.1	AP002817	Oryza sativa
BAB19066.1	AP002744	Oryza sativa
BAB40710.1	AB003038	Nicotiana tabacum
AAF78897.1	AF210816	Oryza sativa subsp. japonica
BAB40706.1	AB053095	Nicotiana tabacum
BAB40705.1	AB053094	Nicotiana tabacum
BAB40703.1	AB053092	Nicotiana tabacum
BAB40704.1	AB053093	Nicotiana tabacum
BAB40702.1	AB053091	Nicotiana tabacum
BAB40707.1	AB053096	Nicotiana tabacum
BAB40701.1	AB053090	Nicotiana tabacum
BAB40700.1	AB053089	Nicotiana tabacum

SEQ ID NO. 2653

AAA19571.1	U10150	Brassica napus
AAA87347.1	M88307	Brassica juncea
AAA92681.1	U13882	Pisum sativum
AAA33706.1	M80836	Petunia x hybrida
CAA43143.1	X60738	Malus x domestica
CAA78301.1	Z12839	Lilium longiflorum
CAA42423.1	X59751	Daucus carota
AAG27432.1	AF295637	Elaeis guineensis
AAG11418.1	AF292108	Prunus avium
AAA34237.1	L20691	Vigna radiata
AAC49587.1	U49105	Triticum aestivum
AAC49586.1	U49104	Triticum aestivum
AAC49585.1	U49103	Triticum aestivum
AAC49584.1	U48693	Triticum aestivum
AAC49580.1	U48689	Triticum aestivum
AAC49579.1	U48688	Triticum aestivum
AAC49578.1	U48242	Triticum aestivum
AAB36130.1	S81594	Vigna radiata
CAA78287.1	Z12827	Oryza sativa
AAB46588.1	U83402	Capsicum annuum
AAA32938.1	M27303	Hordeum vulgare
BAA88540.1	AP000969	Oryza sativa
AAF65511.1	AF108889	Capsicum annuum
AAC36059.1	AF042840	Oryza sativa
AAA34238.1	L20507	Vigna radiata
CAA36644.1	X52398	Medicago sativa
AAB68399.1	U79736	Helianthus annuus
AAD10244.1	AF030032	Phaseolus vulgaris
AAA33705.1	M80831	Petunia x hybrida
AAA16320.1	L14071	Bryonia dioica
CAA61980.1	X89890	Bidens pilosa
AAA33900.1	L18914	Oryza sativa
CAA78288.1	Z12828	Oryza sativa
CAA74307.1	Y13974	Zea mays
AAC49583.1	U48692	Triticum aestivum
AAC49582.1	U48691	Triticum aestivum
AAA85157.1	U20297	Solanum tuberosum
AAA85156.1	U20296	Solanum tuberosum
AAA62351.1	U20295	Solanum tuberosum
AAA85155.1	U20294	Solanum tuberosum
CAA46150.1	X65016	Oryza sativa
AAD10246.1	AF030034	Phaseolus vulgaris
AAF73157.1	AF150059	Brassica napus
CAA54583.1	X77397	Zea mays

SEQ ID NO. 2654

AAC32120.1	AF051216	Picea mariana
AAC32164.1	AF051745	Picea mariana
AAC32163.1	AF051744	Picea mariana
AAC32162.1	AF051743	Picea mariana

SEQ ID NO. 2656

CAA71494.1	Y10468	Spinacia oleracea
CAA64413.1	X94943	Lycopersicon esculentum
AAA32676.1	M37637	Arachis hypogaea
BAA82307.1	AB027753	Nicotiana tabacum
AAD37429.2	AF149279	Phaseolus vulgaris
AAB67737.1	L77080	Stylosanthes humilis
AAD37375.1	AF145349	Glycine max
CAA62226.1	X90693	Medicago sativa
AAA65637.1	L13654	Lycopersicon esculentum
AAD37427.1	AF149277	Phaseolus vulgaris
CAA40796.1	X57564	Armoracia rusticana
CAA66037.1	X97351	Populus balsamifera subsp. trichocarpa
AAB41811.1	L36157	Medicago sativa
CAA62227.1	X90694	Medicago sativa
BAA08499.1	D49551	Oryza sativa

CAA76680.1	Y17192	Cucurbita pepo
BAA06335.1	D30653	Populus kitakamiensis
BAA94962.1	AB042103	Asparagus officinalis
BAA01992.1	D11396	Nicotiana tabacum
AAF63027.1	AF244924	Spinacia oleracea
CAB94692.1	AJ242742	Ipomoea batatas
BAA01877.1	D11102	Populus kitakamiensis
AAA34108.1	J02979	Nicotiana tabacum
BAA03644.1	D14997	Oryza sativa
AAD37430.1	AF149280	Phaseolus vulgaris
AAF63024.1	AF244921	Spinacia oleracea
AAC98519.1	AF007211	Glycine max
CAA80502.1	Z22920	Spirodela polyrrhiza
AAD11482.1	U51192	Glycine max
AAB41810.1	L36156	Medicago sativa
CAA62225.1	X90692	Medicago sativa
BAA03911.1	D16442	Oryza sativa
AAC49818.1	AF014467	Oryza sativa
BAA07664.1	D42065	Nicotiana tabacum
AAC49821.1	AF014470	Oryza sativa
CAA76374.2	Y16776	Spinacia oleracea
BAA07663.1	D42064	Nicotiana tabacum
AAB48184.1	L24120	Linum usitatissimum
CAA46916.1	X66125	Oryza sativa
CAA59485.1	X85228	Triticum aestivum
AAD11481.1	U51191	Glycine max
BAA92500.1	AP001383	Oryza sativa
AAC49820.1	AF014469	Oryza sativa
AAB02554.1	L37790	Stylosanthes humilis

SEQ ID NO. 2657

CAA46556.1	X65606	Hordeum vulgare
AAF66639.1	AF143743	Lycopersicon esculentum
BAA05649.1	D26602	Nicotiana tabacum
AAB52224.1	U83797	Solanum tuberosum
CAA46554.1	X65604	Hordeum vulgare
AAC99329.1	AF062479	Oryza sativa
AAB05457.1	U55768	Oryza sativa
CAA07813.1	AJ007990	Hordeum vulgare
CAA65244.1	X95997	Solanum tuberosum
AAD23582.1	AF128443	Glycine max
CAA71142.1	Y10036	Cucumis sativus
CAA57898.1	X82548	Hordeum vulgare
CAA65243.1	X95996	Solanum tuberosum
BAA96628.1	AP002482	Oryza sativa
CAA73068.1	Y12465	Sorghum bicolor
CAA73067.1	Y12464	Sorghum bicolor
BAA83689.1	AB011968	Oryza sativa
AAF22219.1	AF141378	Zea mays
BAA34675.1	AB011670	Triticum aestivum
BAA83688.1	AB011967	Oryza sativa
AAD00239.1	U73938	Nicotiana tabacum
AAG60195.1	AC084763	Oryza sativa
AAB62693.1	AF004947	Oryza sativa
BAA19573.1	AB002109	Oryza sativa
BAA13608.1	D88399	Oryza sativa
AAB68962.1	L38855	Glycine max
CAA81443.1	Z26846	Mesembryanthemum crystallinum
AAD00240.1	U73939	Nicotiana tabacum
AAF27340.1	AF186020	Vicia faba
AAB58348.1	U29095	Triticum aestivum
CAA06503.1	AJ005373	Craterostigma plantagineum
AAC98509.1	AF100162	Chlamydomonas reinhardtii
AAA96325.1	M94726	Triticum aestivum

SEQ ID NO. 2658

AAF29773.1	AF159229	Gossypium hirsutum
AAG34795.1	AF243360	Glycine max
AAF22518.1	AF118925	Papaver somniferum
AAF22517.1	AF118924	Papaver somniferum
AAF22519.1	AF118926	Papaver somniferum
AAG34848.1	AF244705	Zea mays
AAC32118.1	AF051214	Picea mariana
AAG34842.1	AF244699	Zea mays
AAG34846.1	AF244703	Zea mays
AAG34830.1	AF244687	Zea mays
AAD10129.1	AF004358	Aegilops tauschii
AAG34835.1	AF244692	Zea mays
AAG34839.1	AF244696	Zea mays
AAG34850.1	AF244707	Zea mays
AAG34845.1	AF244702	Zea mays
AAG34838.1	AF244695	Zea mays

AAC32139.1	AF051238	Picea mariana
CAA09188.1	AJ010449	Alopecurus myosuroides
AAG34834.1	AF244691	Zea mays
CAA09187.1	AJ010448	Alopecurus myosuroides
AAG34833.1	AF244690	Zea mays
AAG34798.1	AF243363	Glycine max
CAA09189.1	AJ010450	Alopecurus myosuroides
AAG34841.1	AF244698	Zea mays
AAG34797.1	AF243362	Glycine max
AAG34840.1	AF244697	Zea mays
AAG34809.1	AF243374	Glycine max
CAA04391.1	AJ000923	Carica papaya
AAG34843.1	AF244700	Zea mays
AAG34807.1	AF243372	Glycine max
AAF64450.1	AF239928	Euphorbia esula
AAG34801.1	AF243366	Glycine max
AAG34796.1	AF243361	Glycine max
AAC18566.1	AF048978	Glycine max
AAG34803.1	AF243368	Glycine max

SEQ ID NO. 2663

AAG60665.1	AF314150	Thalictrum flavum subsp. glaucum
AAA33862.1	M96072	Petroselinum crispum
AAA33861.1	M96071	Petroselinum crispum
AAA33863.1	M95685	Petroselinum crispum
AAC61844.1	AF025435	Papaver somniferum
AAA33860.1	M96070	Petroselinum crispum
AAC61842.1	AF025433	Papaver somniferum
AAA62346.1	U08597	Papaver somniferum
AAA62347.1	U08598	Papaver somniferum
AAC61843.1	AF025434	Papaver somniferum
AAC61841.1	AF025432	Papaver somniferum
AAC61840.1	AF025431	Papaver somniferum
AAA97535.1	U16804	Papaver somniferum
AAB39709.1	U73657	Camptotheca acuminata
AAA33859.1	M96069	Petroselinum crispum
AAB39708.1	U73656	Camptotheca acuminata
AAA33109.1	M25151	Catharanthus roseus
CAA47898.1	X67662	Catharanthus roseus
AAA62348.1	U08599	Papaver somniferum
AAG12476.1	AC037197	Oryza sativa

SEQ ID NO. 2666

BAB08188.1	AP002539	Oryza sativa
CAA70815.1	Y09602	Hordeum vulgare
CAB59202.1	X78878	Hordeum vulgare
CAA55478.1	X78877	Hordeum vulgare
AAD22150.1	AF061282	Sorghum bicolor
AAD22151.1	AF061282	Sorghum bicolor
CAB58992.1	X78876	Hordeum vulgare
AAD22164.1	AF061282	Sorghum bicolor
BAA04510.1	D17586	Oryza sativa
CAA70816.1	Y09603	Hordeum vulgare
AAF44708.1	AF242849	Lycopersicon esculentum
AAD01264.1	AF006079	Solanum berthaultii
AAA32940.1	J03897	Hordeum vulgare
AAF64227.1	AF248647	Lycopersicon pennellii
AAD01265.1	AF006080	Solanum berthaultii
AAD01263.1	AF006078	Solanum berthaultii
AAD42963.2	AF141384	Matricaria chamomilla
BAA01757.1	D10985	Oryza sativa
CAA70817.1	Y09604	Hordeum vulgare
BAA04511.1	D17587	Oryza sativa
CAB71127.1	AJ271659	Cicer arietinum
BAA94235.1	AP001633	Oryza sativa
BAB19126.1	AP002839	Oryza sativa
AAA92064.1	U49741	Vigna radiata
AAA92062.1	U49382	Vigna radiata
CAA92216.1	Z68130	Pisum sativum

SEQ ID NO. 2667

AAC09419.1	M68929	Mitochondrion Marchantia polymorpha

SEQ ID NO. 2668

AAF61647.1	AF190634	Nicotiana tabacum
BAA89009.1	AB027455	Petunia x hybrida
AAF17077.1	AF199453	Sorghum bicolor
BAA93039.1	AB033758	Citrus unshiu
BAA36423.1	AB013598	Verbena x hybrida
AAF98390.1	AF287143	Brassica napus

BAA36421.1	AB013596	Perilla frutescens
BAA36422.1	AB013597	Perilla frutescens
BAA12737.1	D85186	Gentiana triflora
BAB41024.1	AB047097	Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
AAD21086.1	AF127218	Forsythia x intermedia
BAB41025.1	AB047098	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41021.1	AB047094	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAA19659.1	AB002818	Perilla frutescens
AAB48444.1	U82367	Solanum tuberosum
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAB36653.1	U32644	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
BAA90787.1	AB038248	Ipomoea batatas
CAA54612.1	X77462	Manihot esculenta
BAA89008.1	AB027454	Petunia x hybrida
CAA54614.1	X77464	Manihot esculenta

SEQ ID NO. 2669

AAD56282.1	AF155332	Petunia x hybrida
BAB20076.1	AB012925	Torenia hybrida
CAA80266.1	Z22545	Petunia x hybrida
BAA03438.1	D14588	Petunia x hybrida
AAC32274.1	AF081575	Petunia x hybrida
CAA09850.1	AJ011862	Catharanthus roseus
AAG49299.1	AF313489	Callistephus chinensis
AAG49300.1	AF313490	Lycianthes rantonnei
CAA50155.1	X70824	Solanum melongena
BAA03440.1	D14590	Campanula medium
CAA80265.1	Z22544	Petunia x hybrida
AAB17562.1	U72654	Eustoma grandiflorum
AAG49301.1	AF313491	Matthiola incana
BAA03439.1	D14589	Eustoma grandiflorum
AAG49315.1	AF315465	Pelargonium x hortorum
AAC39452.1	AF014800	Eschscholzia californica
CAA50648.1	X71657	Solanum melongena
AAC39453.1	AF014801	Eschscholzia californica
BAA12735.1	D85184	Gentiana triflora
AAF05621.1	AF191772	Papaver somniferum

SEQ ID NO. 2672

AAC48922.1	U06047	Vigna radiata

SEQ ID NO. 2673

BAA93453.1	AB026495	Petunia x hybrida
BAA74428.1	AB010708	Gentiana triflora
BAA96577.1	AP002480	Oryza sativa
BAA93452.1	AB026494	Gentiana triflora
BAA93475.1	AB029340	Perilla frutescens
AAG13130.1	AF193789	Fragaria x ananassa

SEQ ID NO. 2674

AAF19807.1	AF180356	Brassica oleracea
BAA92986.1	AP001550	Oryza sativa
AAF19403.1	AF203481	Lycopersicon esculentum
AAF19402.1	AF203480	Lycopersicon esculentum
BAA05648.1	D26601	Nicotiana tabacum
AAF23900.1	AF194413	Oryza sativa
AAF23901.2	AF194414	Oryza sativa
CAA89202.1	Z49233	Chlamydomonas eugametos
BAA13440.1	D87707	Ipomoea batatas
AAF21062.1	AF216527	Dunaliella tertiolecta
BAA85396.1	AP000615	Oryza sativa
AAC05270.1	AF048691	Oryza sativa
AAC04324.1	U73937	Nicotiana tabacum
CAA73067.1	Y12464	Sorghum bicolor
CAA57156.1	X81393	Oryza sativa
AAG36872.1	AF239819	Zea mays
AAD17800.1	AF090835	Mesembryanthemum crystallinum
CAA43659.1	X61387	Zea mays
AAF76187.1	AF271237	Zea mays
BAB21591.1	AB036788	Oryza sativa
BAB21589.1	AB036786	Oryza sativa

CAA72362.1	Y11649	Zea mays
CAA72290.1	Y11526	Zea mays
CAA65244.1	X95997	Solanum tuberosum
AAG46110.1	AC073166	Oryza sativa
AAB80693.1	U69174	Glycine max
CAA39936.1	X56599	Daucus carota
CAA07481.1	AJ007366	Zea mays
BAA12338.1	D84408	Zea mays
BAA13232.1	D87042	Zea mays
AAD28192.2	AF115406	Solanum tuberosum
AAC99329.1	AF062479	Oryza sativa
AAB80692.1	U69173	Glycine max
CAA57157.1	X81394	Oryza sativa
BAA02698.1	D13436	Oryza sativa
BAA05649.1	D26602	Nicotiana tabacum
AAF40430.1	AF234652	Mesembryanthemum crystallinum
AAB05457.1	U55768	Oryza sativa
AAA33443.1	L15390	Zea mays

SEQ ID NO. 2675

AAA86979.1	U16021	Mesembryanthemum crystallinum
CAA49994.1	X70651	Nicotiana tabacum
AAD24857.1	AF047842	Solanum tuberosum
AAA33499.1	M80912	Zea mays
CAA83914.1	Z33611	Zea mays
CAB66002.1	AJ132256	Apium graveolens
CAA06215.1	AJ004915	Malus x domestica
CAA49995.1	X70652	Ricinus communis
CAA52928.1	X75020	Prunus dulcis

SEQ ID NO. 2676

AAF29773.1	AF159229	Gossypium hirsutum
AAF22518.1	AF118925	Papaver somniferum
AAF22517.1	AF118924	Papaver somniferum
AAF22519.1	AF118926	Papaver somniferum
AAG34795.1	AF243360	Glycine max
AAG34850.1	AF244707	Zea mays
AAG34842.1	AF244699	Zea mays
AAD10129.1	AF004358	Aegilops tauschii
AAG34830.1	AF244687	Zea mays
AAC32118.1	AF051214	Picea mariana
AAG34848.1	AF244705	Zea mays
AAG34839.1	AF244696	Zea mays
AAG34846.1	AF244703	Zea mays
AAG34838.1	AF244695	Zea mays
AAG34845.1	AF244702	Zea mays
AAG34835.1	AF244692	Zea mays
AAC32139.1	AF051238	Picea mariana
AAG34833.1	AF244690	Zea mays
CAA09188.1	AJ010449	Alopecurus myosuroides
CAA09189.1	AJ010450	Alopecurus myosuroides
AAG34843.1	AF244700	Zea mays
CAA09187.1	AJ010448	Alopecurus myosuroides
AAG34834.1	AF244691	Zea mays
AAG34841.1	AF244698	Zea mays
AAG34840.1	AF244697	Zea mays
AAC16555.1	AF064201	Gossypium hirsutum
AAG34797.1	AF243362	Glycine max
AAC18566.1	AF048978	Glycine max
AAG34809.1	AF243374	Glycine max
AAG34800.1	AF243365	Glycine max
AAG34844.1	AF244701	Zea mays
CAA71784.1	Y10820	Glycine max
AAG34810.1	AF243375	Glycine max
AAG34798.1	AF243363	Glycine max
CAC24549.1	AJ296343	Cichorium intybus x Cichorium endivia
AAF22647.1	AF193439	Lycopersicon esculentum
AAG34805.1	AF243370	Glycine max
AAG34807.1	AF243372	Glycine max

SEQ ID NO. 2677

AAF75791.1	AF271892	Pisum sativum
BAA03763.1	D16247	Nicotiana sylvestris
AAF40306.1	AF156667	Vigna radiata
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95705.1	AB042644	Oryza sativa
BAA95704.1	AB042643	Oryza sativa

SEQ ID NO. 2678

AAG17470.1	AF123609	Triticum aestivum

AAK31592.1	AY029178	Brassica rapa subsp. pekinensis
AAG33645.1	AF092917	Vicia sativa
AAD10204.1	AF030260	Vicia sativa
CAB41474.1	AJ238402	Catharanthus roseus
AAB94586.1	AF022457	Glycine max
CAA89260.1	Z49263	Pisum sativum
AAD56282.1	AF155332	Petunia x hybrida
CAA70575.1	Y09423	Nepeta racemosa
CAA50155.1	X70824	Solanum melongena
AAA32913.1	M32885	Persea americana
BAA22423.1	AB001380	Glycyrrhiza echinata
AAB94588.1	AF022459	Glycine max
BAA74466.1	AB022733	Glycyrrhiza echinata
AAB94592.1	AF022463	Glycine max
BAA84072.1	AB028152	Torenia hybrida
BAA12159.1	D83968	Glycine max
AAA17732.1	L19074	Catharanthus roseus

SEQ ID NO. 2683

CAA84230.1	Z34465	Zea mays
AAD55979.1	AF159296	Lycopersicon esculentum
AAD55980.1	AF159297	Zea mays

SEQ ID NO. 2684

CAB45652.1	AJ243308	Pisum sativum
CAA28471.1	X04782	Glycine max
BAB12437.1	AB027468	Adiantum capillus-veneris

SEQ ID NO. 2685

AAF40306.1	AF156667	Vigna radiata
BAA03763.1	D16247	Nicotiana sylvestris
AAF75791.1	AF271892	Pisum sativum
CAA68193.1	X99937	Spinacia oleracea
AAD20980.1	AF079782	Zea mays
BAA95705.1	AB042644	Oryza sativa
BAA95704.1	AB042643	Oryza sativa
AAG48833.1	AC084218	Oryza sativa

SEQ ID NO. 2687

AAC61839.1	AF025430	Papaver somniferum
AAB20352.1	S65550	Eschscholzia californica
AAC39358.1	AF005655	Eschscholzia californica
AAD17487.1	AF049347	Berberis stolonifera

SEQ ID NO. 2688

BAA13524.1	D87984	Fagopyrum esculentum
BAB20886.1	AB053294	Oryza sativa
AAF88067.1	AF286593	Triticum aestivum
CAA05081.1	AJ001903	Triticum turgidum subsp. d
CAA41415.1	X58527	Nicotiana tabacum
AAB53694.1	U59379	Brassica napus
BAA25681.1	AB010434	Brassica rapa
BAA04864.1	D21836	Oryza sativa
AAB51522.1	U92541	Oryza sativa
BAA05546.1	D26547	Oryza sativa
AAC32111.1	AF051206	Picea mariana
AAG35777.1	AF273844	Brassica oleracea var. alboglabra
AAB53695.1	U59380	Brassica napus
CAA94534.1	Z70677	Ricinus communis
CAA77847.1	Z11803	Nicotiana tabacum
BAB39913.1	AP002912	Oryza sativa
AAD49230.1	AF159385	Hordeum bulbosum
AAD49231.1	AF159386	Secale cereale
AAD49234.1	AF159389	Phalaris coerulescens
AAD49233.1	AF159388	Phalaris coerulescens
AAD33596.1	AF133127	Hevea brasiliensis
AAD49232.1	AF159387	Lolium perenne
AAD56954.1	AF186240	Secale cereale
CAA56850.1	X80887	Chlamydomonas reinhardtii
CAA55399.1	X78822	Chlamydomonas reinhardtii
AAC19392.1	AF069314	Mesembryanthemum crystallinum
CAA53900.1	X76269	Pisum sativum
AAC04671.1	AF018174	Brassica napus
AAC49358.1	U35831	Pisum sativum
AAB52409.1	U76831	Brassica napus
AAD45358.1	AF160870	Brassica napus
CAA33082.1	X14959	Spinacia oleracea
CAA35827.1	X51463	Spinacia oleracea
CAA35826.1	X51462	Spinacia oleracea
CAA45098.1	X63537	Pisum sativum
CAA06736.1	AJ005841	Oryza sativa

AAC49357.1	U35830	Pisum sativum
CAA56851.1	X80888	Chlamydomonas reinhardtii
CAA55398.1	X78821	Chlamydomonas reinhardtii
CAA44209.1	X62335	Chlamydomonas reinhardtii
CAA06735.1	AJ005840	Triticum aestivum
AAB03681.1	U43609	Chlamydomonas reinhardtii

SEQ ID NO. 2689

AAF64227.1	AF248647	Lycopersicon pennellii
AAD01264.1	AF006079	Solanum berthaultii
AAD01263.1	AF006078	Solanum berthaultii
AAD01265.1	AF006080	Solanum berthaultii
CAA70816.1	Y09603	Hordeum vulgare
BAA04510.1	D17586	Oryza sativa
AAF44708.1	AF242849	Lycopersicon esculentum
AAA32940.1	J03897	Hordeum vulgare
CAB59202.1	X78878	Hordeum vulgare
CAA55478.1	X78877	Hordeum vulgare
BAB08188.1	AP002539	Oryza sativa
CAA70815.1	Y09602	Hordeum vulgare
AAD22150.1	AF061282	Sorghum bicolor
AAD42963.2	AF141384	Matricaria chamomilla
CAA70817.1	Y09604	Hordeum vulgare
BAA04511.1	D17587	Oryza sativa
BAA01757.1	D10985	Oryza sativa
AAD22151.1	AF061282	Sorghum bicolor
CAB58992.1	X78876	Hordeum vulgare
BAA94235.1	AP001633	Oryza sativa
CAB71127.1	AJ271659	Cicer arietinum
BAB19126.1	AP002839	Oryza sativa
AAD22164.1	AF061282	Sorghum bicolor
AAA92062.1	U49382	Vigna radiata
AAA92064.1	U49741	Vigna radiata
CAA92216.1	Z68130	Pisum sativum

SEQ ID NO. 2691

AAC67587.1	AF095521	Citrus x paradisi
CAA83682.1	Z32849	Ricinus communis
AAA63451.1	M55190	Solanum tuberosum
CAA83683.1	Z32850	Ricinus communis
AAC67586.1	AF095520	Citrus x paradisi
AAA63452.1	M55191	Solanum tuberosum
BAA04611.1	D17765	Oryza sativa

SEQ ID NO. 2692

CAA54612.1	X77462	Manihot esculenta
CAA54609.1	X77459	Manihot esculenta
CAA54611.1	X77461	Manihot esculenta
CAA54613.1	X77463	Manihot esculenta
CAB56231.1	Y18871	Dorotheanthus bellidiformis
AAB36653.1	U32644	Nicotiana tabacum
AAK28303.1	AF346431	Nicotiana tabacum
AAF61647.1	AF190634	Nicotiana tabacum
AAB36652.1	U32643	Nicotiana tabacum
AAK28304.1	AF346432	Nicotiana tabacum
AAF17077.1	AF199453	Sorghum bicolor
BAA89009.1	AB027455	Petunia x hybrida
CAA59450.1	X85138	Lycopersicon esculentum
BAA83484.1	AB031274	Scutellaria baicalensis
AAF98390.1	AF287143	Brassica napus
BAA36423.1	AB013598	Verbena x hybrida
AAD04166.1	AF101972	Phaseolus lunatus
BAB41021.1	AB047094	Vitis vinifera
BAB41023.1	AB047096	Vitis vinifera
BAB41025.1	AB047098	Vitis vinifera
BAB41019.1	AB047092	Vitis vinifera
AAD21086.1	AF127218	Forsythia x intermedia
BAB41017.1	AB047090	Vitis labrusca x Vitis vinifera
BAB41026.1	AB047099	Vitis vinifera
BAB41024.1	AB047097	Vitis vinifera
BAB41022.1	AB047095	Vitis vinifera
AAB81682.1	AF000371	Vitis vinifera
BAB41020.1	AB047093	Vitis vinifera
AAB81683.1	AF000372	Vitis vinifera
BAB41018.1	AB047091	Vitis labrusca x Vitis vinifera
BAA93039.1	AB033758	Citrus unshiu

SEQ ID NO. 2693

CAA09881.1	AJ011939	Trifolium repens
CAA62228.1	X90695	Medicago sativa
AAB41812.1	L36158	Medicago sativa
CAA71495.1	Y10469	Spinacia oleracea

AAD11482.1	U51192	Glycine max
AAD11481.1	U51191	Glycine max
AAD11483.1	U51193	Glycine max
BAA77387.1	AB024437	Scutellaria baicalensis
AAD11484.1	U51194	Glycine max
CAA62226.1	X90693	Medicago sativa
AAC98519.1	AF007211	Glycine max
CAC21393.1	AJ401276	Zea mays
AAA65637.1	L13654	Lycopersicon esculentum
BAA07664.1	D42065	Nicotiana tabacum
AAA98491.1	L36981	Petroselinum crispum
AAD37427.1	AF149277	Phaseolus vulgaris
CAB67121.1	Y19023	Lycopersicon esculentum
AAA65636.1	L13653	Lycopersicon esculentum
BAA03644.1	D14997	Oryza sativa
CAA50597.1	X71593	Lycopersicon esculentum
AAB41811.1	L36157	Medicago sativa
AAF63024.1	AF244921	Spinacia oleracea
BAA07663.1	D42064	Nicotiana tabacum
BAA01950.1	D11337	Vigna angularis
AAF65464.2	AF247700	Oryza sativa
BAA08499.1	D49551	Oryza sativa
CAA71496.1	Y10470	Spinacia oleracea
CAB94692.1	AJ242742	Ipomoea batatas
AAG02215.1	AF291667	Pinus sylvestris
AAD37376.1	AF145350	Glycine max
CAA62227.1	X90694	Medicago sativa
CAA71488.1	Y10462	Spinacia oleracea
CAA71492.1	Y10466	Spinacia oleracea
BAA01877.1	D11102	Populus kitakamiensis
CAA76374.2	Y16776	Spinacia oleracea
AAB06183.1	M37636	Arachis hypogaea
AAD43561.1	AF155124	Gossypium hirsutum
AAC49819.1	AF014468	Oryza sativa
CAA05897.1	AJ003141	Hordeum vulgare
AAB67737.1	L77080	Stylosanthes humilis
BAA03911.1	D16442	Oryza sativa
CAA62225.1	X90692	Medicago sativa
CAA74203.1	Y13905	Zea mays
CAA71490.1	Y10464	Spinacia oleracea
AAA34108.1	J02979	Nicotiana tabacum
CAA46916.1	X66125	Oryza sativa
AAA32676.1	M37637	Arachis hypogaea

SEQ ID NO. 2694

CAA88254.1	Z48221	Phaseolus vulgaris
CAA40686.1	X57438	Brassica napus
CAA05491.1	AJ002485	Medicago sativa
CAA05493.1	AJ002487	Medicago sativa
CAA56766.1	X80788	Medicago sativa subsp. x v.
CAB07803.1	Z93768	Nicotiana tabacum
CAA05492.1	AJ002486	Medicago sativa
BAA92244.1	AB038648	Vicia faba
AAA33545.1	M60215	Zea mays
AAA74625.1	U31773	Oryza sativa
CAA07470.1	AJ007332	Catharanthus roseus
AAD38856.1	AF156101	Chlamydomonas reinhardtii
CAB07804.1	Z93769	Nicotiana tabacum
CAA45119.1	X63558	Brassica oleracea
CAA82263.1	Z28627	Acetabularia cliftonii
CAA05494.1	AJ002488	Medicago sativa
CAA82264.1	Z28632	Acetabularia cliftonii
CAB07805.1	Z93770	Nicotiana tabacum
AAD48068.1	AF173881	Oryza sativa subsp. indica
CAB46506.1	AJ007496	Nicotiana tabacum
CAA81395.1	Z26654	Acetabularia cliftonii
AAD22116.1	AF134552	Oryza sativa subsp. indica
BAA92698.1	AB039917	Vicia faba
BAA92697.1	AB039916	Vicia faba
CAB07807.1	Z93772	Nicotiana tabacum
BAA92699.1	AB039918	Vicia faba
CAA49849.1	X70399	Medicago sativa
AAD41126.1	AF159061	Oryza sativa subsp. indica
CAA40687.1	X57439	Brassica napus
CAC11129.1	AJ298829	Fagus sylvatica
CAA81126.1	Z26041	Helianthus annuus
AAD09953.1	AF107464	Hevea brasiliensis
AAF86353.1	AF283668	Oryza sativa subsp. indica
AAC72838.1	AF097182	Oryza sativa
CAA07471.1	AJ007333	Catharanthus roseus
AAA91806.1	U49113	Oryza sativa
CAB07806.1	Z93771	Nicotiana tabacum

CAA87385.1	Z47076	Malus x domestica
CAC11128.1	AJ298828	Fagus sylvatica
CAA87387.1	Z47078	Malus x domestica
CAA87386.1	Z47077	Malus x domestica
BAA92333.1	AB038786	Vicia faba
BAA92334.1	AB038787	Vicia faba
BAA92337.1	AB038790	Vicia faba
BAA92338.1	AB038791	Vicia faba
BAA92336.1	AB038789	Vicia faba

SEQ ID NO. 2695

AAA33945.1	J03919	Glycine max
CAA48297.1	X68215	Pisum sativum
AAA33944.1	J03920	Glycine max
CAA48298.1	X68216	Pisum sativum
CAA48299.1	X68217	Pisum sativum
CAA48300.1	X68218	Pisum sativum
AAD50278.1	AF169830	Glycine max

SEQ ID NO. 2696

AAC37515.1	L44134	Cucumis sativus
AAD16139.1	AF096299	Nicotiana tabacum
BAA77383.1	AB020590	Nicotiana tabacum
BAA86031.1	AB026890	Nicotiana tabacum
AAC31956.1	AF080595	Pimpinella brachycarpa
AAD55974.1	AF121353	Petroselinum crispum
AAC49527.1	U48831	Petroselinum crispum
BAA82107.1	AB022693	Nicotiana tabacum
CAA88326.1	Z48429	Avena fatua
AAD16138.1	AF096298	Nicotiana tabacum
AAF23898.1	AF193802	Oryza sativa
AAC49529.1	U58540	Petroselinum crispum
AAG35658.1	AF204925	Petroselinum crispum
BAA77358.1	AB020023	Nicotiana tabacum
BAB16432.1	AB041520	Nicotiana tabacum
CAA88331.1	Z48431	Avena fatua
CAB66338.1	AJ279697	Betula pendula
AAC49528.1	U56834	Petroselinum crispum
AAG35659.1	AF204926	Petroselinum crispum
AAF61864.1	AF193771	Nicotiana tabacum
AAF61863.1	AF193770	Nicotiana tabacum
AAD27591.1	AF121354	Petroselinum crispum
BAA87069.1	AB035271	Matricaria chamomilla

SEQ ID NO. 2698

CAA06223.1	AJ004923	Lycopersicon esculentum

SEQ ID NO. 2699

CAA59472.1	X85206	Catharanthus roseus
BAB16431.1	AB041519	Nicotiana tabacum
AAF78903.1	AF248055	Glycine max
AAC60566.1	S68113	Brassica napus
AAC49369.1	U34333	Phaseolus vulgaris
AAD01800.1	AF026382	Fragaria x ananassa
BAA13150.1	D86629	Nicotiana tabacum
BAB16428.1	AB041516	Nicotiana tabacum
BAA95941.1	AB035125	Nicotiana tabacum
BAA13155.1	D86721	Nicotiana tabacum
AAB18205.1	U73214	Triticum aestivum
CAA57810.1	X82413	Asparagus officinalis
AAA33132.1	L20755	Cuscuta reflexa
CAA42959.1	X60432	Zea mays
CAA43666.1	X61395	Lycopersicon esculentum
CAA40361.1	X57076	Lycopersicon esculentum

SEQ ID NO. 2701

CAA52149.1	X73961	Cucumis sativus
AAC03416.1	U92815	Citrullus lanatus
CAA47345.1	X66874	Phaseolus vulgaris
AAC60559.2	S59747	Mitochondrion Solanum tuberosum
AAA33637.1	L03299	Pisum sativum
AAB96660.1	AF039084	Spinacia oleracea
AAB91473.1	AF035458	Spinacia oleracea
AAB91472.1	AF035457	Spinacia oleracea
CAA65356.1	X96502	Chlamydomonas reinhardtii
AAB96659.1	AF039083	Spinacia oleracea
AAB91471.1	AF035456	Spinacia oleracea
AAA18570.1	M99565	Spinacia oleracea
CAB72128.1	AJ249329	Cucumis sativus
AAA34139.1	L08830	Lycopersicon esculentum
CAA67867.1	X99515	Pisum sativum
CAA30018.1	X06932	Petunia x hybrida

AAB99745.1	AF005993	Triticum aestivum
AAB88134.1	AF034618	Spinacia oleracea
CAA44620.1	X62799	Glycine max
CAA37971.1	X54030	Lycopersicon esculentum
AAB88009.1	AF035414	Brassica napus
CAB72130.1	AJ249331	Cucumis sativus
AAF34134.1	AF161180	Malus x domestica
CAB72129.1	AJ249330	Cucumis sativus
CAA47948.1	X67711	Oryza sativa
AAB88133.1	AF034617	Spinacia oleracea
AAB88132.1	AF034616	Spinacia oleracea
AAB97316.1	AF033852	Spinacia oleracea
CAA43711.1	X61491	Spinacia oleracea

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The claims defining the invention are as follows:

1 An isolated polynucleotide, comprising SEQ ID NO: 1034.

2 A recombinant nucleic acid molecule, comprising the isolated polynucleotide of claim 1 operatively linked to a heterologous nucleotide sequence.

3 A vector, comprising the polynucleotide of claim 1.

4 A vector of claim 3, which is an expression vector.

5 A cell containing the polynucleotide of claim 1.

6 A cell of claim 5, which is a plant cell.

7 A method of identifying a cold stress condition to which a plant cell has been exposed, the method comprising:

(a) contacting nucleic acid molecules representative of expressed polynucleotides in the plant cell with an array of probes representative of the plant cell genome ; and

(b) detecting expression of SEQ ID NO: 1034 in the plant cell, thereby identifying the cold stress condition to which the plant cell was exposed.

8 The method of claim 7, wherein the nucleic acid molecules representative of expressed polynucleotides in the plant cell are RNA molecules or cDNA molecules.

9 The method of claim 7 or 8, wherein the array of probes representative of the plant cell genome is immobilized on a microchip.

10 A method for determining whether a test plant has been exposed to a cold stress, the method comprising contacting nucleic acid molecules representative of expressed

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polynucleotides in cells of the test plant with at least one nucleic acid probe under conditions suitable for selective hybridization to a complementary nucleotide sequence,

wherein the probe comprises at least 15 nucleotides of a nucleotide sequence as set forth in SEQ ID NO: 1034, or a nucleotide sequence complementary thereto,

whereby

detecting selective hybridization of at least one nucleic acid probe, or

detecting a change in a level of selective hybridization as compared to a level of selective hybridization obtained using nucleic acid molecules representative of expressed polynucleotides in cells of a plant known not have been exposed to a cold stress,

indicates that the test plant has been exposed to a cold stress, and

whereby an absence of selective hybridization of at least one nucleic acid probe indicates that the test plant has not been exposed to a cold stress.

11 A method for determining whether a test plant has been exposed to a cold stress, the method comprising detecting a level of expression of at least one polynucleotide comprising a nucleotide sequence as set forth in SEQ ID NO: 1034 in cells of the test plant,

wherein

detecting a level of expression that is at least about two-fold different from a level of expression of the at least one polynucleotide in cells of a plant not exposed to a cold stress, or

detecting a level of expression that is less than about two-fold different from a level of expression of the at least one polynucleotide in cells of a plant known to be exposed to a cold stress,

indicates the test plant has been exposed to a cold stress, or

wherein

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detecting a level of expression that is less than at least about two-fold different from a level of expression of the at least one polynucleotide in cells of a plant not exposed to a cold stress, or

detecting a level of expression that is at least two-fold different from a level of expression of the at least one polynucleotide in cells of a plant known to be exposed to a cold stress,

indicates the test plant has not been exposed to a cold stress.

12 A method of producing a transgenic plant comprising plant cells that exhibit altered responsiveness to a cold stress condition, the method comprising introducing a polynucleotide portion of a plant stress-regulated gene into a plant cell genome, wherein the polynucleotide portion of the stress-regulated gene does not comprise a nucleotide sequence as set forth in SEQ ID NO: 1034, whereby the polynucleotide portion of the plant stress- regulated gene modulates a response of the plant cells to a cold stress condition, thereby producing a transgenic plant comprising plant cells that exhibit altered responsiveness to the stress condition.

13 The method of claim 12, wherein the polynucleotide portion of the plant stress-regulated gene encodes a cold stress-regulated polypeptide or functional peptide portion thereof.

14 The method of claim 13, wherein the stress-regulated polypeptide or functional peptide portion thereof increases the cold stress tolerance of the transgenic plant.

15 The method of claim 13, wherein the stress-regulated polypeptide or functional peptide portion thereof decreases the cold stress tolerance of the transgenic plant.

16 The method of any one of claims 13 to 15, wherein the polynucleotide portion of the plant stress-regulated gene is operatively linked to a heterologous promoter.

17 The method of any one of claims 13 to 16, wherein the polynucleotide portion of the plant stress-regulated gene comprises a stress-regulated regulatory element.

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18 The method of claim 17, wherein, upon introducing the cold stress-regulated regulatory element into the plant cell, the regulatory element integrates into the plant cell genome in a site-specific manner.

19 The method of claim 18, wherein, upon integrating into the plant cell genome, the regulatory element is operatively linked to a heterologous nucleotide sequence, which can be expressed in response to a cold stress condition specific for the regulatory element.

20 The method of any one of claims 17 to 19, wherein the plant stress-regulated regulatory element is a mutant regulatory element, which is not responsive to the stress condition, whereby upon integrating into the plant cell genome, the mutant regulatory element disrupts an endogenous stress-regulated regulatory element of a plant stress- regulated gene, thereby altering the responsiveness of the plant stress-regulated gene to the stress condition.

21 The method of any one of claims 12 to 20, wherein the stress is an abnormal level of cold.

22 The method of any one of claims 17 to 21, wherein the stress-regulated regulatory element is operatively linked to a polynucleotide encoding a detectable marker.

23 A transgenic plant produced by the method of any one of claims 12 to 22.

24 A plant cell from the transgenic plant of claim 23, wherein said plant cell exhibits altered responsiveness to the stress condition.

25 A seed produced by the transgenic plant of claim 23.

26 A cDNA or genomic DNA library prepared from the transgenic plant of claim 23, or from a plant cell of claim 24.

27 A method for monitoring a population of plants for exposure to a cold stress, the method comprising:

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(a) introducing into the population of a plants a sentinel plant, wherein said sentinel plant is a transgenic plant of claim 24, which comprises plant cells containing a stress-regulated regulatory element is operatively linked to a polynucleotide encoding a detectable marker; and

(b) examining the sentinel plant for expression of the detectable marker, which is indicative of exposure of the population of plants to a stress condition or combination of stress conditions,

thereby monitoring the population of plants for exposure to the cold stress condition.

28 The method of claim 27, wherein the plants are also monitored for exposure to further stress condition.

29 The method of claim 28, wherein the further stress condition is an osmotic stress, a saline stress, or a combination thereof.

30 The method of any one of claims 27 to 29, wherein the regulatory element comprises a nucleotide sequence as set forth in any of SEQ ID NOS: 2704-3955.

31 The method of claim 27, wherein the regulatory element comprises a nucleotide sequence as set forth in any of SEQ ID NOS: 2704-2855,2857-2928, 2930-2932, 2934-3256,3258-3271, 3273-3304,3306-3323, 3325-3333,3335-3485, 3487-3511, and 3313-3955.

32 The method of claim 28, wherein the further stress condition is an osmotic stress, and wherein the regulatory element comprises a nucleotide sequence as set forth in any of SEQ ID NO: 4389-4654.

33 The method of claim 28, wherein the further stress condition is an osmotic stress, and wherein the regulatory element comprises a nucleotide sequence as set forth in any of SEQ ID NOS: 4389-4414, 4416-4552, 4554-4602, 4604-4612, and 4613-4654.

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34 The method of claim 28, wherein the further stress condition is a saline stress, and wherein the regulatory element comprises a nucleotide sequence as set forth in any of SEQ ID NOS: 4655-5909.

35 The method of claim 28, wherein the further stress condition is an osmotic stress, and a saline stress, and wherein the regulatory element comprises a nucleotide sequence as set forth in any of SEQ ID NOS: 3956-4388.

36 The method of claim 28, wherein the further stress condition is an osmotic stress, and a saline stress, and wherein the regulatory element comprises a nucleotide sequence as set forth in any of SEQ ID NOS: 3956, 3958-4078, 4080-4097, 4099-4136, 4138-4175, 4177-4279, 4281-4299, 4301-4324, and 4326-4388.

37 The method of any of claims 27 to 36, wherein the detectable marker is visibly detectable.

38 The method of any of claims 27 to 36, wherein said detectable marker comprises a luminescent detectable marker.

39 The method of any of claims 27 to 36, wherein said detectable marker comprises a fluorescent detectable marker.

40 The method of claim 39, wherein said fluorescent detectable marker comprises a green fluorescent protein, a yellow fluorescent protein, a cyan fluorescent protein, a red fluorescent protein, or an enhanced or modified form thereof.

41 A method of selecting a plant having an altered resistance to a cold stress condition, the method comprising:

(a) contacting nucleic acid molecules representative of expressed polynucleotides in a plant cell of a plant to be examined for having an altered resistance to an abiotic stress with a nucleic acid probes that selectively hybridizes under stringent

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conditions to a plant stress-regulated gene comprising a nucleotide sequence as set forth in SEQ ID NO: 1034;

(b) detecting a level of selective hybridization of the nucleic acid probes to a nucleic acid molecule representative of an expressed polynucleotide in the plant cell, wherein the level of selective hybridization corresponds to the level of the expressed polynucleotide in the plant cell, which is indicative of resistance of the plant to an abiotic stress; and

(c) selecting a plant having a level of expression of a polynucleotide indicative of altered resistance to an abiotic stress condition.

42 The method of claim 41, wherein the abiotic stress condition is cold stress, and wherein the nucleic acid probe comprises at least about 15 nucleotides of a nucleotide sequence as set forth in SEQ ID NO: 1034.

43 A method of modulating the responsiveness of a plant cell to a cold stress condition, the method comprising introducing a polynucleotide portion of a plant stress-regulated gene into the plant cell, wherein said gene comprises a nucleotide sequence of a polynucleotide as set forth in SEQ ID NO: 1034, thereby modulating the responsiveness of the plant cell to a stress condition.

44 The method of claim 43, wherein the responsiveness of the plant cell is increased upon exposure to the stress condition.

45 The method of claim 44, wherein increased responsiveness of the plant cell increases the stress tolerance of the plant cell to the stress condition.

46 The method of claim 43, wherein the responsiveness of the plant cell is decreased upon exposure to the stress condition.

47 The method of claim 46, wherein decreased responsiveness of the plant cell increases the stress tolerance of the plant cell to the stress condition.

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48 The method of claim 43, wherein the polynucleotide portion of the plant stress-regulated gene integrates into the genome of the plant cell, thereby modulating the responsiveness of the plant cell to the stress condition.

49 The method of claim 43, wherein the polynucleotide portion of the plant stress-regulated gene encodes a stress-regulated polypeptide or functional peptide portion thereof.

50 The method of claim 49, wherein the stress-regulated polypeptide or functional peptide portion thereof increases the responsiveness of the plant cell to the stress condition.

51 The method of claim 49, wherein the polynucleotide portion of the plant stress-regulated gene is operatively linked to a heterologous promoter.

52 The method of claim 49, wherein the polynucleotide portion of the plant stress-regulated gene contains a mutation, whereby upon integrating into the plant cell genome, the polynucleotide disrupts an endogenous plant stress-regulated gene, thereby modulating the responsiveness of said plant cell to the stress condition.

53 The method of claim 52, wherein the endogenous plant stress-regulated gene encodes a maladaptive stress-regulated polypeptide, and wherein said plant cell exhibits increased tolerance to the stress condition.

54 The method of claim 43, wherein the polynucleotide portion of the plant stress-regulated gene comprises a stress-regulated gene regulatory element.

55 The method of claim 54, wherein the regulatory element is operatively linked to a heterologous nucleotide sequence, which, upon expression from the regulatory element in response to a stress condition, modulates the responsiveness of the plant cell to the stress condition.

56 The method of claim 55, wherein the heterologous nucleotide sequence encodes a stress-inducible transcription factor.

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57 The method of claim 56, wherein the transcription factor is DREB1A.

58 The method of claim 55, wherein the heterologous nucleotide sequence encodes a polynucleotide specific for a plant stress-regulated gene, said polynucleotide selected from the group consisting of an antisense molecule, a ribozyme, and a triplexing agent, which, upon expression in the plant cell, reduces or inhibits expression of a stress-regulated polypeptide encoded by the gene, thereby modulating the responsiveness of the plant cell to a stress condition.

59 The method of claim 55, wherein the heterologous nucleotide sequence encodes a recombinant polypeptide comprising a zinc finger domain and a transcription effector domain.

60 The method of claim 59, wherein the transcription effector domain is a transcription activator domain.

61 A plant cell obtained by any of claims 43 to 60.

62 A plant comprising the plant cell of claim 61.

63 A method of identifying a polynucleotide that modulates a cold stress response in a plant cell, the methods comprising:

(a) contacting an array of probes representative of a plant cell genome and nucleic acid molecules expressed in plant cell exposed to the stress;

(b) detecting a nucleic acid molecule that is expressed at a level different from a level of expression in the absence of the stress;

(c) introducing the nucleic acid molecule of step b) into a plant cell; and

(d) detecting a modulated response of the plant cell of step c) to a cold stress, thereby identifying a polynucleotide that modulates a cold stress response in a plant cell.

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64 The method of claim 63, wherein expression of the nucleic acid molecule increases the tolerance of the plant cell to the stress.

65 The method of claim 63, wherein, in step b), the nucleic acid molecule is expressed at a level that is less than the level of expression in the absence of the stress.

66 A transgenic plant, which contains a transgene comprising a polynucleotide portion of plant stress-regulated gene, wherein the gene comprises a nucleotide sequence as set forth in SEQ ID NO: 1034.

67 The transgenic plant of claim 66, wherein the transgenic plant exhibits altered responsiveness to a stress condition as compared to a corresponding wild-type plant.

68 The transgenic plant of claim 67, wherein the transgene disrupts an endogenous stress-regulated gene in the plant, thereby reducing or inhibiting expression of the gene in response to a stress condition.

69 The transgenic plant of claim 67, wherein the plant exhibits increased tolerance to a stress condition.

70 The transgenic plant of claim 67, wherein the plant exhibits decreased tolerance to a stress condition.

71 The transgenic plant of any of claims 66 to 70, wherein the transgene comprises a coding sequence of a plant stress-regulated gene.

72 The transgenic plant of claim 71, wherein the coding sequence is operatively linked to a heterologous regulatory element.

73 The transgenic plant of claim 72, wherein the regulatory element is a constitutively active regulatory element.

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74 The transgenic plant of claim 72, wherein the regulatory element is an regulated regulatory element.

75 The transgenic plant of claim 72, wherein the regulatory element is a tissue specific or phase specific regulatory element.

76 The transgenic plant of any of claims 68 to 70, wherein the transgene comprises a plant stress-regulated regulatory element operatively linked to a heterologous nucleotide sequence.

77 The transgenic plant of claim 76, wherein the transgenic plant expresses a polypeptide encoded by the heterologous nucleotide sequence.

78 The transgenic plant of claim 77, wherein the polypeptide improves the nutritional value or ornamental value of the plant.

79 The transgenic plant of any of claims 68 to 77, wherein the plant comprises multiple transgenes.

80 The transgenic plant of claim 79, wherein the multiple transgenes comprise multiple copies of the same transgene or comprise two or more different transgenes.

81 A plant stress-regulated gene regulatory element, wherein the gene comprises a nucleotide sequence as set forth in SEQ ID NO: 1034.

82 A method of identifying an agent that modulates the activity of the plant stress-regulated regulatory element of claim 81, the method comprising:

(a) contacting the regulatory element with an agent suspected of having the ability to modulate the activity of the regulatory element; and

(b) detecting a change in the activity of the regulatory element, thereby identifying an agent that modulates the activity of the plant stress-regulated regulatory element.

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83 The method of claim 82, wherein the regulatory element can be operatively linked to a heterologous nucleotide sequence.

84 The method of claim 83, wherein the heterologous nucleotide sequence encodes a reporter molecule.

85 The method of any of claims 82 to 84, which is in vitro in a plant cell- free system, in a plant cell in culture, or in a plant in situ.

86 The method of claim 85, wherein the plant is a transgenic plant, into which the plant stress-regulated regulatory element has been introduced.

87 The method of any of claims 82 to 85, wherein the agent is a stress mimic.

88 A method of modulating a stress-regulated response in a plant cell, the method comprising expressing in the plant cell a recombinant polypeptide that interacts specifically with a plant stress-regulated regulatory element of claim 81, thereby modulating a stress-regulated response in the plant.

89 The method of claim 88, wherein the recombinant polypeptide comprises a zinc finger domain, which specifically interacts with the stress-regulated regulatory element, and a transcription effector domain, which effects expression of the regulatory element.

90 The method of claim 89, wherein the effector domain is a transcription activation domain.

91 The method of claim 89, wherein the effector domain is a transcription repressor domain.

92 A method of producing a plant having an improved tolerance to dehydration stress, the method including the following steps:

(a) providing a plant;

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(b) introducing a nucleic acid having a sequence shown in SEQ ID:No:1034 into the plant to permit the expression of the nucleic acid in the plant.

93 A plant produced by the method of claim 92.

94 A cell or tissue of a plant having an improved tolerance to dehydration stress of claim 93.

95 A cDNA or genomic library prepared from a plant of claim 93 or cell or tissue of claim 94.

96 A seed produced by a plant according to claim 93.

97 A computer readable medium having stored thereon computer executable instructions for performing a method comprising:

(a) receiving data on expression in a cell of a plant of a nucleic acid molecule having at least 70% sequence identity to a nucleotide sequence comprising any of SEQ ID NO. 1034; and

(b) comparing the data on expression of the nucleic acid molecule with data on expression of the nucleic acid in a cell of a plant that has not been exposed to an abiotic stress, of a plant that has been exposed to an abiotic stress condition or combination of abiotic stress conditions, or of a combination of such plants.

98 The computer readable medium of claim 97, wherein the nucleic acid molecule comprises one of a plurality of nucleic acid molecules, and wherein the computer executable instructions are capable performing receiving and comparing of any or all of the plurality of nucleic acid molecules.

99 A computer-readable medium having stored thereon a data structure comprising:

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sequence data for at least one nucleic acid molecule having at least 70% nucleic acid sequence identity to a polynucleotide having a nucleotide sequence as set forth in any of SEQ ID NO. 1034 or a nucleotide sequence complementary thereto; and

a module receiving the nucleic acid molecule sequence data, which compares the nucleic acid molecule sequence data to a least one other nucleic acid sequence.

Dated : 6 November 2006

Freehills Patent & Trade Mark Attorneys
Patent Attorneys for the Applicant:

The Scripps Research Institute
Syngenta Participations AG

<110> The Scripps Research Institute
Syngenta Participations AG
HARPER, Jeffrey F.
KREPS, Joel
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<120> STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING SAME, AND METHODS OF USE

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accggcatct ccgtcaccgt cggctatctc tctgggatta agcctgggat taagggaccg 180

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<213> Arabidopsis thaliana

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<213> Arabidopsis thaliana

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<211> 1188
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<213> Arabidopsis thaliana

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aatgctaaga tggaggaaat caaagccagt atggaaaatg gtgtgttgtc ggttaccgtg 420

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gttttgtttg ctttggagat taattcgctt ccgtatgaaa gacaaatggg gagtgtccct 360

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<211> 768
<212> DNA
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aagatttgtg ctagaatgcc gagaggtcaa gagaaattcg tagcaattgg agatctgcaa 480

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<211> 1260
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cctccgtctt atatttcctt agcgggcctc tataagcaga gcgctgcaac aaactcatcg 420

gatcctagaa attcgaaagc tcagggtttc aatttcaaaca ctgtaagtga aactttaaag 480

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agttttcaaga gcactgtagg tgaagcattg ccaaaatacc tgttcgaaac acaaatggat 600

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aacgaagaag aattaggtga gaaactaagg acgcttaggc cagaaggaga gaaaaaagaa 720

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gaagttttcg atgatgttac tatccagttc cagatcatcc gtctcgcgaa acagatttac 180

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agctctccct ttaacttgta cacttctatt ccttga 936

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<211> 1041
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actgcgactg aggaagctaa gaaagctttg gattatgtga ctgagaaagg aaaagaagcc 360

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caatctcgag gcacaatgag tgagtcatct tgtggaggag gacatggaag ccctattcat 840

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<211> 513
<212> DNA
<213> Arabidopsis thaliana

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gagacgagtt tcactgtgaa tggggttaaa tacgaaggaa gcttgctctg tgttgggaat 240

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<213> Arabidopsis thaliana

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ttggaatag 129

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gttatcgctg ccgcaaatac tgcagctgat gttgctctaa ggctcgtacg tcctggaaaa 480

aagaacactg atgtaactga agctattcag aaggtagctg cagcttatga ctgcaaaatt 540

gttgaaggtg ttctttccca ccagctgaaa cagcatgtga tagatggaaa caaggttgtg 600

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tatgcaatag atattgtggc aagtactggt gatggcaagc caaagctatt agacgagaag 720

caaacaacta tttacaagaa agatgaaagt gttaactatc agttgaagat gaaggcctcc 780

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ggtggtggaa agaagaagaa agcccaaaag gcgggagaga aaggagaggc ttcaacagag 1140

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<213> Arabidopsis thaliana

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ctccagatct tgcaggagag ggagcgttct gagtttcgtg ctctccagga acaagccggt 180

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cttattcgta aatcggtaga agaaaaagga aagggtaaag atggagacac aaaggagcac 540

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tctgattcgg aagaagattc tggtgaagag aataacggaa gaaaatctca ccatcagaaa 660

acgtcaggga ctcatgacag acactatgaa agaccaaggt cagatttaga agatgagtca 720

aaaggaagag agagtcgtga taggcactat gagaaacgaa ggtcagaact agatgatggg 780

cacaaaagaa gagagagaca tgatacgcac tatgagagac gaaggtcaga aatggatgat 840

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gatgagtcca aaagaagaga aagtcatgat aagcacttt g agagacaaag gtcagatttg 960

gatgatgagt acaaaagaag agaaagtcaa gataagagac gaaggtcaga tattgatgat 1020

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<213> Arabidopsis thaliana

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cataaggtct ttggtgccag caacgtcagc aaaatgttgc aggagctacc agttcatcaa 180

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aacatcaata actgcaacac caacaacaac aataacaact ttggttatgc catgtcttct 480

ggacagttca actctaactt tgcctcacca agcagcataa tgcaaatgca gatgcaaatg 540

caaatgcaag accctcttaa gcaagaatct ctttggactt aa 582

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<211> 222
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<213> Arabidopsis thaliana

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<211> 1170
<212> DNA
<213> Arabidopsis thaliana

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gcttcgaaca cacttctcga agccgtggtt ccgtattcca tgatctctat ggttcaatta 180

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gcttataatc gtgctcttaa gctttctaag ccaggatgtg cggttcttgg tgttggtttt 300

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agagcttcca accggatatg ggaaacttca gttactctaa caaagggaaa acgaagccga 420

gaggaagaag ataaagtggc aagctctgta ctgattcagg ctatggctaa ggcatgccaa 480

gttttctgaga cacttgactc tggcttgact gattctgagg tgcttaatga gtctgtaatc 540

cagttttagtg aagaagaaga actagaacag cttatagatg gacaaatatg ctctaagatc 600

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<211> 1173
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<213> Arabidopsis thaliana

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gctaatagac caatgataca cattggtggc taa 1173

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<211> 435
<212> DNA
<213> Arabidopsis thaliana

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gatctagatc cgccggcgaa aaagcagagc cgtcacattc atcgtcggaa atcaagaaag 120

agagacatgg aagccaagtt tttccggttc ttgaagattg ttggagttgg atacaaagct 180

agagctgagg aagcagggcg tttcttatac ctcaaattgg gttacagtca cgaagtcgaa 240

cttgcggttc ctccagcggt tcgagtcttt tgttttcaaga acaatgtggt ttgctgcact 300

ggaatcgaca agcaaagagt gcatcagttt gctgcaacgg taaggagttg caaacccccct 360

gaaccttata agggcaaagg cataatgtac actgatgaag tcgtcaagaa gaaacaagga 420

aagaagtcca aatga 435

<210> 591
<211> 609
<212> DNA
<213> Arabidopsis thaliana

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agatgcgaat catcggaacc gattaagcag attcagatcc agcaacgacc aagaggtggc 120

gattttagccg agaacgggaa gatcgtgctc caaccaaggc tttgcacgct gagatcttat 180

ggatctgata tggtcatcgc taaaaaggac ggcggagatg gtggaggagg aggatctgat 240

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ttggttgatc agatcgttga tggactgttc tacgatacca agcctagtga ttggtctgat 600

gatctttaa 609

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<212> DNA
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gacgaagaag gcagtgcaga tgatgcagaa ggaaaggaga ccaagaaagg accggtaagt 180

gatcctgatt tgaacggtga agctggagat aatgatgatg aacctgaagg ggatgatggt 240

aacgatgacg aggatgatga taaccatgag aacgatgatg aagatgagga ggaggatgaa 300

gacgagaatg atgatggtgg tgaagaagac gacgatgagg atgcggaggt agaggaggag 360

gaagaggaag aagatgaaga tgatgaggaa gcgcttcagc caccaaagaa gaggaagaag 420

tga 423

<210> 593
<211> 744
<212> DNA
<213> Arabidopsis thaliana

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gctgagacct ctcgttctga tgctgattcc aaactggatg aatgtactgc ttggacgaat 180

gagaaacaca actcatatct tgattattta gagagctcgt ttgttaggca attatactcc 240

ttgcttggag gtgggactca gagactttct agaactcgtg atgtgcagtc taactctcat 300

aaatcagctg atcagtggaa cttacaacat cctttgtttgc agtttaccgt cctacaaaat 360

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tttcgttttc acagaaattc attgagaaat aagcctgaaa attccaacgg aaattacacc 480

atgggaacta ctgtccaagg agatgtgtta tgtcatgacg aaaccaaaca ctcagaggcg 540

tcagggcaga atttcagaga agaagaagaa gaagaagaga agggagaggt gagcaaaaaa 600

cgagaaagag aagcaaataa cgatgatagt tcattgaagg aggatcaggt aaatatagat 660

aaagaacaaa tacgaaacaa tttcacttct actggtgaag ttttgctaaa gaggctgcta 720

catattctca ggttgtgccg gtaa 744

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<211> 1278
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aagaagacaa aagcatccca tgtttcaact gcgacagatg aaggatcaac agctgaaaac 480

gaagatgtag cagagtctga agtaggtggt ggttcttctt ccaaccacgc aaaggaggtg 540

gttcgtcctc ctactgatac aaacattgtg gacaacttaa ctggtcaaag gaggagcaac 600

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<210> 596
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<213> Arabidopsis thaliana

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aagatgactt gtcatgcgga ggtggagacc gaaagggttg aagcaaagag gaggaagacg 180

aaggagaatg tggtggtgca agcgcagaaa aaacagttc ctccgcctct ctcgtcatta 240

aacagccgtg gacagcgata ttttttatct c cgtccggtga gaaaagacgg tagattggaa 300

cttacgcaag ttatggtcga tcgaccagag attttccacg tttctagagt agatggacgg 360

ttgagattac attttgtcga tggtgtcgag aatcccatta gagcttattc tggtcctcaa 420

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attagtagat ctgatctgga atgtggtaga gagattaatg aagacgacaa tgatggtgca 540

tgtaatcaag gaatggattt atctataatc agtgatgata gtggtgcaag aagttggaga 600

tgtaaaagta gtcatgatgt ttcggtgaat agtaataatg atgttgcaca tttccatgat 660

gaccatgaca cgagagaatg gatgtacaac agtggttta agatcgtggc aagtaggaac 720

catgatgaga acaatcatca tcattatcat catcgtcatc gtcatcatat tcatccatac 780

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taccaaaacc acaacccata ctacgcgcca caaccaaacc cacgcgccgt cataatccgc 180

cgtctcttca tcgtcttcac aacattcctc ctactcctag gtctaatcct cttcatcttc 240

ttcctaatcg ttcgtcctca actaccagac gttaacctaa actcactctc cgtctccaat 300

ttcaatgtct ccaacaatca agtctctggt aaatgggatc ttcaactcca atttcgaaac 360

cctaatttcaa agatgtcact tcactacgag actgctcttt gcgctatgta ttacaatcgt 420

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